

OLA 1.3 Diary of Events on Excavation, 1993-2008

Extracted and abridged from the on-site journals of M O H Carver.

1993

July or August. Martin and Madeleine went to stay with Chris Carver at Fort William and met Siobhan's parents. They were friends of the Shepherd-Barrons. Chris Carver is first cousin to Martin, and Siobhan is his wife.

September or October. Caroline Shepherd-Barron of Geanies, Chair of Tarbat Historic Trust (CSB), telephoned and asked for an archaeologist to help the Tarbat Historic Trust (THT) raise money to restore St Colman's Church. I (MOHC) volunteered to come up and take a look. I saw the site and thought it promising.

1994

Press Release 25 July 94. Announces that the University of York has accepted an invitation from Tarbat Historic Trust, which is working in co-operation with Highland Region, Highland Enterprise and Ross and Cromarty District to raise interest in the Portmahomack site.

At Easter, we undertook geophysical surveys, locating fluxgate anomalies to the north of Gordon field.

In Summer we tested a radar in the Glebe Field without useful result.

Summer season 1-25 Sep: test excavations, culminating in an open day fixed for 25 Sep 94. On that day we hope to answer the question: what is left of the Picts of Portmahomack?

1 Sep. Duncan Johnson remembers hitting sandstone blocks around present boundary between the Glebe Field and the Gordon Field. Remembers that his binder machine regularly got bogged 10 yds out from the churchyard wall [ie on the line of the stream]

2 Sep: CSB and Bess Forbes ask me to redo Jill Harden's business plan. I agreed.

5 Sep. JGL first day as field director. Opened Int 7. "By midday, could see elements of wall and pits and drains. By 1730, we had one certain building, one bread oven/kiln and the [enclosure] ditch, which was wider than our area allowed. Not bad for the first 8 hours. We could well have a monastery".

Gifts from the community. A ham from Janet Gill, ginger and fruit cake from Jill Scott and potatoes from James Gordon.

5 Sep Turned out that we had no Church of Scotland permission to dig in Glebe Field, only permission from Billy Vass, tenant farmer and Rev Low, minister. Faxed the Church of Scotland Trustees who fortuitously met the next day.

8 Sep Visit of Donald Davidson (Stirling) who recommended:

- Column through ditch fill
- Micromorph through podsol
- Consult R Tipping

Miss Burnside (Church of Scotland) faxed back permission to dig in the Glebe field subject to 6 conditions, the 6th being that it was only valid for one week; this at the instigation of Rev Low. Miss Burnside said get started and she would obtain an extension till 1 Oct (which she duly did).

9-10 Sep S1 experiences a brief identity as a wheelhouse. The wheelhouse is really just a round house with a few blips on the inside of the rim. The stone paving is still the only convincing spoke and is out of character with everything else, being slabs or blocks rather than cobbles.

Int 8: Rig and furrow containing large amounts of shells and snails. A visitor says that the houses on the north side of the church road were cut through deep layers of shells

11 Sep Willy Gordon said that when he was young all his produce went by sea.

13 Sep Alan Weddell for HS says our project likely to find support.

14 Sep Int 10 began after 4 test pits showed ochre-sand at 30-50cms down.

14 Sep Visit of George and Isabel Henderson. George says dog whelks produce purple dye for mss illumination. Isabel: the artistic link between Iona, Portmahomack and St Andrews is *beyond doubt*

14 Sep Richard Hingley visits. Neither he nor Jill has seen anything like the parallel ditches in Int 8.

16 Sep Beginning to make up my mind. I try to design an east coast settlement programme [v grand]

19 Sep. BBC TV visit. Extensive ongoing negotiations with Tarbat Historic Trust who are chewing over the merits of a partnership of equals between THT, Highland Council and the University of York, as advanced by MOHC. Some reservations since THT prefer a role as developer with others as subcontractors.

1995

Season began....14 Aug

18 Aug At S1, intensive sieving of baulk across W end in an attempt to detect turf walls.

22 Aug S1 fails to be circular, but bag-shaped: round E end, converging trapezoidal W end.

Provisional interpretation, using Fenton and Walker:

- * main building material is turf
- * stones are in a trench as a foundation.
- * wall carried up in layers of turf or turf and stones alternatively
- * timber crucks, from unsplit trees, let into walls, with sockets among the stones

So different span is due to different availability of cruck size.

Decided that grid sampling for turf detection was important for S1

20 Aug. Submitted three appendices for the business plan to THT:

- The context for our research
- The Tarbat research programme
- The cost

Asked THT to adopt this as part of the package and to assume responsibility for permissions and fund raising.

Drafted an agreement for collaboration between THT and the University.

24 Aug Meetings with Highland Council, R&C, RACE, NMS and Inverness result in encouragement to the University to proceed with the archaeology with or without THT. The archaeology underpins everything else so the funding for the archaeology takes precedence over the rest. THT may fail, but the archaeology can go ahead without them.

28 Aug Meeting at Highland Council with Chris Claridge, Bill McDermot. They don't want University and THT both bidding for grants. Archaeology is eligible for funding through Euro-funding. Strong feeling that Highland Council would rather see this as a research project, in partnership with the University alone. However I think unlikely we can access big funds without the participation of a local Trust, and big funding is needed if we are to understand a Pictish site at an appropriate scale (large).

Later same day. At a meeting with CSB and Gilean Mackenzie, THT propose a joint operation with the University, by a Board on which both are represented. I agree.

30 Aug Evaluation of the church begins.

Three phases agreed in the Board proposal. Phase 1 evaluation. Phase 2 a large scale archaeological excavation. Phase 3 will be the reconstruction of the buildings discovered. The bid for funds will be mainly aimed at the Heritage Lottery Fund (HLF).

3 Sep 1995 Niall Robertson finds TR20 in the crypt by gouging with his fingertips between the stones of the vault.

4 Sep Jill Harden finished clearance of the crypt, leaving an uneven clay floor spattered with mortar from re-pointing.

7 Sep Meeting at Dingwall with Rory Mair and Graham Watson. I finally persuade Highland

Council of the merits of a joint THT/Highland Council/University of York venture. Peace breaks out.

1996

4 July HLF authorised release of grant and thereby gave the project its official go-ahead.

14 July Season initiated by JGL

11-13 Aug Attempts to get and confirm permission to dig in churchyard. We apparently have it from James Gordon (Chair, Community Council), Jim Paterson (Highland Councillor), John Duncan (Highland Council Graveyards) and Hugh David Skinner (Church of Scotland elder)

Int 14 opened and immediately reveals S4 (stone-lined tank) and a paved road. The area still thought to be manageably shallow at this stage.

Int 15: late pits cut into dunes.

Patrick Ashmore visits and suggests that phytoliths and iron concentrations could indicate turf lines. Our shells could be spread middens rather than fertiliser.

14 Aug Devised a scheme for eventual presentation of the site.

15 Aug Tensions continue between the THT chairman's business-based model of the project as an enterprise led by THT with subcontractors, and MOHC model of a collaborative venture delivering designated outcomes for the partners. In general these are:- THT: restore the church; Highland Council provide a long term amenity; University of York do ground-breaking research. Thus THT propose that MOHC can only deliver public lectures for THT and must charge a fee to their benefit. MOHC does not comply.

16 Aug Met old George Munro who was building himself a house on the top of the southern rise overlooking Tarbat Old Church. He had farmed the land we were working on before Duncan Johnson. The school had had an allotment at the W side of Int 11 beside the road, and as a schoolboy he had won prizes for growing vegetables on it. I asked him about the rubble drains, and he explained that the hill slope field did not need draining. What we were finding was the Portmahomack water supply, which operated before the mains were installed (1948?). Water was collected by feeder drains all over the hillside and fed into a main collector which in turn fed the wells. There were two wells: the 'baptistery' which was something to do with the church, and the village well which was the other side of the road, near the War Memorial.

29 Aug Meeting to create business plan for HLF. I press for decisions about overall design and permissions for digging in the church.

2 Sep Jack MacDonald and Cathy Ross visit and put a stop to the service trench (Int 16). Bad publicity, unfairly redounding on the University ("Churchyard ghouls make grave blunder")

Glasgow Herald), rather than THT, who had dismissed the need for wider consultation.

6 Sep Visit to Free Church minister John Macleod, re crisis at St Colman's, who offers helpful advice. Any excavation in the churchyard must be preceded by widely broadcast notice. Official permissions are necessary, but not sufficient in Scotland.

6 Sep Visit to Finlay Munro. Potted meat sandwiches by a blazing fire. Recommends us to use the path for the service trench. He doesn't believe he will live to see the church restored, and in fact he died shortly after.

6 Sep Went to play flute, with Hamilton Cormac, Trust Solicitor, at the piano.

9 Sep Boar stone revealed

Harry Gordon-Slade suggests that the crypt could have been a free-standing chapel: you can see the outer wall in the N light. Encourages a total record of the building.

Anna Ritchie persuaded me to add nave excavation in Dec 1996.

In face of constant pressure from Trust to finish, I redesign church investigation to fit with restoration programme:

- (1) Complete excavation in the church to establish relationship between crypt and nave
- (2) Strip fabric during restoration
- (3) Dig crypt
- (4) Dig beneath stage at E end [not done]
- (5) Insert services trench along path

Tension continues due to THT reluctance to give the archaeologists, Highland Council and the local community an equal voice in steering the overall project.

1997

28 April

Church: Original objective was to determine the structural sequence by means of a 4x8m module across the crypt steps, connecting the nave walls, crypt walls, crypt steps and N aisle.

Hilton of Cadboll cross-slab: A Community Meeting at Hilton agreed that the University would do an evaluation and price a replica.

5 June Excavation of Mackenzie tomb complete. Subsoil is hard orange concreted laminated sand with pockets of yellow sand. On top of that: layer of pebbly gravel. On top of that, a soft grey sandy soil.

MOHC decides that carved stones will be removed from crypt vault and excavated walls for study and eventual exhibition.

30 June TR20 (dragon stone) extracted from propped vault with assistance and advice from Fred Geddes, architect, and Mark Eliot, Conservator, Inverness Museum.

TR21 removed from N wall of Church 2

7-9 July TR 22 (boar stone) removed. Mark Eliot in attendance

17 July Discovery of TR28 (calf stone) in Int 14

21 July Cist graves showing in church, and ditch F129. Looks like a tree trunk water pipe.

22 July Major row with CSB who was also antagonising Fred Geddes, Matthew Higgins and George MacQuarrie by trying to do their jobs. Emphasised in presence of JGL and AR that we were in partnership with THT, not employed by them.

4 Aug Agreed to enhance the display with a 'Discovery Pit'

8 Aug General observations on the church sequence.

* Cist burials SW-NE are earliest features, cutting a grey podzolic sand resting on crusty panned pebbly orange sand.

* Then pillow [head-box] burials, then coffin burials then ordinary shroud burials.

8 Aug Disarticulated bone (it was examined by Don Brothwell and Donna) recommitted in church with a brief ceremony conducted by Rev Stewart Low.

During the service Donna and Caroline Sheperd-Barron both spotted a carved stone ball in the back fill of the foundation trench for the crypt steps. Seized by CSB as soon as the minister had completed his service. She is fascinated by its tactile properties.

A thumbnail scraper found in Int 14.

Int 25 modules done.

September. Lecture tour and reconnaissance of Gairloch, Ullapool, Lochinver, Inchnadamph field centre, Assynt, Lairg, Kincardine, Elgin, Archeolink

1998

Hole dug for oil storage tank (Int 26) 1.8m deep finds a large stone-lined drain (?) and stratified deposits to this depth below the surface.

6 Aug. Showing as many as possible of locals around so they feel less excluded from the

development.

17 Dec Derek Hall says med pottery is 13-14th c. and consists of locally made red wares with a small amount of higher status imports from Yorkshire. This suggests that the disuse of the well (?) [dam] and pebble road is 13-14thc.

Tarbat pH is neutral at 7.2 - 7.4

1999

7 July Int 25. S1: Excellent set of post-holes of various dates appearing near supposed entrance.

7 July Int 14. The system appears to go;

- Buried land surface (mesolithic?)
- wind-blown, water-laid sand dump c 1m thick
- grey buried soil - becomes podzolised? Charcoal patches, and negative features Neo/BA?
- brown earth with buff sand slicks. Some large hollows levelled up with buff sand EM?

23 July Richard Blossie discovered two worked stones among the material taken from the demolished Manse steading for wall-building at Ann Perry's house (at the top of the hill on the road to Rockfield).

23 Aug Visit of Stephen Carter

- Initiating sequence probably natural. A gravel cap on the hill which carries the church, eroded by periglacial streams. Some hollows with local soils.
- Buried podzol survives here and there, cut by ard marks
- Everything on this could be 8th c.
- Plaggen soil possible

Agreed to leave small part of Int 14 open for HRH visit when the Museum is opened.

25 Aug Suspect that all strata belongs to 8th c or earlier monastery. Given the tensions with the Trust, I assumed that next season would be our last, and make contingency plans for getting as much as possible out of it.

Stephen Carter suggests that Jill Harden's samples may have been peat. So Outer enclosure ditch can still be 8th c. Jill confirmed (27 Aug) that the samples were peaty and from the same context.

28 Aug Ian G Scott paid £100 to secure the copyright on the reconstruction of TR20 [ie Cross C] he did and gave me at Glasgow.

Results and revised design to Sep 1999 (see 4.3.1). At this stage the site is characterised as 'A Pictish Monastery and its farm'. Doubts about a phase earlier than the 8thc.

24 Sep 99 HRH Prince Charles visits as Duke of Rothesay and opens the Tarbat Discovery Centre.

2000

27 Jul Int 25 The pink crunch has to be a rampart

27 July David Breeze (HS) says HS policy is to encourage local bodies to adopt and curate monuments.

1 Aug 00 At meeting with Jim Paterson and John Wood, MOHC proposes a Tarbat peninsula committee. They agree to accept responsibility for the bad debt incurred by Richard Easson and Tain and Easter Ross Civic Trust over the University's evaluation for Hilton.

4 Aug Liz Budge likes the idea of a Tarbat network

18 Aug HS visit: Sally Foster, Alain Rutherford, Steve Watt.

21 Aug [says march] Meeting at Jim Paterson's house. Enthusiasm expressed for a consortium (except by Caroline Shepherd-Barron). Agreed that Jim (?) would bid for a feasibility study to RACE. Main purpose: marketing.

31 Aug Visit of Stephen Carter. Advice on sampling workshops, 'Mill pool' and enclosure ditch.

1 Sep C14 dates cause major revision of interpretation. Earliest burial late 6th, enclosure ditch 7th [later redated to 8th], farm feature 10th

15 Dec I invent a Research Committee to broaden our base and we have the first Meeting at NMS.

2001

[This year I was up and down a lot]

6 Aug Ross Trench-Jellicoe has noticed a letter 'A' and key pattern among the stones used to fill in the S door (E).

Excavation well organised as always.

Inner enclosure ditch has metalworking debris (8-9th). Should mean outer enclosure ditch and S1 later.

Hilton of Cadboll saga: intervention by Historic Scotland by passes the proposed Project Design (see OLA 8.1). Followed by tussle over ownership of the base that is discovered.

2002

April THT ask MOHC to progress the new HLF bid. Spoke to Stephen Johnson and Anna Ritchie and Caroline McIntyre about the possibilities. Best wait for new strategy document.

Early July new strategy document appears. A 'Landscape partnership' looks promising.

Reported this to the Trust (CSB, Tony Watson, Kate) 19 July and had meeting with CSB and TW 22 July asking what they thought. Verdict: go ahead.

Tested reaction from Will Aitken, Richard Durham, Liz Budge, Sally Foster etc by conversation and letter. All positive. Apart from CSB who has reservations about co-operation with other peninsula trusts.

Late July. Caroline McIntyre says archaeology not eligible because we have started and in any case low priority.

Met Liz Whiteford of new Fearn Peninsula Partnership and persuaded her and Richard Durham (Councillor) to take over my initiative. Agreed.

9 Aug Wrote report to Trust saying that archaeology was not eligible for HLF funding and we would go it alone. Desired a memorandum of agreement with the Trust for permission to excavate. This was circulated with the agenda.

14 August Visit of Graham Watson. He advises: we are supporting you in any event. If you (University) want to talk about a possible venture with Highland Council and NMS we can find funding. Suggest a Trust or consortium to explore the origins of early Scotland in the NE. Would have a massive educational spin off and help convince the highlanders that they were core not periphery. Could take Tarbat peninsula as the search area. HC would not be easily persuaded to fund the dig through THT. Nor would they pay more than £14K per year towards the upkeep of the museum.

Agreed that I would seek THT consent to explore funding with Highland Council after 23 Aug.

15 Aug Int 25 The outer enclosure ditch looks more like a butt-ending storm drain (cf Cheddar). Could the inner enclosure ditch be a ditto?

Int 11. S1 beautiful. 4 rows of double aisle posts with inner verticals and outer buttress posts, all removed when the building was dismantled.

This forms a circular area to the East with a hearth in the centre. This hearth had hammer scale (found by Cecily with magnet). Feeling now that F79 was a flue (air intake) for a forge. A working space for a smith?

At W end, rectilinear area with two post partitions. Fifth pair of double posts, but this time not in double (peanut shaped) post pits. A living quarter?

Porch entrance on N side. When you go in you turn right to living quarter or left to working area.

Elements of occupation have fallen into post pits during extraction and reinforce idea that this is a smithy.

Analysis and interpretation owed to Cecily – emerging as an excellent, thoughtful and disciplined excavation director.

Churchyard survey accelerated under Cecily and Gary Nayar. Sue Buckham's involvement mainly to push her own agenda forward (conservation), rather than ours. But interference minimal after two manic days of teaching.

15 Aug S1: some of the packing stones have been cut from the same block. They have the same patterns of green and red veins.

16 Aug Letter from Noel Fojut. Nearest outcrop of mica which has sizeable sheets is the Fearn granite c 16 miles from Portmahomack This has a lot of pegmatitic patches which produce good crystals of white and black mica. .

23 Aug Tarbat Historic Trust meeting. Approval for new funding initiative by University. The project is now to be regarded as a research project under the control of the University, with the Trust as one of its sponsors. New partnership agreement signed. Trust agree to try and raise £8K pa towards excavation. Agreement to new training scheme for more senior trainees (including Meftah students). Excellently chaired by new chairman Tony Watson.

24 Aug End of dig talk. Tony Watson graciously and sincerely thanks Caroline for her 11 years' chairing of THT. Caroline reads from a prepared speech in which all are thanked, including the University of York 'who have provided Martin and his team'. 'Without them' she continued, 'the project could not have happened and the Tarbat Discovery centre would never have come into existence'.

Archaeology Report as at 22 August 2002

This season we set out to study four areas:

* Structure 1, at the west end of Sector 1. This bag-shaped building first seen in 1994 is finally being dissected. It has three pairs of double posts which supported a roof over the

round part, and four triple-posts which supported the roof over the square part. Two pairs of posts supported a porch over an entrance on the north side. The hearth in the round part contained hammer scale, and fragments of mould and mica were found in the back-fill of replaced posts. This, and the presence of the flue suggest that the building was a smithy, with a work space (in the round part) and living quarters (in the square part). The building is provisionally dated to the 8/9th century.

* The inner enclosure ditch was examined in a small area to the east of Structure 1. Its top layer has produced evidence for monastic crafts of the 8/9th century: an inlaid stud and a mould for a glass boss decorated with a cross.

* The SE corner of the great enclosure was re-examined to try to find the structures relating to an entrance. So far, it appears that there is no entrance: the inner and outer enclosure ditches simply ended. The provisional interpretation is that the enclosure ditches were storm drains, protecting the settlement from water coming from the south, while to the east the enclosure was open to allow water to enter the mill stream.

* The churchyard was the subject of two studies. In the first, all the memorials were recorded by York students. This record will be used to provide an account of burial practice in the 17-20th century. In the second, the memorials were examined for their condition of survival as part of a recording initiative funded by Historic Scotland through CSA. Sue Buckham, the conservation project leader, held day schools at Portmahomack for local groups engaged in recording their churchyards.

In addition, Martin Carver completed studies on the church excavations, the churchyard and the portage routes on the peninsula.

Our team this year comprised 21 professional staff for two or more weeks, 8 volunteers and 10 trainees on the field school. These included participants from Norway, Sweden, USA and Canada. The site director was Cecily Spall.

Our season began on 8 July. It will end on 31 August (8 weeks).

We acknowledge with gratitude the funds raised for the excavation season by Tarbat Historic Trust.

Report on the Training Session to be offered in 2003

In 2003 the Field School will be discontinued in its present form and a new Training Experience has been devised. This will offer a slightly more advanced level of training to fewer people, which is necessary given the character of the excavation from now on (small, professional). It is also designed to suit students from Florida Coast funded

through the Meftah Foundation. This is a preliminary announcement of the proposed syllabus and programme to allow Trustees a chance to have an input before I send it to Mike Macdonald.

Programme

Six weeks work, earning 3 credits

Week 1: Induction, in the Centre. This will include visits to the National Museum and York to be briefed on the accession system. Work in the Centre will be to accession objects and records using the systems that are in place in Edinburgh. Each student will be given a particular assignment contributing to the documentation of the Centre and the project.

Week 2-5: Field work, on site, in apprenticeship to one or more professionals. The skills to be learnt or mastered include survey, excavation, recording, handling and recording finds, screening, taking samples. In this period the student will be taken on at least two day-long field trips by project staff, featuring sites or centres relevant to the Tarbat project.

Week 6: Reporting, in the centre. This week will be used to complete the assignment, draft reports and communicate with the public by giving tours.

Output:

- (1) An essay, describing the objectives and results of the project and offering a critique of aims and methods.
- (2) A portfolio summarising the objectives and results of the assignment, with examples of records made or catalogued.

Resources

We should continue to provide accommodation and travel for the students, as now. York should send a briefing pack which includes:

- * Briefing for work on site
- * Briefing on what the training will cover
- * Url of the web sites, with access to the *Bulletins*

The work on the documentation that could be undertaken for assignments could include:

- * Cataloguing photographic collections
- * Updating and improving the Centre's data-base
- * Entering selected photographs from excavation archive into Centre's collections
- * Accessing objects for the Centre.

However, it is important that the students get briefed on the right materials and methods for doing this.

Martin Carver

From 2003 onwards, the excavation focused on Sector 2.

2003

Excavation recommenced 4 August 2003. Confined to Modules B4, 5, 6, 7.

Two craft-working areas lie either side of a stone-built road: leather and wood to the W and metal and glass to the E. "These remains lie directly beneath the destruction layer characterised by scorched sand, burnt organic building materials, notably oak timbers and turf, and smashed Pictish sculpture"

Road (Road 1; F469) created on a causeway. F471 is roadside ditch to W; F472 is roadside ditch to E. Surface of road is sandstone slabs (eg 2492, worn on upper surface) on compacted ash.

On E side roadside ditch F472 contained 20 contexts of fill: 2459.....2523; backfilled over a period of time. Sequence had continued with 2088, 2097, 2104, 2113, 2117. Latest contexts [for joining with upper sequence] are 2335, 2339, 2334, 2992, 2993 . [ST says 2117=2335, p185]. Dumping episodes, not in ditch: 2461, 2462, 2466 [but also cited as ditch fill], 2473, 2480. Possible wall footing, F476 [in E section]; stone-lined pits F470, 473 to hold water. Wall and pits cut into spreads of ashy soils: "these deposits clearly pre-date the road and seal a hearth visible in the base of F472" [in the SW corner of B7]

[Note that F473 represents a feature from the earliest part of the metal-working sequence, and F148 a feature from the latest part.]

On W side, roadside ditch F471 contained 29 contexts 1875.....2057. Leather workshop has earth floor 2109 (this contained most of the objects), wall footings to N, F434 (turf and gravel); stone hearth with fire-back F445. Ultimate deposit in hearth for radiocarbon [but beware burnt turf]. F466 [F446] another possible wall footing with turf superstructure 2209. F468 is flue [or ditch], so is F475, with hearth F477 between them. Underground heating? But no scorching. Flues may be contemporary with road and ditch (F471) "although the stone-built features may of course be a later addition to the complex". Cattle metapodials tipped into disused F475. F474, hard standing. F467 culvert. Culvert, hard standing, flues, and ditches all contemporary and probably refer to leather working.

[Wall at SW is F480. Has internal strip of white sand. Part of wall just S of baulk is filled with grey soil. Is this turf? Or a robbing of stones? A previous excavator [unknown] thought it was robbing so dug a chunk out of it. See N192/22, N205/11; N222/37. Revetment wall F198 lies immediately SW of the SW corner of F480].

2004

Modules B5,6,7; C4, D1, 2, 3 opened, Cecily Spall and Martin Carver on site.

17 July 2004

The end sequence of the monastery:

1584 remains labelled in section as the latest strong burning episode. 1506 (sculpture-bearing layer) is above it, with dark brown [1284?] above that. The main sculpture dumping is 1506=1510=1547. This section reports the sculpture as the latest episode before abandon. Below 1584 is 1588, bearing more sculpture. *Sculpture-bearing layer that is still in place in Int 24 appears to be 2294. This layer appears in 2003 section drawing B7 as over 2335 and under 2992 and 2334. Thus 2335 (=2117) ends the workshop sequence so far.* There is no sculpture in 2294. 2294 is below primary burning]

Workshop studies W (leather working) and E (metal-working) are promising.

Problems for solution in 2004.

WEST:

1. Is there a S limit to the leather workshop? ie wall F480.
2. Are these heating ducts - or if not what?
3. How does the leather workshop work? Frames, pegs, tanning, hearth. Why do you need heat?

EAST

1. What was the layer 2392 that we mapped chemically? How does it fit into the sequence?
2. What is the giant flue doing?
3. Where are the metal working hearths?
4. If further south (F148), then what is the north end (B7) for?

ROAD

1. Is the pebbled surface 1150 (F18) a direct continuation of F469 [as CAS thinks]? Or a later medieval road on the same line [as AR and SAT thought]? A preliminary study concluded that the pebbled phase belonged to the end of the monastery rather than a later medieval phase. However it is possible that the sculpture dumping preceded the final pebbling; or that post-destruction use of the pebbled road, or its dispersal by ploughing, resulted in pebbles spilling over the layers to the E. An opportunity to study the relationship of the pebbled phase and the sculpture dump exists in Int 24, where sculpture still lies on site and the road appears to be the raw surface immediately after removal of the pebbles.

STRATEGY

Factors:

We have not really done enough PX work to understand the detailed story so far, but the overall framework is a lot clearer: road and workshops and mill pond are contemporary.

What goes before is unclear but it may be a non-industrial phase, possibly even nothing. It will need environmental scrutiny.

What goes after is also unclear. The relationship of the dumped sculpture, final burning, latest industry and latest road is to be established.

We need clear demonstrations of sequence, other than plans and strat. The sections are proving invaluable, and we should aim at publishable extracts, given the controversial nature of the sequence.

There is also the question of what sort of a monument can be created and left.

It is assumed that the mill pond and race are sufficiently well defined to leave them if we have to.

SO:

Decision: to lower the N part of Int 24 against the 991 Northing, extending the two N-S balks. The objective is to reach the beginning of the workshop phase. We will then have a NORTH facing section joining the two revetments across the road.

Subsequently this area would be lowered to subsoil creating a SOUTH facing section along 994 [2005]. We would then go north from this recorded section into Int 14, leaving such structures as we might be able to consolidate as a monument for display.

As well as a full context sequence we will have two N-S sections and two E-W sections. The one along 991 will be N facing and stand from subsoil to monastic abandon. The one along 994 will too, but as a composite of which everything from the workshop floor up will be N facing and everything before that S facing.

23 July 04. At the end of the week the strategy is working well. Module B6 (exc by Roy J) shows this:

Road 1 is paved on gravelly make-up (“causeway”)

Sand (2568) lies above the slabs

Slaggy layer 2556 lies above the sand. The pebbles of F18 (Road 2) probably lay directly on this layer (but are no longer there)

F 180 is a ditch that went with Road 2. Burning and sculpture (2537= 2294) form its ultimate

fill.

A layer of clay-silt derived from metal-working (2536) lies OVER the sculpture bearing layer, OVER the curb for Road 1 and OVER the slaggy layer. This implies that it lies UNDER the pebbles of Road 2.

Thus the emerging story is that the burning episode affected Road 1 and its adjacent workshops at a time when the road-side ditches were largely filled in. Road 2 was constructed and new ditches cut (F172, 180). The ditches were nearly filled in. Then sculpture was dumped in them. Metalworking continued (F148).

This means that there was a “short-term recovery” after a raid.

Road 2 could still continue into the Middle Ages.

27 July 04

Hearth F148 and associated clay rings

Rang Mark Noel, Durham. 01207 583 576;

- can date burnt clay, stone as long as it cooled in situ
- advised us to empty both bowl features and send him pictures
- he will charge £350 per sample (plus expenses)

Rang Cathy Mortimer 01904 640 701

- suggested the clay bowls were for cupellation. Look out for lead and mercury and droplets of precious metals. Keep all loose material.

- speak to Justine Bailey 023 928 567 85

28 July 04

Discussion Martin, Justin, Cecily.

Agreement that road 1 and 2 should be close in date. Road 2 builders could see the line of Road 1, but not its ditches, which were filled in. Primary burning is under hearth F148. Sculpture can be over hearth. Sculpture should be later than road 2, because it lies in Road 2's ditch (F180).

Medieval pottery all over 1326 mill dam destruction. Revetment wall F149 should have cut late metal working dump (ass with F148). But metalworking debris deposited at foot of revetment wall. So revetment wall F149 (and thus mill) is later than beginning of phase 2 metalworking but still within metalworking era (8-10th c).

Decided: to record E (w-facing) section this year (MOHC). Next year to retire this section

and widen by 1 metre, in order (1) to provide a safe edge to complete module B7 (2) to provide a fresh section (3) to connect with features in Int 26.

Then Module B7 would be dug to the bottom.

Decided to probe wall F

3 Aug 04 Mark Noel's verdict. The clay ring has soil in it so he can only offer a 30% chance of success. Could not come for three weeks in any case

Decision MC/CS: Abandon wait for archaeomag. Concentrate of AMS dating of sorted ephemerae from primary contexts. If possible assemble context trains or date several samples from same context to improve precision using Bayesian statistics. Intensive sampling of the layers over Roy's sculpture dump.

Date received from SUERC for hearth in bag-shaped building S1: 1205 +/- 35 BP = 745 AD
Terrific.

Wall F480. Linear contexts, running N-S, are from the W a burnt line of ?wattle fencing, a course of stones faced to W, grey soil which could be turf or could be infill resembling ploughsoil 1322 which lies above it, a strip of bright white-yellow sand. This wall line contains workshop dumping to the E. The dumping threatens to dive off under the wall, which would make the wall late and medieval. Alternatively, the sand has built up against a wall which was subsequently robbed (thus the grey earth). Today we gingerly sample the yellow sand to see if it goes under the wall, or stops where the wall once was.

Result: The yellow sand comes out and proves to be the fill of a gully running alongside the wall. The topography suggests that this is the result of flooding up against the wall F480, the flow coming down the hill. This flood could also account for the sand layer in the northern part of the vellum workshop. The grey sand can certainly belong to a robber pit dug through the sand and wall, and back-filled with 1322.

It remains to be seen if this gully was originally an ordered lined gully which over flowed through flood action; or was actually formed through flood action.

13 August 2004

Some clarification to the model:

Early workshops in B5 (vellum) and B7 (metals).

Wall F480 provides a W limit to the vellum workshop. It may have had an internal drain. In C2, the vellum workshop turns to metal working. Is this before or after the major burning episode?

A major flooding of the drain (F487) deposits yellow sand & brown earth (mixed together) along the drain line. Later another drain (F485) is cut through F487, and perhaps through the

wall F480 about 2m S of the baulk (where the stones are missing) to disgorge into the mill race.

In C3 the road has a worn, cracked flagstone surface. It is resurfaced with pebbles. Adjacent ditch F180 (to E of road) is filled up. Then levelled with broken pieces of sculpture.

In D1/2 the primary burning emerges. It has streaks and lumps of charcoal within it [these may clean up with a soft brush so as to indicate what structures have burnt down]. There is a then a levelling, and metal-working recommences with hearth F148, clay-rings and perhaps a post-hole building?

In D3, the predecessor of the revetment wall F149 was a turf wall clad with a wattle fence on the N side. This burnt to charcoal (ie in the absence of air, thus within turf) at the time of the primary burning. It was then still vertical. Large amounts of grey sand, containing plough pebbles were used to put out the fire. Then the wattle fence and turf wall collapsed on the grey sand, and the stone revetment wall F149 attempted to follow suit, with a great lean towards the north. [If this is so then the thinner wattles/withies should provide a reasonably good TAQ for the fire]

Our hope:

*that the exposure of a large part of the major burning horizon will reveal what structures were being burnt.

*that the equivalent of the burning horizon will be identified in the W workshop.

Rethink in August 2004

The mill dam, pond, revetment walls, curbed road and workshop areas E and W are broadly contemporary and belong to the 8th c and earlier.

The major questions of sequence concern the end phases of this “monastic” settlement. The key players here are:

1662 - a layer of burning, which is followed by 1847 a layer of buff sand, which is followed by 1510 a layer which includes burning and broken fragments of sculpture. These episodes are still visible in July 2004, either in the E section or in the area of quadrant D. This suggests that although this family of abandon dips down into the roadside ditches, they are all later than the pebbled road and the metalworking. But the burning 1662 lies above black slaggy layer 1849, suggesting that the burning occurred when road 1 was in use but before the pebbles of road 2 were laid. An exception might be hearth F148 (which is under 1248, therefore high).

Steve Timms’ analysis shows “the road” (= pebbled road F18) stratified high, that is post-dating 1662, 1847, and 1510. Which means it is laid after the destruction of the monastery but in the same place as the monastic road. Is this:

- (A) Coincidence. The later track used the higher harder drier part of the site
- (B) Continuity. The monastery was destroyed but the community continued in business
- (C) A misreading of the strat. The pebbled road is actually monastic, so is earlier all the destruction layers.

Proposition: that the pebbled road F18 (1) is later than the sculpture dumping layer (1510,1547), and the “primary burning” [ie the ultimate burning] 1662 and (2) is medieval.

	For	Against
	On the strat. diagram F18 lies over 1510 via a train: F18-1554-1555-1225....1510 1662-1660. This is also recorded on all context sheets. 1554 lies over where the pebbled road was to be.	The sequence is connected by a single thread F18 over 1554 over 1555 over 1225. 1554 is certainly under the road [context plan], but 1555 is not under F18, nor is it certainly under 1554, since 1555 and 1554 do not overlap [context plan] 1225 is over a number of contexts sealing 1510. p105 1225 on E side road is slipping into a depression [ditch?]. But this does not mean it is under the road. On the contrary if the ditch is already there, so is the (pebbled) road. So, the road is over 1554. But 1555, 1225, 1574, 1510 (sculpture), 1662 (burning) can all lie over it. 1121 lies over everything.
	F166, containing 8 th c carved stones lining drain, disappears under F18	Not confirmed. In plan F166 does not coincide with the pebbled surface F18. Therefore it could have been later
	E side of the road (B6,7) characterised by clay silt dumps and spreads “which are earlier than the road stratigraphically”. Under the road there are several thin spreads and an area of trample but little the same way of deposits sequence [ie spreads and dumps]. Suggests that either the area of the road was scraped off before pebbling or that the road lay over an earlier track	When the pebbles were removed, the monastery area was in the same place. Therefore should be an earlier phase of the same thing. The dumps are not “earlier” but contemporaneous or later. No dumps were found ON the pebbled surface; but some were found beneath it. Conclusion: metal working earlier or contemporary to final surface of road
	No burning or sculpture over the pebbled surface F18 (1150). If a general episode why not? So road must be later	No burning or sculpture reported under the pebbled surface F18 (1150). If a general episode which predated the pebbled surface, why not? But nothing to burn on road and the dumping was done from the road while it was still open, into its ditches.
	After the removal of the pebble road F18 several fragments of sculpture were recovered (3841-3848) from rubble	No recorded coincidence between sculpture, 1547 and road. The implication that 1547 is earlier than the road does not follow

	spread 1547 (module D2) around the area of square hearth F148.”	
	Hearth F148 is higher than road and was covered directly by 1284. So there should have been some metalworking after the pebbled surface was laid.	Actually F148 was sealed by 1510, sculpture layer [information CS pall July 04]. So no metalworking here after sculpture is dumped. Metalworking area undulates greatly over a broad area. Some hearths high some not so high. Stratigraphically, there is no clear reason why hearths, incl F148 are not broadly contemporary with road F18 and pool revetment F149. The key is the layer 1284 which “covered the cobble road and [lies] beneath the shell dumps” [Context card]. This sounds as though 1284 lay over 1510=1547 and together this constitutes the “abandon” horizon for the monastery. 1284 was a cultivation soil which truncated more of the deposit the further north it went.
	F59 cuts through sculpture layer. It is parallel to F172, F180. They are parallel to the road: what road, if there is no longer a road?	OK. But can we accept the pebbling as a late resurfacing after destruction rather than a late medieval road?
	Burning layer recorded under pebbled road and under “rotted turf” on 25 July 1997	
	F16, 121 later than burning AND later than pebbled road. A structural phase after Road 2	

Conclusion

The question is whether F18 pebbled surface is a final resurfacing of the monastic road or a later medieval road on the same line. If the former, then the pebbled surface, and all hearths and industrial activity belong to the monastery which is then burnt and sculpture dumped and there are no Norse or medieval phases. If the latter, then we can allocate the pebbled surface and some activity to a period after the sculpture is dumped - but how long after?

The provisional ST/AR interpretation, that the pebbled surface is a medieval road, looks shaky. The monastery wasn't remembered, so why should the pebbled surface be in exactly the same place as the monastic road?

The provisional CS interpretation, that the pebbled surface is simply the last surfacing of the road, and was in use when the sculpture was broken up, is stratigraphically possible but the records are against it. There is also the matter of gullies F59, 172, 180 which have cut the sculpture layer but align with the road.

The MOHC compromise, for testing, runs as follows:

The monastic road flanked by its ditches and industry belongs to the 8th -9th century. There is an incident in the 9th-10th century in which sculpture, particularly Cross-slab 4 is smashed up. Something is burnt at the same time. The occupants themselves then clear the debris, depositing it in gullies or spreads either side of the road. These could have been old or new occupants (monks or lords) but, whoever they were, they needed to respect the road. They also needed to resurface it (they used pebbles) and to drain it (they dug gullies).

The explanation for this is probably the mill, or the access that was required across the mill race. It is certainly not excluded that several metal working hearths were also constructed after the smashed sculpture horizon - but these should be for smithing rather than bronze-casting. Timber buildings beside the pebbled road denote an impoverished short-lived survival. These survivors build the drain F166 with its TR28/35 lining. Low level medieval occupation (pits) can continue. The contrast between the monastic phase and the apparent misery that follows is historically suggestive. A 10th century “secular phase” between the monastery and its abandon would make good sense

The strat. is therefore right, or can be. But the interface between the monastic road and the pebbled road is instantaneous: no perceptible discontinuity. The Scarborough ware on the pebbled surface would belong to the ploughing. With the demise of the mill it seems likely that the axis has moved to the church road, and the pits are in the back yards. We might suppose two timber phases (1) reduced circumstances in the 10th alongside the F18 road (2) Medieval dwellings, running back from Church road

Layers with sculpture in (to 2003):

14/1002 TR23

B7: 14/1506. E of road F18. UNDER 1225. [IN E section] TR36, 149

B [Dr.536]: 14/1510. **No context record.** Only recorded in section as UNDER 1225. [CS says it was definitely OVER F148 hearth]. TR37, 38, 42-47, 50-74, 76-80, 82-85, 98-104, 106, 114-119, 121-142, 145, 151-165, 166-175, 177-180, 203-213 [animals]

B7: 14/1588 [IN E SECTION; 883/995/14.05] TR49

B7: 14/214/1593. [IN E SECTION] scoop F214 over 1588. TR TR48 120, 150, 200

B7: 14/1607. Under 1588. OVER 1662 TR105

B7: [Dr.714] 14/304/1721. OVER 1734. Sculpture disturbed from 1510: TR75, 81,166, 176, 201 [saint], 202; 24/1721 TR143-144, 190

B4: [Dr. 758] 14/1778 TR214

B7:14/377/1911. UNDER or cuts 1849 [should cut] TR215

Calf stone

B4: 24/1370 [=1192, cut by F57] TR28

B4: 24/166/1453 TR35 [conj. With 28]

E:24/1310 TR148
 D2: 24/1545 TR113,220,
 D1: 24/1547 **No context record** TR 88-9, 91, 93-4, 86-7, 107-109, 111-112, 146-147, 181-182, 184-189, 193-195, 198, 216-218 [affronted horse], 221-224
 D1: 24/1602 TR219
 D2: 24/1805.[Hor 3] TR110, 191-192
 D2 [Dr.757] 24/1811. [hor 3b. Ph] TR96, 197
 D2 [Dr.757] 24/1812 TR196
 C6: 24/1877 TR97

SEQUENCE

<i>West of road</i>	<i>Road</i>	<i>East of road</i>
ROAD 1		
	Flagstones [2094] laid on a buried soil with two horizons N296/6, 9	
Workshop with hearth and ash deposits N293/1, N276/01;N308/00 in building, with adjacent revetment wall N222/37,N205/11; N192/22; mill pond is immediately adjacent and contemporary N261/22;	Curb stones [F389?] laid to E and W (N271/06). Ditches run alongside curb N293/1; N273/	Workshop with flue [F395] and ashy deposits N293/1; N293/1 N314/12
Workshop fills up with sand and ashy soil, raising floor level, filling ditch and spilling onto road N219/01; N209/04 [Horizon 3]	Silty sand with charcoal patch develops over road (N267/08; N211/19; N227/06; N226/20)	Ditch fills up N219/12; N132/05;
ROAD 2		
Pebbles overlies filled in ditch Road 1; N264/00	Pebbles laid N156/12, N132/0	New Ditches cut on E side [F180]; N211/33, N191/10
		Ditches filled with rock N191/03; N188/01
		Ditches overlaid with burning x3473; N206/29; N235/10
		Broken up sculpture dumped on burning N241/01, 03 [1510]; N237/9;N235/3; N235/6; N235/13,15; N 233/3. In ditch F180 [photos to come]
		Sculpture dumped in and beside ditches N237/10; N241/01
	Road 2 presumably still active	Hearth F148 active N209/29;

	after burning	N239/02; N213/19 Follows burning [PHOTO NEEDED]. Clay silt ash debris created by metal-working seals sculpture section [PHOTO NEEDED]
Slabby construction F121 N63/10	Features cut through pebble road: F94 (N118/31); F5 (N42/29), F168 (N187/28); F1 (F189/18). Culvert F130 cut through pebbles (N186/29; N187/07). [Cf F166]	Slabby construction F16 N63/10
Brown soil buries workshop N231/12	Brown soil buries road N132/03, N41/03, N40/08)	Brown soil buries sculpture and hearth; N185/19). And revetment wall N228/07.

Conclusion from picture sequence:

1. Road 1 and ditches and workshops
2. Road 2 and new ditches and workshops
3. Burning episode 1662
4. Sculpture dumped in Road 2 ditches
5. Final metal-working phase, includes F148
6. Timber phase with E-W culverts F130 and F166 (calf stone), and slabby surfaces F16, 121
7. Wind-blow/ Brown soil
8. Middens
9. Ploughing

SEQUENCE IN SECTIONS

1. Subsoil is banded sand (N184/09)
2. with a gravel cap in places (N137/27)
3. There is a white sand podsol(?) (N49/13; N206/15, 18)
4. There may have been two podsol episodes (N185/09)
5. A brown (buried) soil lies on the podsol (N184/04). Stone features are cut from or laid at this level
6. There is a strong layer of burning above the stones [W facing section; PHOTO NEEDED]
7. A layer of white (wind-blown?, water-laid) sand follows the burning; then deep brown soil, then shell middens (N184/02).

14-15 Aug 04

Eventual Site Presentation

Emma Carver visited and advised against consolidation as a presentation solution. Jenny Glazebrook, Helen Geake and Angus Wainwright visited. Jenny and Angus suggested a “garden” option, where features are marked with trees and hedges. MOHC drafted a design.

16 Aug 04

Tarbat Historic Trust meeting. Trustees agreed, in principle, plan for refurbished exhibition and garden option. Refurbishment exhibition proposal is

(1) Monastery in the nave (international). Table top model. Sculpture in Treasury. Crafts in boutiques along S wall: metal-working, vellum making, milling, using NMS cases at knee level, dioramas or reconstructed features and finished artefacts on the wall.

(2) The Story of the church in St Colman's Gallery (national). Table top model. Panel, cases.

(3) Portmahomack in the mezzanine (local). Panels along top corridor

(4) How to do archaeology. In Activity room.

THT Agreed that annual temporary exhibitions should focus on the field research. To be prepared by FAS.

Hilary White (Highland Council) approved garden option as a better bet.

17 Aug 04

David Clarke and Fraser Hunter approve garden option and new exhibition - except table top model. NMS offer full service for 2007 exhibition and for temporary exhibitions.

19 Aug 04

Lindsay Campbell, RACE, visited. Happy with dig and agreed that outcome (publication) was good for RACE. Approved garden option and said RACE could support it under the heading of environmental improvement.

20 Aug 04

Visit of Richard MacKenzie and his architect. He has bought the Highfield Steading and proposes to build two bungalows. Said that we could provide the archaeological services at the cheapest rate he could get. Recommended him to redesign to reduce costs. He agreed: the bungalows to be re-located to take advantage of existing foundations. Will send plan.

21 Aug 04

Visit of Sally Foster and Genevieve Adkins. Approved garden option and refurbishment plan for exhibition. Buying might be better than management agreements.

In D3, 2701 grey sand beneath the charcoal layer (hurdles) was removed this week. The primary burning appeared beneath, first as a dirty version (2735) and then as a cleaner brighter version (2704). Circles of grey sand show through. These are thought by CAS to be

due to trowelling away little bumps of thin 2704. Not so sure that this is so, since surface of 2704 was followed quite accurately. More likely to represent unburnt patches, or where stones had stood. Some black marks of burnt wood look like they are in situ beneath the bright orange sand of 2704.

Section of wall F149 started to be removed.

23 Aug 04

The section through the terrace wall, F149 proving positive. The wall built of large blocks in its lowest courses and smaller stone in its upper courses (including many small sandstone slates) was bonded with a grey sand (2737) which probably derived from turf. On its inner (northern) face was a turf jacket held in place by a wattle fence. The primary burning meets the wattle fence at the bottom, so that the primary burning occurred when the wall was standing upright. The wattles burnt at the same time as the primary burning. Grey sand (2701) was thrown against the wattles - and more wattles collapsed or were strewn on 2701. The ground level from which the wall was built is just beneath the primary burning on the north side (and on subsoil on the S side).

Judi Menabney (Highland Council) visited and advised on educational policy. We should put in an integrated bid to the 2007 office for display and education. NMS can be quoted as the matching grant.

25 Aug 04

Paid cheque for £400 and a bottle of Highland Park to James Gordon. Our field actually belongs to Douglas, but he is in favour of our archaeological park. Only reservation : don't plant trees, their roots seek out and block up the drains. HS can approach him ASP

26 Aug 04

Paid cheque for £550 and bottle of Stolichnaya to Billy Vass. In favour of our archaeological park, although would have preferred a monument. No reservations about the scheme. HS can approach him ASP.

Miserable afternoon, and rain all night. The boys hiked round Hill of Nigg to Shandwick beach and camped there.

26 Aug 04

Peter Yeoman visited. Thought Church 1= E wall of the crypt very plausible. See also Glasgow, Iona, Whithorn for conscious incorporation of earlier ruin into 13th century pilgrimage churches. [Might imply relic of St Colman and adoption of St Colman at this time]

D2 [Nicky] burnt wattle including one piece of daub layered with scorched sand [= "primary

burning”]. Different in D3 [Martin]. Here scorched sand and baked clay lie on top of thatch-like layer of rooty strands = heather? These have all been given the number 2704. Still not possible to say whether the D2 strip of wattle or the D 3 strip of thatch, or the space between them (all these N-S strips are about 4m across) or none or all of them, represent the inside of a building. Roadside ditch [Roy] now V-shaped

The section across F149 terrace wall shows that the primary burning reaches the bottom of the wall and the equivalent of the “beach level” on the pond side. Implies that the wall was not long constructed when the fire happened. It is possible (but not necessary) that the same fire that produced the primary burning was also responsible for burning this timber barrier.

Auger survey across the site E-W fails to find clean sand on the W side, but finds what look like naturally layered water-laid deposits. Implies a swampy zone in the lower ground before the monastic management of the area. [The real natural horizon appears to be the white podzolic sand seen, eg in N49/13, N206/18 and on the “beach” in the mill pond. This lies OVER the sequence of water-laid dark clays that remains. The mill pond wall F149 is founded directly on the white sand].

The *current model* runs as follows:

Late 6th century. Columba or his followers found a monastery on a peninsula allowed to them by Bridei son of Mailchu, King of the N Picts. The land has scarcely been occupied, although there are hints of a late neolithic or Bronze Age occupation (stone ball, leaf-shaped arrow head). The land S of the church is swampy.

The early community settles on the hill where its church and monastery are located. Burials are in stone cists, referring to stone sarcophagi, with simple cross grave-markers. The community drains the swamp (with a stream?) and ploughs the Glebe Field (plough-pebbles).

In the 7th century(?), the road is built on a gravel causeway with a stone kerb. It leads SW towards the inner enclosure ditch. Vellum working on the W side (stretcher frame with bone pegs, pebbles, knife); metal-working on the E (hearths, crucibles, moulds). These are mainly supplying the refined materials (vellum codex, gold, silver ingots, glass studs, bronze casts) to the experts further up the hill. Community now ploughing the Gordons’ field without plough pebbles.

In the 8th century, there is a massive expansion of metalworking. A mill pond and mill are built (terrace wall). The wall is dry stone with an external cladding of turf held in place with wattlework. A new enclosure wall (c735 AD) is built and inside it a kiln-barn which doubles as a smithy (c745AD). Four cross slabs are erected, two to the E and two to the W of the church. Three more erected on the boundaries of the estate. A stone church is built (E wall of crypt). Burials are head-support, remembering cist burials.

In the 9th century, there is a raid. One or more cross-slabs are broken up. Artisans’ huts are burnt down (2704); they were made of wattle and roofed with heather. The wall surrounding the pond is pushed over or collapses outwards into the metalworkers’ area.

There is a partial and temporary revival. The metal-workers build new hearths and continue to make the same kind of object. Moulds thrown over leaning wall. Road resurfaced with pebbles. Roadside ditch levelled with broken pieces of sculpture. Mill continues to function. Kiln barn no longer in use. Two monks with sword cuts to the head buried in the traditional manner by someone.

Metalworking ceases by 10th c. Outer enclosure ditch colonised by alder (?).

Site revived c1100. A parish church built to the W of the ruined 8th c church and dedicated to St Colman. Re-uses pieces of sculpture found on the W side.

In the 13th c monasticism returns to the peninsula. The 8th century church refashioned as a crypt and the church is lengthened with a chancel and belfry. Crypt perhaps contained a relic of St Colman.

27 Aug 04

Sabina Strachan: update on scheduling. Would like a basic statement on what we would like to schedule and the current threat as a prequel to our conservation plan. Area, depths, landowners.

Talked to the office of the Community Land Buyout scheme. 01520 722 988. Explained that we wanted to purchase c 0.7ha of an archaeological site to develop into an archaeological park. This will preserve and display our discovery (a monastery of St Columba) and create a recreational space. This will benefit the local community and its visitors.

Our contact is Sandra Holme, currently away. She will need to talk to Tony Watson to discover the legal situation of the Trust and so decide if we are eligible.

Sep 2004 MOHC wins EH/HS/CADW competition for talk on Tarbat at the BAAS conference Exeter.

2005

22 Jun 05 Season began. CAS with FAS team open Int 14 and Int 24 (N) [Int 24N = same as 2004]

12 July MOHC gives CAS's talk at Leeds IMC (gold working)

Initial cleaning complete this week (2 weeks). Feature excavation beginning

18 July MOHC arrives. Volunteer briefing by CAS. No movement on new exhibition. Lots of local and short term additions to display - looks a little ad hoc now.

19 July Site tour. Excellent job by CAS. Subsoil showing through here and there all over Int 14, and in the lower parts of Int 24. The basic early sequence appears to be sand and gravel subsoil on which a soil develops that subsequently podzolises. No trace of any features associated with this soil. Plough pebbles in D3 suggests early monastic ploughing. But leaf-shaped arrowhead from this soil also. We don't know if the ard marks in Int 11 are prehistoric or monastic. Association with plough pebbles in Int 24 suggests latter.

No plough marks seen in buried soil or subsoil in Int 14 - but plenty of opportunity to see them.

The rump of the workshops west and east being taken down by D Fell and N Toop respectively. Both are industrial sequences (parchment west, metal east). We expect them to give out onto peaty sandy soil over subsoil: the bottom.

Only one feature, so far, could be pre-industrial: the hearth under F472 (DSR 2003, 8)

The objectives are:

- to complete the exc of both workshops [Sep 05]
- to remove baulks and tidy surviving late patches all over [14 Aug]
- to photograph whole site as "The monastic workshops" [14 Aug]
- to cut sections through buried soil and subsoil along S edge (N facing) and along E baulk

19-21 July MOHC makes strat diagrams of Sector 2 (N) (=Int 14 and Int 24 N of 991 northing).

The site has three main periods:

Period 1 - about which we know very little precedes the main constructions (6-8th c?)

Period 2 - sees the kerbed paved road, the terrace wall and the principal walls and drains constructed for both workshops - metal (E) and parchment (W). It is terminated by the primary burning and the dumping of sculpture. (8th-9th c?)

Period 3 - a revival. Road is pebbled and metal working recommences on the E side. The settlement is less disciplined and a great deal of dumping takes place. (Mid 9th till-????)

Preliminary phasing late July 05
by MOHC

Method

A strat diagram was prepared in pencil on a sheet of A1 permatrace and inked in. The starting point was the two Data Structure Reports compiled by CAS for the 2003 and 2004 seasons. These represent the first good understanding of the sequence. I then checked all the A1 drawn sections and all the contexts and feature cards for modules in A, B, C and D. I also used notes from field notebooks (above) and draft strat diagrams in the context files and in folders on notes. I didn't consciously ignore any sources available in Tarbat.

I omitted a number of contexts, for which adequate stratigraphy had not been recorded, and a number of features which were uncertain. The latter were mainly post-holes, the existence of which was doubtful. The stratigraphic units omitted from the diagram may have been as many as 1 in 5 (20%).

The objective was to produce a stratigraphic map of Int14/24 north of 991 northing, our limit of excavation in 2003-5. However I also roped in the mill and mill pond features. Many contexts, especially in workshops, were recorded in “trains” of successive deposits. These were not drawn out dendritically, but approximated into linear groups, the latest at the top and the earliest at the bottom. Their relationships with adjacent features was marked where known.

The *result* was a reasonably strong phasing, thanks largely to the ubiquity of the layer of primary burning recognized in a large number of context descriptions from most parts of the site. This was a key horizon. The key relationship it implies is that the early metal-working at the south end came *after* it. The phasing of the second road and the dumped sculpture was less clear and has caused endless headaches. The uncertainty in the strat after the primary burning is due to a number of factors. At the north end and on the west side there was no primary burning, so features have been phased from the subsoil up. The road separates east and west, and few layers were tracked across the roads with confidence. Large numbers of contexts were generated, often within modules, but reliable equations were not recorded between them. Relationships were not comprehensive on the cards, (although the context plans and their heights should provide an acceptable model when that bit of px can be done). This has resulted in a number of context trains effectively isolated from each other, except in the rare cases where they included the primary burning or a balk survived between the two modules. Thus although the module system was helpful in allowing the nature and sequence of contexts to be studied (not just recorded), the supervisors before CAS were not successful in maintaining the big picture with context equivalents. In the end this was a failure of supervision (mine) not a failure of method. Neither AR nor ST were really up to the task of understanding the site as it progressed. That should have been my job, at least until CAS was ready to take over. This she did after 2001, at the behest of JGL and to my increasing relief.

PHASE 1: Relic turf on a podsol above pleistocene sand and gravel suggests a grassy dune. The amount of prehistoric material (after a hectare of minute excavation) continues to be tiny. The number of events assigned to Phase 1 is v small: the early hearth in B7 yet to be excavated is the only feature thought to precede the extensive operations of Phase 2.

PHASE 2:

PHASE 2A. The stratigraphy so far suggests that Phase 2 began with a major development in stone that affected the whole site. The construction is characterised by the use of massive stones in foundations that were continued upwards with smaller stones and (probably) turf.

A paved road with two kerbs (F469, 449) was laid on a gravel causeway, with drainage ditches on either side F471 (W), F472 (E).

To the west a workshop area was laid out. To the north-west, a washing facility (S4) with tank and culverts was constructed from slabs of stone and pebbles. To the south, the ground was levelled with white sand (2353) within a walled zone (walls F434, 480) in which were hearths (F477, 495). A complex of lined flues and/or culverts (F467, 468, 475) fed water or hot air into the workshop from up the hill.

To the east a second area was laid out. It was limited to the E by a wall (F476), and contained a flue lined with turf (F395) and two stone-lined pits (F473, 470). The early hearth in B7 (unexcavated at the time of writing) may have formed part of the arrangement. The intended function of this space is at present uncertain.

The road led down hill into the valley, where a mill pond was created by a dam (F440). Two leats (F431, 432) led water into a mill race bounded by stone walls (F194, 394). A terrace wall (F149) marks the northern limit of the pond.

There is a small group of timber features in the base of the terrace wall on the pond side, some of which could conceivably be pre-pond (ie on its beach or in its marsh) and thus belong to Period 1. These include a wooden post (F438), pits (F441-3, a gully (F439), a ditch (F435) and a fence (F436).

PHASE 2B. The initial activity is deduced from the debris that accumulated in the west workshop floor. The initial activity in the east workshop is as yet unclear.

In the west, debris first gathered in the churned up floor of this area (2109). It showed that the workshop was dedicated to making parchment from its beginning. Features in situ included two bone alignments (1959, 2511) [NO – LATER THAN CLAY SILTS] and a pit filled with white pebbles (F399). The activities of preparing parchment, including burning seaweed to create astringent from spirorbis filled the workshop floor and the adjacent roadside ditch (F471).

In the east, it has not yet been possible to define an early use layer (like 2109 in the west). However, phase 2B does seem to have included the covered flue and the two stone-lined pits.

PHASE 2C. Both sides of the road subsequently acquired a deposit of “clay silts” about 3-4 m wide [needs mapping] and up to 250mm deep. In each case, yellow/white ash with burnt bone (the clay silt) alternates with dark brown woody or turf layers. In the W balk of B7, the surface could be seen as covered in unburnt butchered bone and stones 5-10cm across, burnt and unburnt. The turf had become compressed and worn into hollows. The ash (clay-silt) layers (eg 2475) appear to have been laid down periodically as levelling. They filled the hollows in the turf and provided a level surface on which new turf was immediately laid. The “turf” is a brown clay soil, woody to the feel (eg 2117). In B7, ash and turf alternated until primary burning. Contexts from this deposit assigned to Phase 2C (1918, 1956, 2144, 2293) contained unspecified slag, 1918 contained an iron buckle and a whetstone, 2144 an iron blade, 1898 a nail, 1918 an animal bone assemblage. After the fire that followed, the same area seems to have developed as a workshop for precious metal shop (see below), but it is

currently uncertain that it had done so in Phase 2B or C. Among diagnostic finds only the carnelian gem was discarded before metal working of Phase 3 began; but its context (2701) may have been redeposited levelling. Metalworking debris found at the foot of the terrace wall F149 on the pond side (context unidentified) might indicate that metalworking began here at the same time as the millpond was constructed (ie Period 2A).

The road was provided with additional drainage particularly on its east side (wood-lined ditch F180).

It is not excluded that the clay silts define floor areas of stalls either side of the road for workshops or the accommodation of people or animals. There should be timber posts to go with these areas (the maps will tell). The burning down of this timber and turf phase provides a better source for the primary burning than the stone phase. There are indications that Phase 2a walls F480 (W) and F476 (E) had tumbled and gone out of use before, and perhaps well before, the primary burning.

PHASE 3: Begins with the primary burning (2704, 1572, 1573, 1916, 1917, 1868 etc) formed by intensive destruction by fire of timber and turf - probably as turf walls. It is not excluded that the infrastructure had already deteriorated; eg turf had collapsed from F480 before the fire (locally 2602), and from F476. There is no doubt that the primary burning seals the first yellow clay-silt series on both sides of the road.

PHASE 3A constitutes a clearing up phase. Levelling is carried out with sand (2687, 2701). Road 1 continues

PHASE 3B represents a phase of reconstruction. Road 1 continues

At the north end of the site, reconstruction was mainly in timber. Post pits were cut through S4 (F73-81 etc), and at least two stake buildings were constructed (F93, F100). Paved or pebbled areas seem to have featured in the reconstruction (F121, F40 etc).

In the south, an intensive phase of metalworking focussed on bronze, silver and probably gold. Square stone-kerbed hearths (F148 etc) and round clay hearths (F353). Numerous finds included crucibles, moulds and studs. There is no doubt that the area was dedicated to making objects, certainly precious, and probably ecclesiastical.

PHASE 3C

In the north, metalworking (probably iron) beginning with hearth F299 and continuing with figure of eight hearth F35 and other hearths and flues (F57, 58 etc). Many pits contained metalworkers waste (F29, 51 etc). A number of gullies (F127, etc) includes one contrived from a broken up carved stone monument (TR28/35, F166)

Large numbers of fragments of carved stone are dumped in the SE corner (1506, 1510, 1602 1721 etc), particularly in the defunct earthwork of ditch F180 (2641, 2537, 2645). These belong to monuments made around 800 AD. The stratigraphic position of this episode has

been debated. *Prima facie*, it would be logical if the broken up sculpture (800AD or later) succeeded the hearths in D2-3 with its fine studs. Hearth F148 is sealed by the plough soil (1284). In the E section of B7, the latest sculpture dump context is also a last activity to survive before ploughing (1506). But 1572, a context belonging to Road 2, is said to have been “over 1506”. Ditch F180 is certainly visible when sculpture spreads into it (2641, 2645, 2537). The pebbles of Road 2 appear to arrive and spread over F180 after this. Thus if the sculpture dump is one of the last things to happen, the road is later still.

The mill dam and pond are probably defunct. A platform of rubble (1326) allows passage across the boggy ground southwards.

PHASE 3D is represented, in the north, by pits and gullies, apparently of a domestic nature (F2, F30, F163 etc).

There is some industrial activity in the south. It all hinges on clay silt layer 1225, which lies over the sculpture (1506) and under the final surface of F18

The road was remade, as Road 2 (F18) in precisely the same place as before, on a sand, rubble and slag foundation (1692, 2562, 1550). It was eventually surfaced with pebbles (1150) which spread over the old ditches to either side. A pit dug apparently during the construction of the road (F185) contained a porcupine scatta of c 715 AD, but this was said to originate from “a black layer” that the pit had cut.

PHASE 4. The site was covered by a family of ploughsoils (1284 etc) that included a number of heaps of shells, or shell middens (F156).

Comment on phasing and dating

This relative periodization needs further analysis, particularly of finds in context and radiocarbon determinations, before it can be certain west and east and north and south groups of features are really contemporary. The north and south are mainly held in phase by the second road (F18). There are several anomalies awaiting resolution:

Phase 1: is there any occupation at all, and, if so, what is its likely date?

Phase 2: what activity in the east workshop accompanies parchment-making in the west?
What structures and activities go with the clay-silts?

Phase 3: is the precious metalworking in the south east in its correct phase? Is it contemporary with the iron working in the north-west? What happens in the space to the west of the road? What date is the sculpture dumped? Could Phase 3C and D be medieval?

Phase 4: Is it true that all the medieval pottery belongs to the ploughsoil or to the interface between the ploughsoil and the end of the settlement?

Possible targets for c14 dating

Phase 1 2527, 2437 charcoal from levelling.
Early hearth in B7

Phase 2 (west) Primary twigs from hearths F445, 495. Bones from bone alignment (1959 or 2511)

(east) Primary twigs from hearth F493 and others below it (we hope)

Charcoal from ash-clay-silts eg 2475

Phase 3A. Date of the primary burning: Samples of twigs and heather (2602) and a bird (1868). Wattles F483, F490.

Phase 3B (north) hearth F299

Phase 3C (north) hearth F35
(south) hearths F148, F353. Dump 2600

Phase 3D (north) Bone from assemblage in F2. EM or Med ?
(south) Charcoal associated with dumped sculpture in F180. EM or Med?

20 July Find of a flat-bottomed socketed stone (mortar) in the top make up of F149 terrace wall, suggests that part of the wall has been rebuilt rather than simply collapsed. That is if the terrace wall belongs to a primary phase of construction.

26/27 July Visits by George and Isabel Henderson, Aidan Macdonald, Steve Driscoll, Katherine Forsyth, Gilbert Markus, Rachel Butters. Friendly – no strong views expressed.

28 July MOHC and CAS rethink the clay-silts. CAS finding post-holes on W; MOHC considering clay-silts to be levelling from flues or ovens elsewhere brought in to level floors. Clay-silt areas to E and W perhaps mark out buildings.

1 Aug CAS recognizes major building, built in the manner of S1, around hearth F495. Christened S9. The components are double post-pits with packing, slabby wall foundations (F434) and spreads of hard ash-clay-silt, now thought to be floor levellings (see above). The shape is indeterminate but could be bag-shaped in plan like S1. The hearth itself is surrounded by well-defined stake-holes, perhaps supporting a cowl. Finds and features currently suggest that the west side of the road is divided into three areas, from N-S: tawing in pit in yard. Hide smoking indoors; and hide finishing in yard (with F480 as yard wall rather than building).

MOHC/MRH suggest that the E side is dedicated to processing carcasses, producing meat and hides.

Work on the balks suggests same basic sequence: stone buildings, road, early ditch (Phase

2A), with clean floors but early ditch fills. E= 2500, 2510; W= 2400, 2401, 2395. Both sides end in a diagnostic floor. E= 2335. W=2109. Clay silts and brown mush then laid down alternately (E= 2335 [2144], 2475, 2117, 2465 [=2294]; W=2109, 1996, 1994, 1976) Phase 3C. Both sides end in primary burning. E= 2704, W=1872.

15 Aug 05 The following was sent to P Ashmore as an outline bid for C14:

Portmahomack Pictish Monastery – the Story so far (August 2005) with key targets for radiocarbon dating

Martin Carver and Cecily Spall, 14 Aug 05
Contact: martincarver@yahoo.co.uk

Introduction

The site divides into three areas which are not stratigraphically connected: the church (sector 4), the workshops (sector 2) and the farm (sector 1). Chronological correlation between them will rely greatly on radiocarbon dating.

There is a good stratified sequence within Sector 4 (burials). There are good sequences within Sector 2, but the context trains are generally separated by a road. Radiocarbon dating will be an important factor in the stratigraphic correlation within this sector.

There little stratification in Sector 1. Radiocarbon dating is essential to phase the key episodes.

The matters for radiocarbon dating are:

*When does industrial activity start? Expected answers: 6th century, when monastery is founded; 7th century, after a century of devotional practice.

*Does parchment-making and precious metal-working start together? Or does parchment-making precede metal-working by a century? Expected answers: Parchment making begins in the 7th, to feed a program of ideological expansion. Metal-working begins in the 8th to feed a program of political expansion. This would match the Irish model.

* When is the mill built? Expected answer: 8th century. It can then be a borrowing from Ireland

* When is the site burnt down? Expected answer: c700. It then has nothing to do with the Vikings. But it does mark a key watershed between an Ireland-influenced ideological programme and a Northumbria-influenced political programme (cf Whithorn).

* When is the sculpture dumped? Expected answers: In the 9th century (Vikings), or c1000 (Earls of Orkney v Moray mormaers), or c1100 (construction of Parish Church)

Is there any medieval activity in the old monastic precinct? Expected answers: No, the iron working and rubbish pits are 10th and follow on directly the monastic industry. Yes, iron working, timber dwellings and rubbish pits are 13th century, and coincidental to the abandoned monastery

Provisional phasing of the Portmahomack site.

<i>CHURCH [Sector 4]</i>	<i>WORKSHOPS [Sector 2]</i>	<i>FARM [Sector 1]</i>
Turf on dunes	Turf on dunes, marsh	Turf, scrub?
Timber Church?	Turf on dunes. Levelling with brown sand	Grazing cattle
Timber Grave markers?	Marsh in Glebe Field	Ploughing with ards
Long Cist and head-support graves		
Incised stone crosses		
Stone church?	Paved stone road with kerbs and side ditches	Grazing cattle
Head-support and unlined graves	Cattle hides tanned and smoked (S4, S9)	Inner enclosure ditch
Incised stone crosses	Parchment made for holy books	
Stone church?	Installation of flues and culverts	Early workers in silver gold? (in final fill of inner enclosure ditch)
Head-support and unlined graves	Dumping of ashy silts	
Incised stone crosses		
	FIRE	
Stone church with aumbry	Working of precious metals for book-covers, reliquaries, chalices, patens	Outer enclosure ditch
Head-support and unlined graves		Mill pond and mill
Stone grave markers in relief	New pebble surfacing for road	Kiln Barn (S1)
Sarcophagus		
Four monumental cross-slabs [Similar cross-slabs at Cadboll, Shandwick, Nigg]		
	RAID.	
Abandoned?	Monumental cross slabs broken up	
	Iron working	Mill?
Coin hoard	Timber buildings	

Abandoned?	Domestic occupation	Mill disused Mill pond filled in; Enclosure ditch filled in Rig and furrow cultivation
Foundation of parish church of St Colman by Fearn Abbey Coffined and uncoffined burials	Fields	Fields

ⁱ *DATES RECEIVED: Burial 162 (Int20/F159) 162 OxA-13483 414 AD; Burial 172 (Int 20/F152/1373 OxA-9699) 570 AD ; Burial 128 (Int20/F103/1244 OxA-13487) 586 AD; Burial 163 (Int20/F160/1374 OxA-13484) 591 AD.*

ⁱⁱ Three dates requested: Charcoal from brown sand levelling, Int. 14/24 c2527, c2473. Calcined bone from c2654. These represent the earliest activity, other than burial, at the Portmahomack monastery.

ⁱⁱⁱ *DATES RECEIVED; Burial 144 (Int20/F98/1232 OxA-13488) 646 AD; Burial 160 (Int20/F148/1346 OxA-13486) 667 AD; Burial 165 (Int20/F158/1371 OxA-13509) 641 AD; Burial 116 (Int20/F96/1228 OxA-13489) 682 AD.*

^{iv} Two dates requested: Calcined bone in final fills of F445 and F495, hearths in the parchment-workers' area.

^v Two dates requested: Samples of aligned cattle metapodials used in parchment-making c2511 and c1959. These represent the latest activities of parchment-makers.

^{vi} Three dates requested: Charcoal from metal-workers' pit F482; Burnt bone from the first later of ashy silt, c2336, and the last c2294. These bracket the use of the workshops by those that dumped ash for levelling, probably derived from heating flues. These dates also refer to the construction and use of the heating flues.

^{vii} One date requested: From the metal-working area in Int 11/25 (inner enclosure ditch). This is stylistically the earliest working of metal and glass. Is it contemporary with parchment-making, or subsequent to it?

^{viii} Three dates requested. From the layer of intense burning that affected the whole of the workshop area (Int 14/24). F483, burnt wattle fence; c2677, burnt heather, c2889 burnt straw. *Burnt wood from the primary burning layer (Int26/1030) was dated (OxA-9664) 470 AD; but this date relates to the cutting of the (heart) wood not the burning. Accordingly we need better selected samples to date this crucial layer:*

^{ix} *DATES RECEIVED: Burial 147 (charcoal burial) (Int20/F125/1294 OxA-13485) 737 AD; Burial 152 (Int 20/F132/1307 GU-9297) 935 AD; Burial 158 (Int 20/138/1238 GU-9296) 774 AD.*

^x Two dates requested. Calcined bone from the final fill of the latest hearths of bronze workers (Int 14/24, F148, F353).

^{xi} *DATE RECEIVED. Wattle stake in situ from revetment of outer enclosure ditch (Int11/F158/1490) OxA-10159 735 AD*

^{xii} Two dates requested. F404 Wooden stakes, possibly belonging to fish trap. On the floor of the mill race, immediately west of the stone dam; F436 stakes in bottom of mill-pond. These represent earliest use of the mill pond

^{xiii} *DATE RECEIVED: Calcined animal bone from hearth in bag-shaped building S1 (Int11/F65/1141 GU-11756) 745 AD*

^{xiv} One date requested: Bone from articulated cow buried shortly after the sculpture was dumped, F304

^{xv} Two dates requested: From charcoal of final firing of iron foundry Int14/F35; Hearth Int14/F299. These represent the latest activities of iron workers.

^{xvi} One date requested: Animal bone from large assemblage in F2, one of the latest rubbish pits before the rig and furrow.

^{xvii} One date requested: from a tree stump (with tree-rings) up-rooted and back-filled into outer enclosure ditch before being ploughed over. *DATE RECEIVED from charcoal from ultimate back-filling of a different late ditch (Int11/F18/1143 OxA-9662) 935 AD.*

^{xviii} *DATES RECEIVED: Burial 90 (Int20/F45/1106 OxA-13521) 1511 AD; Burial 97 (Int20/F48/1107 OxA-13762) 1475 AD; Burial 99 (Int20/F76/1183 OxA-13490) 1306 AD; Burial 113 (Int20/F84/1206 OxA-13491) 1291 AD; Burial 117 (Int 20/F93) 1224 AD.*

16 Aug 05 Farewell to S4.

A list of features and floating contexts recorded in Quad A was taken from the Context and Feature index. The recorded relationships were noted and a strat diagram composed. Quad A has little good strat. compared with Quad B, but the model is therefore simpler.

There are six main horizons above the buried soil (1384), which is here a patchy black turf, with orange gravel showing through the gaps.

1003 is the shelly ploughsoil

1074 is a rubble layer

1025 is a brown soil

1870 is a dark brown silt sand

1307, 1364, 1069, and 1868 are patches of primary burning

F50, 76, 82, 83 are rafts of packed pebbles; which lie above

1384 (1060, 1028) is the old ground surface.
1388 (1051) is the gravel subsoil

The old ground surface undulates, a former dune, and it has been filled in and leveled with a soft yellow buff sand, or, confusingly, redeposited gravel subsoil. On the whole this does not seem to have been noted or recorded.

The following groups of features are recorded within the lattice:

F140, an electricity cable cut 1003

Over 1025 are hearth F3 and stakeholes F47 (with F32, 45,46); post holes or pits F10, 12, 14, 33, 37, 38, 39. Pits or gullies F142, F143 and 145, running into the west balk probably belong here too.

Over 1870 are F60, 67, 68. The road F18 (1150) may here be 1202. If so it belongs later than 1870.

Cutting the primary burning (but otherwise unphased) are pits F325, 323 and gully F380. They could easily be late in the sequence.

Cutting the pebble surfaces of S4 are F73, 75, 78, 84, 94 all (coincidentally) convincing post-holes in a line. F77 and F81 could also belong to this family. They represent a timber structure parallel to S4, half of which lies outside Int 14 to the N.

F41,42, 44, 79, 81, 85, 87 float free.

The flue/culvert F385 cuts 1947 which seals S4. Its position, at the N corner of S4 also suggests it is secondary. There is a hint that this feature led across the inside of the NW end of S4, and was subsequently pebbled over.

In a number of instances, pebble patches could be seen to conceal slabs (but the pebbles have been left on).

A series of anomalies at the centre and E end of the north section were investigated by heavy trowelling and suggested by MOHC to be not subsoil. Perhaps features earlier than S4, possible grave. The distinction is however pretty fine.

S4 comprises 4 walls (yet to be featurised) and 4 pebble surfaces, the tank F72 and its covered drain F376. At the E corner lie slabs F141. This makes good sense as a rectangular building housing a tank (for tawing?). The NE and SE walls are rudimentary, but this is the side most damaged by ploughing (the E side is the shallowest). Several slabs can be seen tipped into the buried soil against the NE wall, as though fallen into a wet patch.

On the E side the ploughing seems to have been compounded by our own machining, since visible in the E section (and only in section) is a horizon of pebbles looking suspiciously like

F18. 200mm below this are large blocks of sandstone, and between the two, a buff sand. The blocks are either the phase 1 road (F469) or part of a building on the line of the road.

All the slabs of S4 lie on the degraded turf of the buried soil or on sand levelling above it. There is no hint beside or under S4, or from finds, of any kind of earlier phase. There is an earlier phase further down the hill, consisting of spreads of ash and charcoal, which are either redeposited or represent randomly sited bonfires.

A dozen or so contexts were generated in 1997 without however being described or located (eg 1024, 1028, 1037, 1039, 1042, 1044, 1046, 1047, 1307, 1364, 1366, 1240). Most of these will have to be abandoned.

A briefing dossier prepared for Nicky Toop shows which contexts and features need written records, and which can be expected to show in each section.

During preparing for S4 final photo, many stones were removed, mainly by MOHC. The principle used was to remove all pitched stones (ie one corner down), loose stones and isolated slabs.

The results looked good for tower shots on 16 and 17 Aug. But rain meant that half quad A had to be done on 16th and the whole on 17th. Rain continued to fall on the night of 17th.

The ROAD F469 proves to have a mantle of brown soil on, beneath which lies buff sand, and beneath this either slabs of weathered sandstone or yellow clay-silt (ashy silt). It is clear that the road has been patched with clay silt, just as the inside of "S9", before the fire that caused the primary burning. Two patches of ultimate clay-silt were left in for the photo: on the road and in the N part of S9.

17 August Donald and Kath Urquart fed the team – excellently

18 August Martin and Jan Dane fed the whole team – excellently. Danes claim to have a scarab presented to her father by Howard Carter.

Met Michael Gallon, a responsible metal detectorist.

Camp site sold off: Portakabins given to Barry Grove, Richard Blossie; Kitchen sold to Jan Dane for £1000; Portakabin and toilet sold to Richard Mackenzie (builder) for £850. All caravans sold or given away. Electricity, sewage and water ready for disconnection.

19 Aug Michael Gallon visited. He has found a gilt bronze A/S disc brooch (c600 AD) at Achinchantler nr Dornoch. Also three Roman trumpet brooches from same area.

From the Manse Field at Portmahomack he has a bronze needle, a zoomorphic pin head and a saddle quern. Plus several medieval and later coins.

He confirmed the company's view of Colin Macleod.

Contact: Michael.gallon@carnegieclubs.com

20 August Pig roast at Castle Balone for Lackie Stewart's 50th birthday. Richard Durham says it is up to the academics to find a solution to the Hilton crisis (big bit in Edinburgh, small bit in Hilton, held illegally).

21 August Dinner with Caroline and John Shepherd-Barron. Good to find the fight has not gone out of her. We resolve to create a subscription by covenant - each life member pays £100 pa.

22 August 05. Useful meetings

Meeting with Sabina Strachan and John Malcolm with

- (a) Billy Vass
- (b) James and Douglas Gordon at Bindal

Our template for scheduling is a rectangular area enclosing the enclosure. Both farmers to be encouraged to convert to grazing via a management agreement. Billy to get c£300 pa and Gordons £560 pa, with a single grant for fencing in both cases. Both look likely to accept.

Some problem about the water in the case of the Gordons. In spite of the fact that we have been paying them every year, it seems as though they have declared our supply (ie the supply to a cattle trough that we are using) to be unused. This risks landing us with a bill that they should have paid.

Sabina's ideas for presentation: no trees anyway. Can't plant bushes and have grazing (animals will eat them). Also a hedge line would confuse, since modern fences will have to be erected or repaired that run along similar lines. Therefore better to signal lines with markers - perhaps pieces of sculpture? The land under management agreement for grazing would then be locked up against access to the people of The Port, so I couldn't leave them a "Peoples' park". A deal to that effect would need a fence and a maintenance agreement. This would be more expensive (and thus less attractive) to HS.

The area of land in the Trust's ownership could be more developed. Suggestions are:

S4, S9 and road laid out as grasscrete paving. Otherwise mown.
Panoramic panel in bronze shows extent of monastery with artist's impression.

Meeting with David Clarke and Andy Heald. They brought Anne Moody, a new appointment courtesy of the Culture Commission, who will develop the NMS plan for outreach. Three centres of excellence have been selected: Kilmartin, Northlands and Tarbat. These three points embrace the broader Highlands and will help irrigate tourism. Each is to act as a node for further outreach. All three to be given a makeover with the same design branding.

At its AGM and meeting that evening, the Trust agreed to this with acclamation. In the

meantime, we (FAS) agreed to produce a pamphlet and do temporary exhibitions to keep the topic warm. The topic would be monasteries and crafts.

23 Aug 05

PLAN FOR CONSERVATION AND PRESENTATION

Sabina has offered c£300pa to Billy and c£560pa to the Gordons not to plough their parts of the site.

We have been paying £550pa to Billy and £400pa to the Gordons for the use of a very much smaller bit.

Suggested to Tony that we could do a deal with farmers, whereby for a little extra they need not graze. In separate meetings, Billy and James agree in principle. Need to work out a price. Tony will take this on.

MOHC to get the OK from Sabina.

Billy would like an extra square to the E included in his management agreement. MOHC to argue for this with Sabina.

If this happens, we would have the equivalent of Sector 2 and 1 as public space. Can mark monuments and could display sculpture.

Visited Barry Grove who has nearly completed Hilton replica. I thought it brilliant. Very enthusiastic about the possible display of modern sculpture at the Port site and elsewhere on the peninsula. I described his replica as a window on the 8th century sculptor. This idea of modern sculpture as reference to earlier craftsmen appeals to Barry – as it will to the public.

Meeting in Church: Self, David Clarke, Andy Heald, Tony Watson.

PLAN FOR TEMPORARY DISPLAY 2006

- Delivery by 15 May 2006
- To occupy nave. Present local exhibits to be moved to St Colman's
- NE. Old church case to be revived. The original story line to be restored and the case to contain: pottery, coins, bell moulds and later church plate
- SE. "Archaeology in Action". Two Victorian cases with drawers provided and ujp against the S wall. Contents: (1) The archaeological project in photographs 1991-2005 (2) Archaeological tools (3) soil with Munsell book and context card (4) Slag etc with Finds card

South wall.

- (1) On wall, centre: Massive blow up of Excavation sample including Sectors 1-4 and labelled with Church, cemetery, workshops, road, mill, barn, vallum. Deliver to NMS as CD and state size
- (2) Blow up of work in progress in Sector 2. Deliver to NMS as CD and state size
- (3) Lectern: statement of the Pictish Monastery, its discovery, excavation and crafts.

- Statement that this is temporary, and that we are developing a new exhibition in partnership with the NMS
- (4) On lectern: new power point presentation
 - (5) On strips either side: How to make a codex; how to make a chalice
 - (6) New clip cases from NMS against the wall: Metal working and parchment working. Labels for same.
 - (7) Pile of querns between the two cases, with label.

Actions required:

- By 1 Oct: List of all objects to be exhibited to NMS
- By 1 Apr: Inventory cards for exhibited objects to be completed
- By 1 Jan: draft copy and pictures to NMS
- By 1 May: Panels and objects available from NMS
- By 1 Jan : Material and design for pamphlet to Trust for approval.

24 Aug. 05

Coaches for tours: Tim Dearman, Ardross, Alness, 01349 883 585

27 Aug MOHC to Dublin for Celtic Art Conf at Trinity. Speaks on Tarbat on 27th

28 Aug- 3 Sep MOHC on holiday in France. CAS telephones 1 Sep to say that the one of the "anomalies" on the north side has turned into a grave.

5-6 Sep MOHC on visit to film with Granada and see new grave. There are three, the excavated example very fine with intact cist of stone slabs.

c12 Sep Site backfilled and camp struck.

2006

15 May Season began. It was clear at the end of the 2005 season that there was still some way to go:

- (1) Understanding S9
- (2) The sequence under the road at the south end
- (3) The cist graves at the north end
- (4) The likelihood of post-holes and other buried features concealed by the buried soils.

We decided to concentrate on the first two, S9 and the sequence either side of the road at the south end leaving the road itself in place.

Having sold the camp site, we had recourse to hiring cottages, and for the sake of economy needed to do so out of season ie before 1 July. We found Rosie Innes willing to let us a cottage c 3miles out of the Port. Cost £2200 for 8 weeks. This was a success but cannot be

repeated in 2007 (daughter returning home to settle there).

This time of year proved v difficult for me: exams, an AUT strike and Antiquity lost its assistant, Emily Smyth, to a better paid job in London.

14 June. Came up on a brief visit. Gave talk at the Centre in the evening on Portmahomack's Neighbours. Very warm reception. Tony Watson gave elegant eulogy of MOHC and the team which we very much appreciated. Caroline's vote of thanks very affectionate

S9 has probably exhausted its secrets. It consists essentially of post-pits, threads of cobbled "walls" and a fine big hearth. It seems likely that a building stood here and that its plan was not unlike S1. But there is little convincing structure.

On the W side of the road (south) the interminable sequence of clay silts excavated by Dave Fell came to an end in a pile of animal bone [well preserved assemblage] in a hollow against F480. Large blocks of stone lie further E. The function of this area is, however, no clearer.

On the E side of the road, the sequence of clay silts and hearths has been taken down to a buried soil-like surface by Nicky Toop. The ditch that runs along the E side of the road is multiplying. Three large stones continue a line of same in a southerly direction. These seem to be the core of a bank, rather than a structural wall. Each is curiously jacked up by a stone on the W side, so the top presents a sloping face to people on the E side. Perhaps these are connected to hide preparation, butchery. The sump continues to grow on the E side – draining water? Blood?

I asked that Cecily should keep going; complete the roadside ditches and adjacent areas at the S end, remove all surface stones except on road, F480 and the large stone line (as above). We should also draw as many sections as possible and take kubienas and C14 samples.

3 July 06 Second visit.

All stones lifted as planned
S9 is declared complete, and the hearth excavated by Becca and gone.

On the W side, the bones have been lifted, but the ditch is no clearer.

On the E side, the ditch is turning into a set of ditches, one of which goes underneath the road. Another has a lining like that in the church. It is even possible that there is a one broad ditch, or hollow way to account for all this. The hearth F472 looks as if it is dished in to the top fill of one of these ditches.

On the E side against the S baulk is a remarkable sunken-floored structure with a slab floor (F530). Voids show here and there between the stone slabs. Cecily thinks this might be a well head.

The other half of the boomerang-shaped stone-lined channel adjacent to Int 26 is F529. The

fill suggested standing water, though this should stand some way above the water table. It curiously resembles a cist grave. So we have at least two of these stone-lined channels emerging from the E section. Both are blocked on the W (downhill) side. They therefore did not drain water but collected it.

In the south facing section, a piece of sculpture (probably 2 or 3) was noted as lying directly above the primary burning 2704. There is more sculpture in the charcoal rich layers above – but these are not necessarily very much later. There is no longer any doubt that the broken sculpture and the primary burning can be closely associated, the one immediately following the other. Sculpture is also dumped c30cm above the subsoil to the N of Int 26 (seen in section).

2740 lies on 2750 which lies on 3051 [see drawn section]. 3051 is an extensive layer of pale buff sand. It looks like, and could be equivalent to 2353 on the W side. If so we have a logical sequence for the whole period: sand 3051, 2353 laid down. Area dedicated to cattle processing, including butchery (W) and parchment making (E). The road was most likely established then too. This ends with the primary burning, after which sculpture is dumped. Then metal-working begins. The parchment-phase metal working is over by the barn in Sector 1.

The big question remaining is what happened before this?

We have, so far only a set of ditches and a sunken stone platform that were there before the road. So there is clearly a long way to go.

PLAN for next season.

On Site

- * We make another determined effort to finish
- * We re-open sector 2 all the way to the dam, in order to establish the relationship between the ditches and the sunken platform and the mill-pond
- * We excavate the cist graves
- * We strip a module width against the E and the W sections, and beneath a part of the road, to certain subsoil, to confirm beyond doubt an absence of structures.

Off site

- *Complete plan of Nigg
- *Complete map of portage

Administration

We have made the following arrangements with Jan Dane of Seafield Farm, Portmahomack (01862 871 221).

From 24 June to 15 Sep 2007, we will have the use of:

*4 bedrooms to sleep in. (She offers linen and washing machine).

*The old dig kitchen and all that it contains. However water must be carried or hosed from the house kitchen.

*The end of the house kitchen (to eat in).

* The walled garden to camp in.

We will pay Jan £500 the approximate equivalent of £50 pw to cover services. It would also be appreciated if one of the team was a house detective, to help her understand the history of her house.

I have told Jan that our work force will be 8, consisting of 6 diggers (including me) and 2 volunteers.

Pip will be welcome, but not Jasper

2007

Season began 25 June. Cecily, Justin strip Int 14 and N 1/3 of Int 24

9 July I arrive. Site opened, poly off and surface cleaned.

S9 advancing, with more buried soils scalped and more post pits tested.

Section of terrace wall removed.

Mill pond and dam and leats exposed. Began to clean the dry parts (E and N). The stone structures exposed. They sit on sand (S) and are butted by redeposited red boulder clay (N). Doubtless CAS correct in saying that the hydraulics of dam, pool and leats are packed with clays thinning out as you go up the hill. Causeway, road, dam, pool and leats begin to like one single massive piece of engineering. This should be testable by simply cleaning the surface of the clays and sands.

However it is not excluded that the area between the dam and the pool still conceals a mill. We have acquired a pump and will be digging this.

Need to send up the plan of the mill area with F nos.

12 July Mill area pumped out and first cleaning done by MOHC and CAS.

14 July Rain in the night and the morning reflooded mill. Work called off. Study Day (1) started on time with Eric Fernie, Tom Clancy, Alex Woolf, Lesley Abrams, Catherine Hills, Sue Youngs, Julia Smith. Enjoyable. In sum: current interpretation believed, indeed welcomed. Including "8th c wall". Perhaps an over-insistence (particularly from Tom and Alex) on the "normal" Christian package among the Picts. Clearly influenced by John Blair.

Lesley told me about the Northfleet Mill, Kent excavated by Wessex Archaeology. Looked it up on internet. Said to be 8th century (didn't say why). Consisted of two parallel pipes 1ft square in section acting as the delivery of jet onto paddle (didn't see paddle). Presumably so you could turn it either way. No sign of this in our "mill"

21 July

Burials: Most westerly is an excellent specimen equipped with double layered of upright stones N and S and a lid. Skeleton in good condition.

Most easterly is in poor condition (only stains in places) without any cist.

CAS now looking for square kerbed barrow among the pebbles and kerbs around S4

Primary buried soils: tests of modules W and E of road show thin levelings of gravel and turf coming off pale buried soil. Absolutely sterile. (ie no finds with 100% sieving)

Nicky's hearth is fine and rectangular. Contemporary with ditch feeding water collector. These are Phase 1 not prehistoric

Mill

All loose now cleared, based on the inclusion of shells.

Culvert runs in a curving line from E to W. Very large capstones opposite the end of the road. S of it and apparently attached is a rectangular structure of four parallel stone walls, whose S end we do not have. This is called, optimistically the "Mill area". Alternatively this area is the site of a wooden bridge, but no sign of springing.

Mill area divides into (from W looking N),

A. outside to west, frass on mud with wood pieces. Our sump is here. External to W, the wall sits on huge cobbles in sand. Stumps of trees or branches at angles around. Nothing structural, although one piece, 10cm in dia, appears to have been sharpened like a stake.

B. W Chamber formed by large long stones on cobbles (W) and thin long stones on edge (E). Contains layers of frass and sand tipping down hill. Square or circular patches that look like posts set in sand, but usually aren't

C. Central chamber, 2m wide. Had large heap of brown sand (lowered flat for drainage) off which will come redeposited boulder clay and frass (in that order) both to E and W. The redep boulder clay is hard, compact, gravelly, v sandy with little clay. It runs in a ribbon across the site, approx along the line of drainage. There was a shallow circular depression in the centre of the central chamber. Seems to have been formed by a drainage vortex, concentrating pebbles at that point. Many other swirling patterns in sand suggesting drainage

vortices.

D. E chamber formed by less orderly stones – probably disturbed. They make a 1m area which curves to E (ie slightly up hill). Boulder clay, frass, sand tipping E (uphill). Sand shows swirling drainage vortices. One context (3368) removed to improve drainage here contained large amounts of butchered bone and half of a drilled stone disc (pot lid?). But also contained shells.

E. Redep clays and grey sand with charcoal make dam. Revetment (terrace) wall still missing on S side, but face of clay dump exposed.

F Mill pool, with peat.

Around entrance to culvert, stones set in clay – blocking, baffling, refurbishment?

Section line established c1.5m from culvert. Plan is to lower S part so we can keep draining water under control.

23 July

In pursuit of the location of Church 1, inspected the area outside and in and measured the length of 11.25m on the ground (taking in a wall thickness of 1.5m). There is a N-S wall, E of and parallel to the E end of the present church which at first looked promising. But this is only 5m away, has the wrong alignment (strictly N-S) and it seems to belong to two burial vaults marked by stone posts. One is labelled Ross, the other uninscribed, but there are memorials in this lair to the MacKenzie, Corbett and McDonald families. Here the ground also drops rapidly into the valley, so that a church 11.25m long (as above) would surely still show above ground. It would at least have shown itself to antiquaries visiting in the 18th and 19th centuries, who observed the broken remains of 8th century sculpture at this point (the “Danish Cross”) – but none report the ruins of a chapel.

24 July

Mill: Entrance to culvert explored. Two rows of stones set in clay mix in front of it (3390). the longer and more westerly had a piece of Cross D at its N end (7780). Looks as though some dumping – post raid – has taken place in pond. Beneath this is frassy woody peat (3391). Lots of water problems. Drain widened and deepened, along same southern line. This gave a section through the mill dam which showed white sand, then dumped sand, boulder clay and tree stumps, then a more clayey mix with the occasional 10cm stone.

Suggests that the dam was built after clearance of a tree-lined hollow followed by a deep excavation to the boulder clay. If not here, somewhere else – eg the outer enclosure ditch.

Road: Long section so far shows that brown earth (3392) covers brown earth with sandstone

flecks (3396), which covers a layer of charcoal. The flecky layer and charcoal respect the kerb. Less clear that the brown earth does. The layers project further southwards as they get earlier, so that the hard surface of the causeway reaches right up to the mill, though the others don't. Cleaned the DITCH (F??) and saw this in section. The pile of flat stones balanced on the N end of this ditch also covers the kerb (round cobbles).

So the story so far is (1) Road on causeway, cut by mill culvert (TO BE CHECKED).with kerbs

- (2) Extensive burning [this is the sceat layer]. with kerbs
- (3) Sandstones flags. with kerbs
- (4) Brown soil breaking them up. 3396
- (5) Brown earth 3392
- (6) Flags from phase 3 piled up beside road. For recycling?

The pebble surface of road 2 lay on top of this. The Ditch probably goes with Road 2.

My guess is that the first 2 phases of Road 1 have yet to be seen N of Int 24

27 July Looking for a possible square ditched cairn, represented by the less well laid pebbling, Cecily defines a drain leading from outside the curbed area into the tank F75 on its N side. Flourey sandstones had been used to block this watercourse in a second phase. At the W end of F75, MOHC fails to find similar drain, but finds circular pit full of dog whelks within drain-like parallel cuts. To be excavated.

Road 1 becomes layers of dump on top of causeway. Includes charcoal layer – the one that contained the sceat.

28 July 2nd study day: Michael Ryan, Euan Campbell, Aidan Macdonald, James Barrett, Roger Mercer. Ragnall O'Floinn and Edel did not turn up. Nor Leslie W. Had a great day.

- James Barrett (father is road builder through forests) pointed out the principles were drainage, drainage and more drainage. He thought the "mill" was a bridge, and that the culvert drained the road both south AND north (ie INTO mill pond). This puts the mill back where it was, and the "mill area" is a typical river bed under a wooden bridge.

- vellum, metalworking OK. "styli" might be pins (Euan)

- Early church dubious because most are becoming 12th c in Ireland too. Aumbry is inserted (Euan). This makes whole thing 13th c although doesn't explain alignment of E end. Consider the possibility of a longer church with a crypt, as Hexham, Ripon.

- Road headed for real site of church? (Mike).

At reception, Tony says Highland 2007 might give us another £20K. I suggest using it for presentation. I work up a scheme and send to Tony.

29 July File of “S7” the mill complex made in 2000 (arrived from York)

F440 is the dam (bank)

F432 is an overflow channel on top of the dam, now gone (it was S of F431)

F431 is the culvert we know and love

F430 is its cover

F394 is the W wall at right angles to F431.

F404 the “eel trap”. Said to have been left in position at end of 2000 season. A row of 12 posts parallel to F394 and W of it. (One post survives).

1326 area of large stones over dam F440. There are a lot of stones, continuing for nearly 8m in all. Too many to be a bridge?

1877 under 1326 large cobbles with hard brown sand.

Toby’s interpretation was the same as mine at start of 2007 season: F431 is the bypass. The wheel is in the square formed by F431 and F394. F394 becomes weir.

Toby saw a plugged breach at the N end of F394, seeing it as originally the out flow from the wheel house, later blocked.

8 August Back from 1 week vacation in Crete (Lexy’s christening)

Both strippings to subsoil E and W looking good (ie nothing).

Possible prehistoric noise continues at N end, but no dating material.

Large dump of metalworking debris W of F480. CAS is sure this lies beneath primary burning. Likely to be an adjacent metal working workshop, contemporary with vellum.

Pump blew up preventing work on mill area until next week. CAS reckons it would waste more time/money to hire a replacement.

So I will deal with the culvert and its meeting with the road.

Agreed these timings with Cecily.

24 Aug digging stops

27 Aug – 31 Aug recording and setting out consolidation markers

1-7 Sep backfilling

Context 3390. Removed stones in area of mill pond immediately E of mouth of F431. These were left as suspected of being structural and perhaps a continuation of F431/430. Not so. They were embedded in peaty frass – **twigs and wood**.

Context 3492 Removed stones on edge of dam N of F431. Uneven result. Could be a drain coming through here. Stones, including slag and whetstones, embedded in **dark grey clay**.

Context 3391 Wood pieces interleaved with sand. Does it go under the dam??

11 Aug. *Study day 3.* Niall Brady (helped on site on Friday afternoon), John Bradley, Heather King, Betty O' Brien, Bernard Meehan, Rosemary, Jill Harden, Laura Hindmarch and Airlei Hindmarch.

Mill is unquestionably a mill – this is what they look like (Niall, Heather, John B). Dig it up!

You'll never finish (everyone).

You must get to the bottom (Heather). She was reassured, I think.

Styli could easily be styli (Bernard).

Presentation: Rosemary suggests creating a plan of the excavated features on the surface. Low maintenance, good protection and gives the scale. The most important asset of this excavation is its size.

This was the plan preferred by Laura Hindmarch too. Seems likely that we would not get SMC to expose archaeology. Would not accept trees.

Meeting Friday to determine future.

*Panels as before

Edge of excavation?

In Gordon Field:

*Vallum: Bank

*S1: cobble trench; post pits

In Glebe Field:

*Terrace walls and dam: stones in trench

*Culvert lines: stones in trench

*Mill building: stones in trench

*Road: cobbles in trench – all the way up

*S9 and hearth: stones in trench; post pits; slabs edge on.

*S4 pebble area. slabs on edge = trench, culverts

*Graves. Slabs on edge

Lunch £45.60 (Oyst); Dinner £239.65 (Cally).

13 August

Excavated the eastern part of the culvert (F431), between the two covering slabs (F430). In 6 inches came down to base of smooth flat stone sloping west. It is clearly a mill chute.

Attempt to repeat this west of covering slab (ie W of dam) less successful and making too much water. Appears to be a 5-way junction, with another inlet to N, and outlets to S, W (ie the main bypass chute) and hopefully SW, the one that would drive the mill. However no clear sign of this yet. The levels of these chutes and the foundations of the W wall mean there are 6-10cms to go, before we reach the mill base.

16 August

Cleared the main drain of F431 – appears to descend rapidly well below the level in the “mill chamber” – which I started to lower.

Broad piece of thin leather found *under* a megalith which appears to form part of the S edge of the culvert (lade) F431

Finlay Macleod of Skye – mill expert came and pronounced himself puzzled. He deals mainly with timber mills.

Pete excavated a shallow oval pit full of charcoal running alongside the marsh edge in B (W). Cecily’s interpretation: charcoal used to purify water.

17 August

Lifted leather.

Visit of Billy Vass. He was entirely comfortable with the idea of scheduling and giving the W part of the Glebe field over to display.

18 August

Piece of sculpture with animal in profile and spiral ornament turned up in the well under the terrace wall. This will take some explaining..... Either it is intrusive from the pond, or the terrace wall is itself post-fire. Later decided as intrusive from the pond.

Major hack at interior of “mill chamber” with help of Ritchie. Removal of concreted yellow sand and pebbles 3558. A row of stones emerges, diagonal across the NE corner. Otherwise it is swirling brown sand.

End of Campaign talk at the Cally. c200 people came, mostly local. Mood sombre. I am the

betrayed, leaving them in the lurch. With near total exhaustion, I ride on adrenalin and keep smiling.

Evening ends with a sing song at Donald and Caths. Annette appears reconciled with Cecily and both hopefully content with their roles. Annette wishes Cecily good luck with the end of the dig....

Mad advises that our site might not be in the right place for an archaeological park.

20 August

Among the stones (3559) in the mill chamber (and NW of the row) is an upside down saddle quern.

3559 is defined as the mass of stones, sand and compact dark earth which seems to go down down down.

Our pump mended.

The "mill" is now quite contradictory: the W foundations are showing, the edge-on stones are about to fall out, and still the fill is higher than the culvert base (F431).

The megalithic lid appears to rest on packed pebbles.

The S side of F431 at the down rush is sitting on a layer containing leather.

Everything points to a *majority* of the large stones being secondary.

Or else the primary situation that I am trying to reach by shovelling out the "mill chamber" is in fact marsh levelling. In this case there is no mill; the box like construction is a cistern of some kind, fed by overflow.

Graham Watson visited. He is now in Education, Culture and Sport. He is willing to help us. He approves of the display. He would not wish to see the Centre go down the pan.

Board Meeting. Tony Watson is wanting to pull out of being chairman (and probably out of the Trust). Prognostication dire. We won't be viable after 2008. He suggests broadening the base of the membership and the executive, but has no view on the right survival strategy: ie more visitors, better shop, more donations or dependency on government agencies.

David Clarke says that the Trust must win wider support locally. Seems to think this has to be done by employing some sort of fixer. The tri-museum project is still in the doldrums.

Isabel Henderson says Susan Kruse is that fixer. She works for WEA and would put on more popular lectures. We might also have academic panels. Isabel herself wishes to pull out.

Eric Grant has resigned.

Universal praise for the new exhibition (except from NMS, who are silent)

But Isabel and Caroline want control of new exhibitions.

I asked for and got an assurance that future archaeological exhibitions would be run past me and the NMS to ensure quality control.

A vote taken on the archaeological park was passed: me, Isabel, Caroline, Michael, Michelle for; David against; Tony abstaining.

David Clarke and Andy Heald visited on 22 Aug and showed warm support. They are pleased that all the finds (including the sculpture) are to be written up in house under Cecily's management. We are offered the use of premises in the Royal Museum to lay out and study.

We will prepare a Project Design for post-excavation and run it past them.

25 August *Study day 4* attended by Malcolm Cooper and Claire, Rod McCullagh, Sally Foster, Neil Price, Stefan Brink and son Hampus, Chris Lowe, Chris Morris, Mark Hall, Raymond Lamb, Julian and Linda Richards. Cecily, Nicky, Tony Watson and Muriel came to the dinner.

Malcolm made a very well received speech at the reception promising strong support, and reiterated it at breakfast the following morning.

The general mood was against surface representation. The centre should concentrate on events. With so much opposition, particularly from Malcolm and Madeleine, I announce my surrender to the Trust at a farewell dinner on Sunday night (26th). No-one is particularly bothered, even if they had voted for the scheme only a few days before.

I recommend a series of events to Tony – high quality conferences that will fill the hotels and make money. I recommend marketing deals with Charlette at the Carnegie and The Castle.

27 -28 August

Tuesday 28 August was the last day of the campaign, assisted by Justin and owing to the intransigencies of S7 we were digging right up to the wire. The rest of the week was given to recording, and the following week to backfilling.

The final situation and interpretation was this, as agreed at lunch break on 28th August:

The two main discoveries were: the culvert went nowhere, petering out well within out excavation area. Where the road met the culvert, there was a carpet of very large stones, abutting the terrace wall. These stones lay under the sandy make up of the road causeway. There was therefore strong evidence that the road was a contemporary build with terrace

wall. The stone platform must relate to access to the water. Although no actual steps had been defined, the stones led to the top of vertical slabs forming the N edge of the culvert at that point. The S edge, immediately opposite, was a single enormous slab of stone, which also formed the N edge of a square box of vertical slabs (F577). Its S side was missing but could easily have been removed. The square box was bottomed onto glacial till (pebbles in concreted sand) and the sequence suggested water-laid deposits concluded by redeposited glacial till. Water rose naturally inside the square box, but it can also have filled via the culvert.

These were unpleasant revelations since we (and I in particular) had spent the whole summer seeking a mill. Further more, we had assumed that the boundary wall was a revettement against pre-existing deposits resulting from vellum-working. If the road and wall were contemporary this would make the vellum working earlier than the road – which it certainly wasn't (rows of bones were recorded in the already backfilled road side ditch).

There was however, a feeling among us that it would be logical, given the size of the investment, if all the megalithic structures were part of the same development. It was agreed that the terrace wall could have been partly free-standing and debris from vellum working subsequently stacked against it. It was proposed by MOHC (though not agreed at this stage) that the metal-working debris *outside* F480 to the W was part of the metal-working that took place after the raid. He based this in the piece of sculpture that was found, without doubt, in the same layer as the moulds and crucibles. CAS on the other hand, was sure that primary burning lay *above* these deposits. This matter was unresolved, although it can be argued that a layer of burning is easier to explain away than a piece of sculpture.

The agreed interpretation of the sequence was as follows:

Period 1 (6-7th): Ground slopes to marsh. Hearth F535; well F527; gully feeding cistern F534, F530, charcoal pit F573.

Period 2 (8th): Major development:

1. Building of dam across valley, creating a pool. Contains some animal bone from period 1. Dries out the land to the W. The dam has a W face of yellow sandstone blocks (F533) and culverts built over or through it (F431, 432). F431 has a fine stone lining and a sluice.
2. Building of terrace (now “boundary”) wall of many stones. This is in two runs, E and W both linked to the dam. The E run (F149) crosses the filled in well F527. The W run also forms the N side of the culvert. The S side of the culvert W of the dam is jerry built as though it did not matter too much if water escaped from it.
3. Building of road. Redeposited gravel, sand, stones and turf are laid from N to S. Sandstone slabs are laid on the upper layer of sand. At the S end of the road, where it met the boundary wall, a platform of large stones is laid. At this point the culvert is formed by large vertical slabs, that to the S forming a 3-sided tank with two vertical walls of slabs. The road and the platform at its S end appear to be designed to give access to these features of water

management (culvert and tank). Both running and still water is provided. Suggestions for use include, water for drinking, washing, washing clothes, latrine or tanning.

The effect of this development is primarily to provide an accessible supply of fresh water, stored in a pool and a cistern or as running water in a culvert.

The evidence for a mill lies in the head of water created by the pool, and this was no doubt its intention. There are numerous querns deposited in the pool and a saddle quern from the tank. From the marsh deposit adjacent to the tank and under the cistern wall came a piece of fine leather.

Period 3 (9thc). Change of use.

1. The terrace wall is affected by fire. The culvert and tank are filled in.
2. The E end of the culvert F431 is blocked. Pieces of sculpture are dropped in the pond at this stage, one by the terrace wall where it cross the filled in well, and another amongst the broken down terrace wall where its meets the dam.
3. Four large slabs of sandstone are manoeuvred over the culvert.
4. The road foundations have been extended over the marsh. A revetment wall is constructed along its W side.
5. The road is resurfaced with pebbles
6. The pond is still there, so the water must find its way past the road by another method. But we have no evidence for this in our excavation.

Having agreed this version of events with Cecily at lunch on site, Justin and I drive back to York and the 14 year campaign is at an end.

MOHC 29 Aug 07