The church in Gásir

Interim report on excavations in 2004 and 2006



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With contributions from Guðrún Alda Gísladóttir & Ramona Harrison



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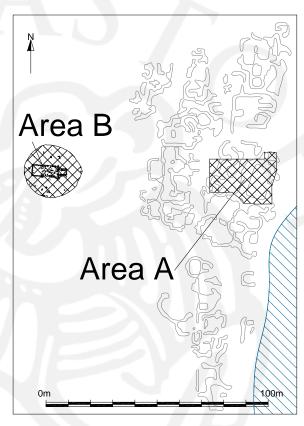
Front page: The church ruin at the end of excavation in 2006, looking east.

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Introduction

A major programme of archaeological research has been underway at the medieval trading place Gásir in Eyjafjörður since 2001. The main focus of the research has been the extensive ruins associated with the merchants' activities, temporary dwellings and structures for storage and industry. In the main excavation area (Area A) two large complexes of sunken featured buildings have been revealed, both post-dating a tephra layer from 1300 AD. The excavation has revealed evidence for intensive (if seasonal) occupation of the site during the 14th century and perhaps stretching into the 15th, but trading at Gásir had definitely ceased in the 16th century when Akureyri became the principal port of trade in Eyjafjörður. The excavations have so far not thrown clear light



Plan of Gásir showing the two main excavation areas.

on the beginnings of trading at Gásir but contemporary documentary evidence indicates that it had commenced by the 1160s.

The research strategy at Gásir included the excavation of a structure believed to be a church some 30 m west of the main cluster of structures (Area B). This is the only apparently permanent structure at the site and is located in a commanding position overlooking the trading site and harbour. It had been partially excavated in 1907 and a trial trench had been dug into it in 1986 (re-opened in 2001) but it was felt that a complete excavation was warranted in the context of the ongoing project as the church is vital to understanding the development of the site and its relations with both the local neighbourhood and the wider world. The excavation of the church and churchyard was carried out in 2004 and 2006 and forms the subject of this interim report.

In 2004 excavation in the churchyard commenced on June 28th and carried one for four weeks until July 23rd. The excavation was led by Orri Vésteinsson, assisted by Louise Felding, Rúnar Leifsson, Freya Sadarangani, Antonia Thomas and Jen Wooding. In addition the whole Gásir team took part in cleaning the area and Óskar Guðmundsson assisted for two days.

At the start of excavation a JCB removed the turf and topsoil on a 4 m wide band inside the circular earthwork that demarcates the churchyard on the surface but the turf covering the ruin of the church was dug by hand. In total an area of approximately 490 m2 was opened. In addition a 4 m long trench was excavated through the churchyard wall on its north-western side in order to study the construction of the wall, but which also served as a barrow run.

In 2004 work concentrated on five main areas:

- intrusions by earlier archaeologists were examined. These consisted of a trench dug into the northern side of the church in 1986 (reopened in 2001) and numerous test pits and larger trenches dug by Daniel Bruun in 1907.
- The construction of the churchyard enclosure
- Turf collapse, midden deposits and aeolian material that had accumulated against the western and northern sides of the enclosure wall all post-dating a H-1300 tephra.
- A number of turf debris deposits interwoven with a series of pits of an industrial nature by the northern wall of the church.
- A number of pits most of them on the south side of the yard with fills indicating both cooking and ironworking.

Apart from a single turf debris layer from a post-abandonment phase of the church no pre-20th century deposits were excavated inside the church.

In 2006 work started on July 4th and was finished on July 28th. As before the excavation was led by Orri Vésteinsson, this time assisted by Bjarki Borgþórsson, Elín Bjarnadóttir, Oddgeir Hansson and Rúnar Leifsson.

Work continued within the excavation area opened in 2004 but two extensions were also made:

- A 26 m² area was opened around the entrance to the churchyard on its east side
- A 29 m² area was opened over the wall on the western face where a stone facing was exposed on the inside.

With these extensions the total excavation area in Area B became approximately 550 m². The work in 2006 concentrated on these areas:

- Pre-1300 contexts within the churchyard. These were mainly sheet middens and turf debris deposits as well as several pits
- A few stratigraphically isolated features and deposits within the churchyard
- The church and associated structural remains
- Deposits in the entrance to the churchyard

All anthropogenic deposits within the churchyard were excavated leaving intact only the churchyard wall, the stone foundations of the church and the man-made platform on which its eastern end was built. The eastern one-third of the churchyard is built on this platform but the area west of that was everywhere excavated down to natural apart from the stone foundations and the churchyard wall. The only area where earlier remains might still be found is under the chancel and easternmost part of the nave. Getting to those earlier remains would have entailed dismantling the foundations and it was decided that this was not necessary as a fairly clear picture had already emerged of the building history of the church from examining other parts.

The post-excavation is directed by Orri Vésteinsson co-ordinated with Howell Roberts, the director of excavations in Area A. The artefacts were processed and analysed by Guðrún Alda Gísladóttir, Ramona Harrison has analysed the faunal remains and Magnús Á. Sigurgeirsson has anlysed the tephra. Dagný Arnarsdóttir digitised the drawings from 2004 and Lilja Björk Pálsdóttir those from 2006. Lilja also assisted in the preparation of plans for this report and Sigríður Þorgeirsdóttir helped with bibliographic research.

In addition to all those who have worked on the project so far thanks are due to Guðrún Kristinsdóttir director of Minjasafnið á Akureyri and her staff, and to Friðrik Gylfi Traustason and Guðrún Björk Pétursdóttir, the farmers at Gásir, for their kindness and cooperation.

The Gásir church - preliminaries

Historical records. A church at Gásir is mentioned in a 14th century annal, Annálsbrot frá Skálholti, where it says for the year 1359: 'Brotnadi kirkia a Gasa eyri' which literally means 'a church in Gásaeyri broke.'.¹ The phrasing indicates that the church was blown off its foundation in a storm, which in turn suggests that it was a timber church rather than a turf one, with the frame resting on but not set into a foundation. This is mentioned in no other annal, which may be significant as they tend to agree on reporting on the destruction, by fire or storm, of major churches. It may indicate that the fate of the church at Gásir was not considered to be particularly newsworthy by the majority of Iceland's annalists.

The church at Gásir will have been in the parish of Glæsibær² but unfortunately the 1318 charter of that church, bar the opening lines, is missing from the copies of the Auðunarmáldagar charter collection.³ A 1394 charter of Glæsibær church contains no hint of an annex at Gásir. It does say that the priest at Glæsibær received 120 hundred ells in fees for servicing chapels or churches other than Glæsibær church itself,⁴ but it does not seem very likely that this would have included Gásir. For one thing the church at Gásir may have ceased to exist at this time and the 120 ell fee is stipulated in much later charters also,⁵ and for another while the full tally of annexes in the parish is not known⁶ they would need to have been unusually few if Gásir church contributed a share of those ells.

Earlier archaeological research. The first antiquarian description of Gásir was made in 1777 by Ólafur Olavius. He counted 36 ruins and says that one of the larger ones was surrounded

¹ Islandske Annaler indtil 1578, G. Storm ed, Christiania 1888, 225.

² The farm of Gásir was in the parish in 1452 - *Diplomatarium islandicum eða íslenzkt fornbréfasafn* I-XVI, Copenhagen/Reykjavík 1853-1976, here vol. V, 89, also 91.

³ Diplomatarium islandicum II, 454.

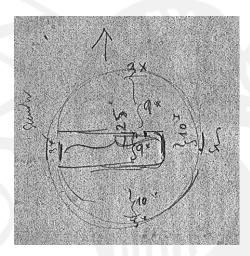
⁴ Diplomatarium islandicum III, 520-21.

⁵ E.g. *Diplomatarium islandicum* V, 318-19.

⁶ There was an annex-church at Krossanes – *Diplomatarium islandicum* III, 620; *Jarðabók* Árna Magnússonar og Páls Vídalín 1-11, Copenhagen 1913-43; 12-13, Reykjavík 1990, here vol. X, 193 – which will have contributed at least 48 ells, and a chapel or church at Samtýni – *Jarðabók* X, 188. Both can have been either in the parish of Glæsibær or Lögmannshlíð, but of those farms definitely in the parish of Glæsibær, Skjaldarvík, Einarsstaðir and Sílastaðir would all from their size be likely candidates for at least a chapel.

by an earthwork or fortification.⁷ Although Olavius did not recognise it as a church there is no other ruin in Gásir to which this description could apply. Kristian Kaalund came to Gásir in 1873 and gives the first detailed description of the site. He says that up-hill from the main cluster of booths there is a circular enclosure with an elongated rectangular ruin, which normally is considered as the remains of a church and churchyard. He adds that he thought this identification was probably right.⁸ In 1888 the Icelandic annals were published in print for the first time and the 1359 entry for the church at Gásir was therefore probably known to subsequent researchers. Daniel Bruun visited the site in 1898 and made a sketch drawing of the church and churchyard but no textual description can be found by him from this time.⁹

The sketch is annotated with measurements in ells and shows the church-ruin joined to the



Daniel Bruun's 1898 sketch of the church at Gásir.

western side of the churchyard, where a row of stones is also indicated. A gate on the eastern side of the churchyard is also shown. The length of the church given (25 ells = 15,7 m) accords well with the actual length of the excavated ruin but its joining to the church-ruin to the churchyard wall does not. This is something of a conundrum, especially as the joining of church and wall persists in all representations of the site down to and including the excavation of 1907. Considering that the measurements Bruun gives for the space between the church and the churchyard wall on the north and the

south sides are fully 2 m too short, it could be argued that prior to the 1907 excavation the inside edge of the churchyard wall was much less well defined and more gradual than it appears now.

Antiquarian visits to Gásir now begin to become more frequent with veteran Brynjúlfur Jónsson arriving only two years later, in 1900, and leaving this description:

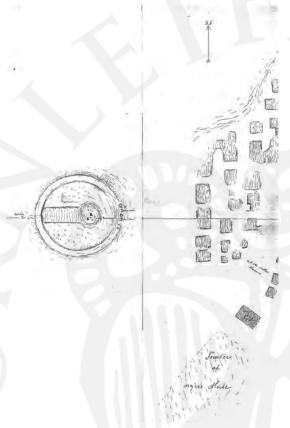
⁷ "Alls eru tóttirnar 36 að tölu, eru sumar þeirra stórar um sig, og um eina þeirra er hlaðinn garður eða virki." Ólafur Olavius, *Ferðabók: landshagir í norðvestur-, norður-, og norðaustursýslum Íslands 1775-1777* I-II, Steindór Steindórsson þýddi, Reykjavík 1963, here vol. I, 56.

^{8 &}quot;Ofan við allar þessar … tóftir er kringlótt girðing með aflangri ferhyrndri tóft, sem venjulega – og sennilega er það rétt – er talin minjar um kirkju og kirkjugarð." Kaalund, P.E. Kristian, *Íslenzkir sögustaðir* I-IV, Haraldur Matthíasson þýddi, Reykjavík 1984-1986, here vol. III. 82.

⁹ Nationalmuseet, København, arkiv.

There is a small ridge above the flat land where the rows of booths are, and on this ridge the church has stood. The churchyard and church-ruin within it are clearly visible. The churchyard is roughly circular, nearly 18 fathoms [34 m]; the gate is towards the east

facing the rows of booths. The church ruin is nearly 7 fathoms [13 m] long. An excavation



Part of Froda's plan of the Gásir ruins from 1902.

has been started in the chancel but then abandoned. 10

While too much cannot be made of the differences in these measurements, which are probably all derived from pacing rather than using tapes or instruments, it is interesting that Brynjúlfur's church is fully 2,5 m shorter than Bruun's, possibly indicating that Brynjúlfur detected the western gable closer to where it actually is.

Another two years later, in 1902, Premierløjtnant F. Froda, appears on the scene, apparently on assignment from Daniel Bruun, among whose papers Froda's report is found. He produced the first map of the whole site (above), including church and churchyard, and wrote a description of what he saw. About the church he says:

... its eastern end appears as a rise with many large stones (there have been diggings in a couple of places in it [i.e. the chancel]). The western gable of the building looks as if it was a direct extension of the circular enclosure, as in that place there is a substantial stone construction, while the rest is overgrown. Outside the building's

"Er dálítil brún fyrir ofan grundina, sem tóttaraðirnar eru á, og á þeirri brún hefir kirkjan staðið. Sér glögt fyrir kirkjugarðinum og kirkjutóttinni í honum. Er garðurinn hér um bil kringlóttur, nál. 18 fðm. í þvermál; hefir hliðið snúið mót austri og að tóttaröðunum. Kirkjutóttin er nál. 7 fðm. löng. Byrjað hefir verið að grafa í kórinn, en hætt við aftur."

Kirkjutóttin er nál. 7 fdm. löng. Byrjað hefir verið að grafa í kórinn, en hætt við aftur." Brynjúlfur Jónsson, 'Rannsóknir á Norðurlandi sumarið 1900.' Árbók hins íslenzka fornleifafélags 1901, 7-27, here p. 18.

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eastern end the enclosure is rather indistinct and here there are a few larger stones, of which two flat ones may resemble steps...¹¹

This suggests that Froda and Bruun may both have mistaken the stone-facing of the churchyard wall for the gable of the church, which would explain why they both show church and enclosure joined together, but this makes Bruun's measurements more difficult to understand. On his plan Froda shows two pits in the chancel, presumably the excavations both he and Brynjúlfur refer to, and a fairly large area north of the church structure hatched in the same way as the church and booths, presumably because he detected a structure there.

In 1907 a large scale excavation was carried out at Gásir by Daniel Bruun and Finnur Jónsson. They concentrated their efforts on the booths but they also excavated the church, although it is not entirely clear to what extent. There is no detailed description of the excavation, neither in the several published accounts, ¹² nor in Bruun's archive in the National Museum in Copenhagen. Three slightly different plans exist and these give some insight into the extent of the digging but otherwise only the results, as Bruun and Finnur Jónsson saw them, are available to us. The different plans are all shown on the next pages. A is a sketch presumably made in the field, possibly before the excavation was completed. B and C are based on the same basic drawing but differ in detail. B is from the overall plan of the trading site while C is the larger scale map of the church on its own.

It is clear that the excavation uncovered the foundation of the church. In Finnur's words:

When the turf was peeled off (about the depth of a spade) a layer of stones was revealed, rather small round stones, with all traces, the row continuous and undamaged the whole way \dots ¹³

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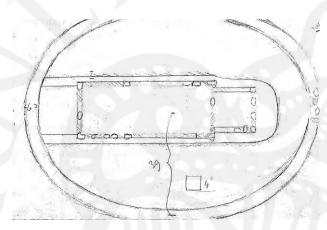
^{11 &}quot; ... Hvis østligste Del nu fræmtreder som en Forhøjning med mange Kampesten; (der er gravet et Par Steder i den). Bygningens vestlige Endeveg synes at have været i umiddelbar Fortsættelse af Ringdiget, der paa dette Sted viser tydelig Stensætning, medens Resten er overgroet. Udfor Bygningens østende er diget noget udydeligt og her ligger nogle større Sten, hvoraf et Par flade kunne ligne Trin." Nationalmuseet, København, arkiv.

¹² Finnur Jónsson, 'Hinn forni kaupstaður "at Gásum".' Árbók hins íslenzka fornleifafélags 1908, 3-8. Finnur Jónsson & Daniel Bruun, 'Det Gamle Handelssted Gásar (At Gásum), yngre Gæsir, ved Øfjørd (Eyjafjörður). Undersøgelser foretagne i sommeren 1907.' *Oversigt over det Kongelige Danske Videnskabernes Selskabs Forhandlinger 1908*, 95-111. Daniel Bruun, *Fortidsminder og Nutidshjem paa Island*, [2nd ed.], Copenhagen 1928 (pp. 116-25).

^{13 &}quot;Þegar grassvörðurinn var flysjaður ofan af (svo sem skóflublaðstunga) kom í ljós lag af steinum, heldur litlum hnullungum, með öllum vegsummerkjum, röðin óslitin og óskemd alla leið ..." Finnur Jónsson, 'Hinn forni kaupstaður "at Gásum".' 7. Cf. "Ved at fjærne de lave Rester af Væggerne fik man snart Beviset i Hænde, idet en uafbrudt Række af ikke meget

From the plans it is clear that they found the church's actual western gable and thus were able to establish the dimensions of the building. They still persisted in showing what appear to be turf walls connecting the church with the churchyard wall, creating like an anteroom or at least an enclosed space in the area between the two structures. On plan B there is in fact shading on the more southerly of these two fictive walls which could be taken to indicate a row of stones, but this is not clear. This enclosure is not mentioned in any of the reports, but it leaps out from all the plans.

Bruun and Finnur concluded that the church-door must have been on the western end

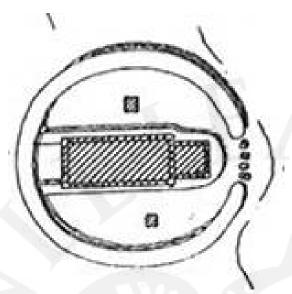


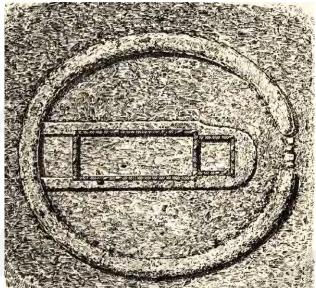
Plan A. Unpublished sketch of the church in Bruun's archive.

afterwards based on memory.

of the south side, where they say a flat slab was found – and this is shown on plan C. There is in reality a large flat stone outside the row of foundation stones, but this is considerably further east than shown on the plan, at the junction of the nave and western extension. That location would be inherently unlikely for a door and Bruun may have been tempted to nudge it westwards on the plan to make it look more convincing – if it was not drawn in

store Sten blottedes, saa at Kirkens hele form kom til Syne." Finnur Jónsson & Daniel Bruun, 'Det Gamle Handelssted Gásar.', 109.





Plan B. Detail from the general map of the whole site.

Plan C. Larger scale map of the church and churchyard.

The published plan B shows a neat and continuous row of evenly sized stones in the foundations of the church, with the corner stones of the nave slightly exaggerated in size. On the other hand the unpublished plan A clearly only shows occasional stones, and although it does not jump out, the same stones are shown with less shading than the others on plan C. This does not make immediate sense. It is possible that these were the stones visible on the surface prior to the excavation, but the stones shown do not match well those which stand highest in the foundation. For instance the large boulder in the northern side of the chancel, the highest of all the stones in the foundation, is not indicated. It is also difficult to see why Bruun would have felt the need to highlight such stones on his published plan. The other possibility, that these were really the only stones exposed, is contradicted by the clear statement that the full length of the foundations was uncovered by the excavation.

Plan A shows a test pit south of the church – and this was re-excavated in 2004 – and plan B shows this and another test pit north of the church, while C shows no pits at all. This latter pit was not identified in the most recent excavation, which on the other hand revealed a number of others not shown on any of the plans.

On plan A the churchyard enclosure is more elliptical than on the published plans, which are both much closer to the actual shape of the enclosure (which is slightly elongated on the E-W axis, 26 m to 23,6 m N-S).

All the plans agree on showing a raised area around the stone foundations, looking very much like a turf wall. It is this that is shown to join the churchyard wall to the west of the church. The chancel is actually built on a man-made mound of up-cast, and for that part

of the structure the plans are realistic. The westwards continuation of this apparent turf wall seems to be based more on the contours of the surface prior to excavation. Faint ridges could still be detected prior to excavation in 2004 and they appear on areal photographs as well as the 2001 surface model. These ridges turned out not to be turf walls, but anyone describing the site can be forgiven in thinking that they were. What this does suggest is that the 1907 excavation concentrated on the inside of the building and that the plans are in reality an amalgam of surface survey and excavation results.

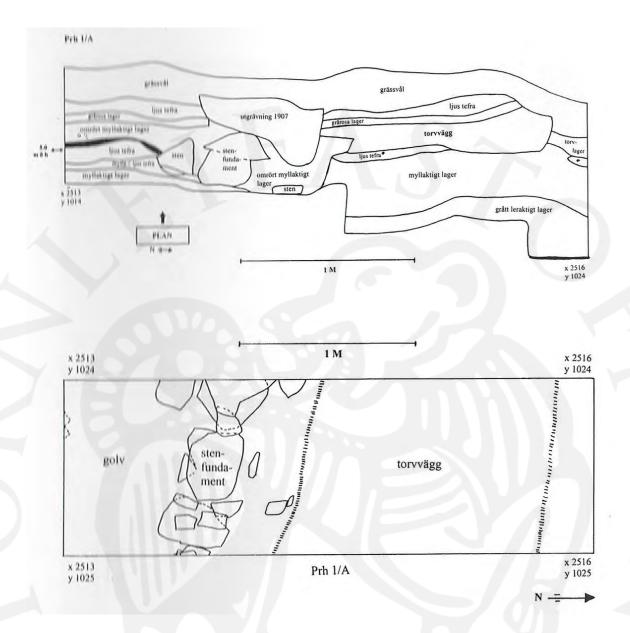
Bruun and Finnur did not have much to say about the church in their reports. They felt confident in confirming that this was a church, and this was probably their primary objective. The concluded that the church was not a turf-church but a timber-church – clearly disregarding what to them must have seemed like turf walls if their plans accurately reflect their observations. More curiously Finnur thought that the space between the church and enclosure was "so short that there can be no talk of a churchyard." ¹⁴ They also thought that the church was "not large, but no doubt large enough for those who were assembled at Gásir; and services were hardly given often." ¹⁵ What they expected in terms of size is difficult to fathom. No other church had at that time been excavated in Iceland and the medieval stone churches in Greenland and the Faroes which Bruun would have been familiar with are a comparable in size to the church at Gásir. While they do not dwell on it, it seems that they considered the church at Gásir to have been primarily a merchant's church and thus untypical for Icelandic churches.

The 1907 excavation of the church at Gásir was the first excavation of a church in Iceland and the first investigation of a timber-church in the North Atlantic. While this seems significant now, it does not appear to have been considered so at the time. Finnur and Bruun were clearly not at all impressed by their results regarding the church and their findings did not lead to any further interest in the archaeological remains of churches in Iceland. It was to be nearly half a century until another church excavation was undertaken in Iceland, in

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[&]quot; ... svo að um eiginlegan kirkjugarð er hér ekki að ræða," – Finnur Jónsson, 'Hinn forni kaupstaður "at Gásum".' 7. It may be that Finnur was entertaining notions about the enclosure being primarily a defensive structure, but that is not made clear. Cf. "Omkring Kirken er der ingen Kirkegaard i egenlig Forstand, og der har næppe nogensinde været begravet Folk her; ..." Finnur Jónsson & Daniel Bruun, 'Det Gamle Handelssted Gásar.', 110. In his later text Bruun just mentions that no inhumations were found - Bruun, *Fortidsminder og Nutidshjem paa Island*, 125.

¹⁵ "Kirkjan er ekki stór, en hefir eflaust verið nógu stór handa þeim, sem á Gásum voru saman komnir; og oft hefir varla guðsþjónusta verið haldin." Finnur Jónsson, 'Hinn forni kaupstaður



Section and plan of the 1986 trench.

Skálholt. Nevertheless the Gásir church became widely known on account of the unusually broad dissemination of the excavation's results, and it is widely referred to in the historical and archaeological literature relating to the North Atlantic in the 20th century.

In his discussion of circular graveyards in Iceland Guðbrandur Jónsson uses the Gásir churchyard as the only medieval example available to him to argue that such earthworks were primarily defensive in nature. The use of churchyards as defensive positions in skirmishes in

"at Gásum".' 7; Also Finnur Jónsson & Daniel Bruun, 'Det Gamle Handelssted Gásar.' 109-10 and Bruun, *Fortidsminder og Nutidshjem paa Island*, 125.

13th century Iceland is attested in written sources and Guðbrandur felt that the circular form was chosen over the rectangular because it was better suited to this purpose. ¹⁶

In his discussion of the Norse churches in Greenland Aage Roussell suggests, based on Finnur and Bruun's measurements, that the Gásir church was designed using Greek feet, a concomitant of the Gothic style in church architecture, and that it should on those grounds be dated to around 1300. ¹⁷

Gásir did not become a specific subject of research again until 1986, when Margrét Hermanns-Auðardóttir and Bjarni F. Einarsson dug a number of evaluation trenches at the site. One of these (Prh. 1/A) was placed over the north wall of the church, 1,7 m west of the northeast corner of the nave. Their trench was 3x1 m in size, aligned with compass North rather than true North.

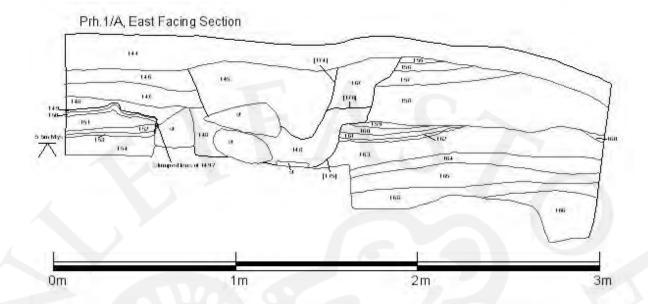
The trench revealed a two course row of stones, the foundations for the church, and a layer interpreted as a floor on the inside and another interpreted as a turf-wall on the outside. Margrét concluded from this that the church at Gásir had been a turf-church in contrast to Finnur and Bruun's findings. ¹⁸

In 2001 another evaluation exercise was carried out in preparation for the large scale excavations which followed in 2002-2006. Directed by Howell M. Roberts, trenches from 1907 and 1986 were reopened, including the 1986 trench dug in the church. Roberts did not find any floor-layer inside the foundation and while he agreed that there was some turf debris in the layer described as a turf-wall by Margrét Hermanns-Auðardóttir, he noted that there were no turf blocks in the deposit. He suggested that the archaeology encountered in the trench represented a limited amount of activity, a single event of construction and possibly

¹⁷ Roussell, Aage, Farms and Churches in the Mediaeval Norse Settlements of Greenland (Meddelelser om Grønland 89.1), København 1941, 134.

¹⁶ Guðbrandur Jónsson, 'Dómkirkjan á Hólum í Hjaltadal. Lýsing íslenzkra miðaldakirkna.' (Safn til sögu íslands og íslenzkra bókmennta V(6)), Reykjavík 1919-29, 72-79.

¹⁸ Margrét Hermanns-Auðardóttir, 'Fornleifarannsóknir að Gásum og víðar í Eyjafirði árið 1986.' *Súlur* 27 (1987), 3-39.



The 2001 drawing of the same section as shown above.

one of repair. He noted that nothing found in the trench helped to date the structure and that no inhumations had come to light. In conclusion he said:

Examination of the deposits seen in Prh. 1/A suggests an interpretation in line with that of Daniel Bruun. The form and layout of these remains are seen as consistent with this structure being a church. In the absence of preserved turf walls it is thought most likely that this structure was largely built of timber on a stone footing. ¹⁹

¹⁹ Roberts, Howell M., *Fornleifarannsókn á Gásum / Archaeological Research at Gásir,* 2001. *An Interim Report/Framvinduskýrsla*, Reykjavík 2002, 21-24, 26.

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The Gásir church – excavations in 2004 and 2006

Aims. Since the 1980s all plans for investigations at Gásir have involved the church site. The church and churchyard have consistently been seen as an integral part of the site and as a vital component to understanding its nature. When plans were laid for a sustained campaign of excavations in 2002-2006 the church was included as it was felt that the site could not be properly understood without examining the church and that its excavation would potentially yield results about aspects of the trading activity in Gásir not likely to be produced by investigation of the booths. Furthermore it was recognized that re-excavating the church and churchyard would potentially throw new light on Icelandic church archaeology.

In 2001 a detailed research programme was put together in preparation for the subsequent excavations. In this the following questions were defined:

- When was the church built and for how long did it stand?
- How was it constructed?
- Was it repaired and/or rebuilt, and if so how?
- Are there inhumations in the churchyard?
- If so what can the graves reveal about the status and origins of the people who came to Gásir.

It was proposed that the whole churchyard be uncovered and that the archaeological remains be investigated by an open area excavation using single context recording. The excavation was to stop short of removing the foundations on account of their obvious preservation value, but emphasis was also placed on revealing if there were earlier phases. ²¹

According to plan the excavation of the church started in 2004 but the only major variation from the original programme was that the second season of work on the church site took place in 2006 rather than 2005.

²⁰ Margrét Hermanns-Auðardóttir, 'Fornleifarannsóknir að Gásum.'; Adolf Friðriksson, Birna Gunnarsdóttir og Orri Vésteinsson, *Fornleifar og ferðamál í Eyjafirði: Rannsóknir og kynning*

á Gásakaupstað, Reykjavík 1995. ²¹ Orri Vésteinsson, 'Fornleifarannsóknir á Gásum 2002-2006 – Tillaga að rannsóknaráætlun.' Appendix 7 in Roberts, *Fornleifarannsókn á Gásum*, pp. 50-59.

Results

Modern excavations. The first objective of the excavation was to establish the extent of previous incursions into the site. The 1986 trench, reopened in 2001 [5034], was clearly



The 1986 trench [5034], looking south.

be a very limited trench [5042] which only extended 0,43 m west of the 1986 trench. Instead of having excavated along the whole length of the foundations it appears that Finnur and Bruun only opened a small trench, perhaps 1 m wide, pretty much in the same place as Bjarni and Margrét placed theirs some 80 years later. This small trench was the only clear indication of previous excavation of the foundations of the nave, and considering that this trench was very distinct in both plan and section the absence

visible on the surface in 2004 and this was easily emptied out as it had been backfilled with sand imported to the site [5033]. This had been emptied out and re-backfilled in 2001. Earlier incursions proved to be less clear cut. It was expected that traces of the 1907 excavation would appear once the topsoil had been removed, but these proved more elusive than had been anticipated. The 1907 cut was clearly visible in the 1986 trench [5034] but in plan this turned out to



Bruun's trench [5037] on the south side of the chancel, looking west.

of anything similar elsewhere must surely suggest that the 1907 examination of the foundations was quite superficial. On the north side of the chancel three small trenches ([5083/5084] and [5118/5119]) with the same sort of backfill had been dug close to the wall, little more than a spade's width and depth. These may have been dug to check the alignment of the stones in the wall and to see how deep they go. The most easterly of these trenches is more extensive but also shallower. A similar trench had been dug on the south side of the



Fill [5071] covering modern trenches [5072] in the chancel, looking east.

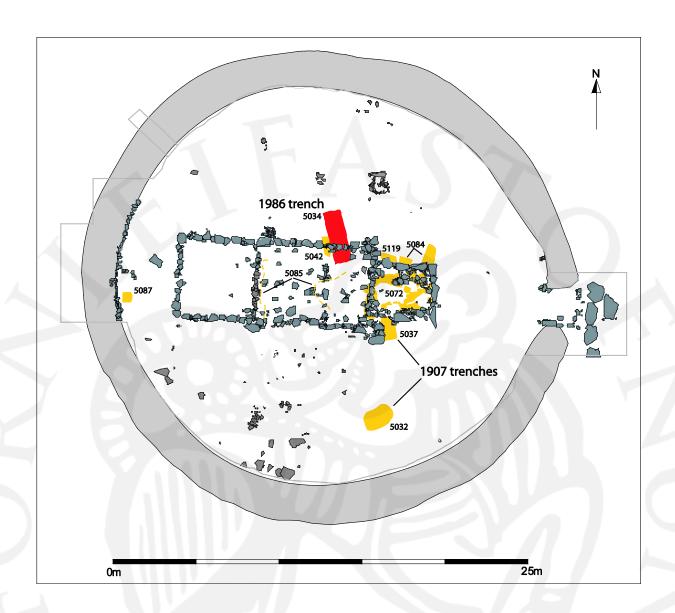
chancel [5036/5037] where its south wall adjoins the nave. It is possible it had been placed there to look for an entrance as it was clearly dug into a pre-existing truncation. At the base of Bruun's trench there was an in situ patch of up-cast, some 0,25 m below the surface of natural on the east side. All these trenches were ca 10 cm deep after the top-soil had been removed (original depth perhaps 20 cm) and had fairly straight sides and flat bases. Inside the chancel there was an extensive but

very irregular cut [5071/72]. It is a discontinuous trench which follows the insides of the walls of the chancel, including the partition between the chancel and nave. There are separate sondages adjacent to the insides of the stones in the eastern gable, but the trench parallel to the north-side is set some 0,3 m inside the foundations. The trenches are dug to the base of the foundation stones or to where progress was blocked by smaller stones and it is not apparent that any structural remains were removed by these excavations. In the easternmost part of the chancel there are additional irregular spade marks and the main trench is decidedly more uneven there than further west. It is possible that these trenches, all or in part, are from the yet earlier excavations in the chancel reported by Brynjúlfur Jónsson and Froda in 1900 and 1902 respectively. While more irregular than the trenches outside the chancel these trenches are however very much in Bruun's style. ²² His main concern was to establish wall-lines and he would dig around stones rather than remove them. The possibility that these trenches are a mix of both earlier and the 1907 excavation cannot be ruled out.

In the nave two truncations [5085] may be associated with Bruun's excavation. During excavation more extensive evidence of his work was expected and these cuts, the highest in the sequence, were therefore attributed to him. There is however nothing about these cuts, an elongated one following the earlier west-front of the nave and a curved one in the eastern half of the nave, which places them in the early 20th century rather than some earlier times. As it turned out that Bruun's excavation was much more limited than expected, and those traces that are visible are quite distinct, it is unnecessary to connect these cuts to his

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²² About Bruun's excavation methods see Orri Vésteinsson, 'Icelandic farmhouse excavations. Field methods and site choices.' *Archaeologia islandica* 3 (2004), 71-100.



Features associated with 20th century excavations.

excavation. The cut along the earlier west-front may in fact rather be evidence for a step between the two parts of the church, with the floor of the eastern part of the nave being a foot or so higher. Both cuts could also be seen as signs of activity in the church base after the building had been removed, possibly salvage of remaining timbers.

Outside the church Bruun has clearly dug at least two pits. There is a large and deep pit [5031/32] on the south side of the church, more than 70 cm deep and 1,7x1 m in size. From its position and unusual depth, considering Bruun's other trenches, it seems that this one may have been dug because indications of an underlying structure had been visible on the surface. That would then have been a structure paralleling the buttress foundation [5219/5223] on the northern side of the church. If this is true Bruun's excavation has removed all traces of the more southerly buttress foundation. Finally there is a small trench [5086/5087], some 0,4 m deep, dug against the inside of the churchyard enclosure, at the

western side where the stone facing of the enclosure may have been visible. Traces of the third pit, shown on one of the plans on the northern side of the church, could not be found.

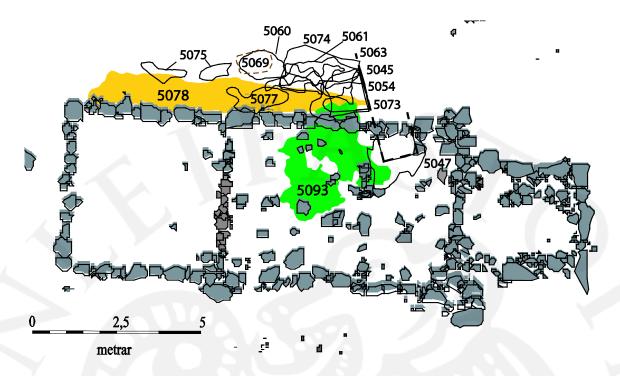
No artefacts were found in the trenches associated with Bruun's excavation but in the topsoil there were a few which most likely stem from the 1907 excavation, although they can also be considered as incidental losses resulting from more frequent visits to the site in the 19th and 20th centuries. These include a couple of iron nails (5004 and 5006) and two bottles both found outside the churchyard; liquor bottle 5103 on or just outside the enclosure wall due west of the church and medicine bottle 5107 in the entrance on the eastern side.

The evidence for Bruun's excavation is distinct, but surprisingly limited in extent. It does however help to explain some (but not all) of the inconsistencies outlined above. It seems that the examination of the church was limited to an analysis of the earthworks visible on the surface, augmented by tactical trenching, focused mainly on the chancel. Only one small trench was placed over the wall line of the nave and it must be assumed that the stones in the foundations highlighted on the plans must either have been those which were visible on the surface or required only very shallow trenching to be revealed. Finnur's statement about continuous wall-lines is therefore not an observation but a surmise, albeit an accurate one. In fact Bruun's and Finnur's analysis of the church must be considered very successful, considering the very limited excavation that actually took place.

Medieval remains

Apart from the features associated with the 1907 (and possibly an earlier) excavation there are no indications of any activity within the churchyard in post-medieval times. All the deposits and features inside the churchyard are either contemporary with the church or from immediately after its removal. These contexts can be divided in four groups. There is a group post-dating the H-1300 tephra, another one pre-dating it, a third group of stratigraphically isolated contexts and a small group of deposits post-dating the church. It is to this last group that we first turn, followed by a description of the other deposits and features within the churchyard, before the structural remains are discussed.

In the course of the excavation a division of the nave into two parts became apparent and in the records the western part is referred to as a narthex as it looked as if this section had been added to the pre-existing nave, and was a structurally separate part of the church. This turned out not to be the case; the division is an artefact of earlier phases of the church, and in the final phase the nave was simply 5 m longer than in the earlier phases.



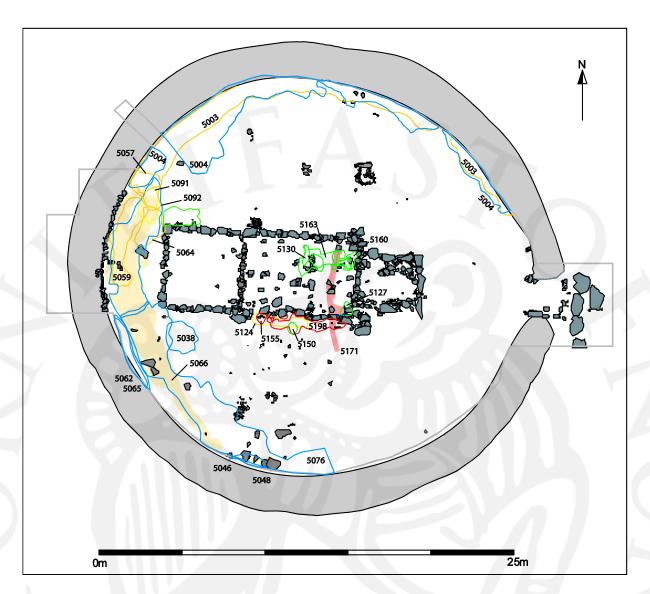
Deposits post-dating the church.

Deposits post-dating the church. Adjacent to the northern wall of the church there was a series of deposits overlying a layer of turf-debris [5093] which spread over the stones in the foundation. At the top of this sequence there was a layer of gravel and turf debris [5045 and 5047], truncated both by Bruun's trench [5042] and the 1986 trench [5034]. This layer had a roughly N-S orientation, 3,5 m long, extending more than 1 m north and south of the foundation, and therefore clearly not shaped by it at all. Nearly 2 m further west, outside the wall there was a shallow sub-rectangular pit [5069] with a fill of grey ash and silt [5068], partly obscured by heavy bioturation [5060] – reminiscent of the ash pit [5035/5040/5220] discussed below. West of this pit there were two small patches of identical turf debris [5075]. The gravel layer capped a series of silt deposits with some turf debris and up-cast (H3 and H4) [5054, 5061, 5063 (with animal bone 5022), 5073, 5074, and 5077]. All of these had accumulated in an area little more than 3x3 m north of the wall, and some of them were cut by the 1907 and 1986 trenches. It is these mixed turf debris layers, esp. [5054] and [5073], which appeared as a possible turf wall in the 1986 trench, but their limited extent clearly shows that they are only small spreads of debris, probably a dump created in the aftermath of the church's demolition. Below these layers was a much more widespread deposit of silt and turf debris [5078] (with animal bone (5026) and slag (5027)), which runs alongside nearly three quarters of the length of the northern foundation, washing up against its stones, but caps the aforementioned layer [5093] which overlies the foundation stones at the middle of the nave. [5078] has clearly formed while the foundation stones were still well above ground but after the timber superstructure had disappeared.

Taken together these deposits suggest that some relocation of material took place within the churchyard very shortly after the church was demolished. There is no sign of any hiatus in the build-up of anthropogenic material which might be associated with the aftermath of the church's disappearance and therefore no reason to suggest that this activity took place long after the church had gone. Rather it seems these remains can be seen in part as a very short-tem continuation of activities that had been going on in the churchyard while the church was still standing but not directly related to its primary function (see further below) and in part as the result of demolition and salvage work. Whether the church ended its days as a wreck, blown of its foundations in a storm, or was deliberately torn down (on the possibility of fire see below), it is quite possible that the salvaging of timbers and any other valuables would have involved small scale disturbance of soil resulting in a localised pile like the one accumulated on the northern side of the nave. The more widespread layer [5078] must however have some other explanation, and it might be possible to argue that it accumulated over a period of time when the church had become dilapidated and after its northern wall had been breached, allowing [5093] to accumulate over the foundations, in a gap of no more than 1,3 m.

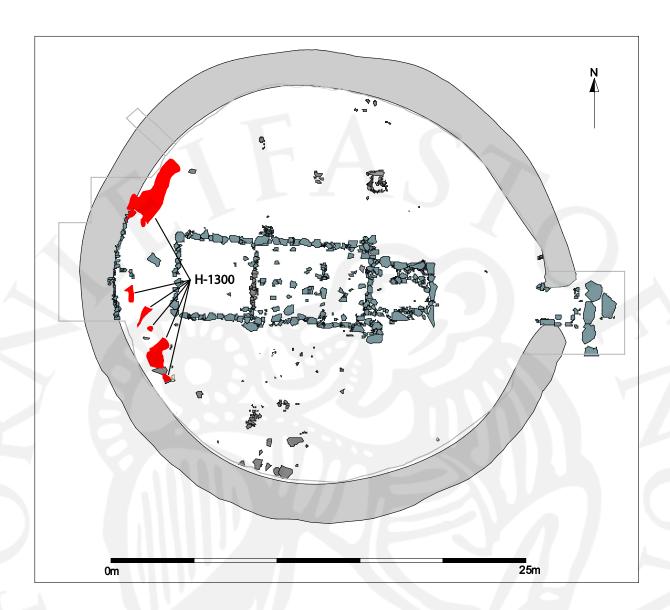
Post-1300 deposits. In the western half of the churchyard, accumulated against the inside of the enclosure wall, there is a series of deposits overlying the H-1300 tephra. At the top of this sequence there are two mixed layers with some ash and charcoal, [5057] and [5059], to the west and northwest of the church and two layers of turf collapse from the churchyard enclosure, [5046] and [5062] to the south and southwest of the church. These last two relate to the slumping of the turf-wall, no doubt a long-term process which may have continued long after activity ceased in the churchyard. Also at the top of the sequence there is a dump of turf-debris [5038] outside the southwest corner of the church, possibly of the same origin as the dump on the northern side discussed above.

Below the ash layer [5057] there is a more widespread layer of peat ash mixed with sand and some up-cast [5003] (with some animal bone (5020) and slag (5018)). This layer has accumulated against the inside of the enclosure along its entire northern side. It caps a layer of turf collapse [5004] (with textiles (5023, 5105) and animal bone (5025)) with a similar distribution and a more localised peat ash dump [5064] by the north-western corner of the church. [5064] is on top of a spread of turf debris [5094] at the north-western corner of



Deposits post-dating the H-1300 tephra.

the church (with textile (5033)), which is in turn capped by the aforementioned turf debris layer [5078] which post-dates the church. This is the only stratigraphic link between the deposits west of the church and those accumulated by its northern side, but it clarifies little. Along with [5065], a layer of turf collapse from the enclosure wall under [5062], [5064] also caps a widespread and substantial layer of mixed turf debris, up-cast, peat ash, wood ash and some charcoal [5066] with some slag (5039). This layer extends some 15 m along the western and south-western side of the enclosure. It is stratigraphically coterminous with charcoal rich layer [5048] abutting the enclosure wall due south of the nave, covered by the aforementioned turf collapse layer [5046]. It is the first of several charcoal deposits in the south part of the churchyard, and one of only two which can be tied in with the H-1300 tephra, the other being [5053] (see below). Further north the widespread turf collapse layer [5004] described above caps several earlier contexts, but only one [5091] which has a



Distribution of H-1300 in situ.

stratigraphical relationship with the underlying H-1300 tephra. [5091] is an aeolian accumulation and may be the same layer as [5081] further north, which is separated from [5004] above by three small layers of turf collapse from the wall [5007], [5009] and [5079]. These last mentioned are at the base of the sequence in their area and do not have a direct relationship with the H-1300 tephra.

The aeolian layer [5091], the widespread mixed layer [5066] and the small charcoal deposit [5048] (with an iron object (5017)) seal a widespread layer of turf collapse [5076/5092] which in turn seals the H-1300 tephra in situ [5123]. [5076/5092] may represent a period of disrepair of the turf-wall in the beginning of the 14th century, and it marks a significant change in the nature of activities within the churchyard. [5076] included some animal bone (5029) and a whetstone (5028). The unequivocal post-1300 deposits are all either turf collapse, aeolian accumulations or mixed deposits with different proportions of ash,

charcoal and turf debris. They suggest that something more was going on in the churchyard after 1300 than just the slow deterioration of the enclosure wall, but the generalized nature of these deposits allows no speculation as to what those activities might have involved.

In addition a short sequence of cuts and deposits post-dates a fill [5192] of a demolition trench [5198] at the southern side of the nave. The fill contained turf with the H-1300 in it. These are hole [5154/5155], below aeolian layer [5124], which is below hole [5049] the fill [5150] of which is probably contemporary to turf debris layer [5039]. These are further discussed below in the context of deposits on the south side of the church. The fill [5192] was also cut by trench [5171], with fill [5152] which predates deposits [5130], [5160], [5163] and [5127] within the nave. These are discussed further below in the context of deposits in the nave.

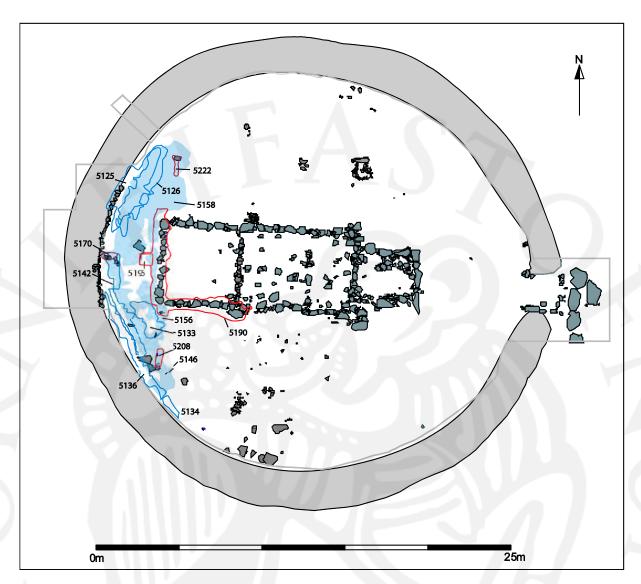
Pre-1300 deposits. The H-1300 tephra [5123] survived in several flecks, large and small, in the western side of the churchyard, where it had accumulated against the enclosure wall (maximum thickness in excess of 0,5 cm), but it owes its preservation no doubt largely to the fact that it quickly became sealed under turf collapse [5076/5092]. The tephra seals two



layers of mixed aeolian and turf debris; [5125] up against the enclosure northwest of the church and [5133] by the southwest corner of the church. It also seals a layer of turf collapse from the enclosure wall [5142] (with slag (5112), probably intrusive) to the west and southwest of the church. This layer was also capped by later turf collapse layer [5134/5136]. [5125] was above another similar mixed layer ig (5158)) which, along with [5133] and [5142], seals

Pit hearth [5169/5170] looking west.

a widespread mixed layer with turf debris and up-cast west of the church. It is discontinuous and was recorded as three separate contexts [5146] (with animal bone 5119)), [5156] and [5158] (with animal bone (5125)) but can safely be regarded as a single stratigraphic event. This widespread layer seals the fill [5190] (with animal bone (5148)) of the foundation trench on the west side of the western extension as well as the buttress foundations [5207] and [5221], showing not only that the westernmost extension of the church dates to before 1300 but also that the buttresses supporting its northwest and southwest corner had come and (possibly) gone before 1300 (see further below). [5146/5156/5158] is also effectively the earliest layer in the sequence west of the church. The only features below it are a pit hearth



Deposits pre-dating the H-1300 tephra.

[5169/5170] dug up against the churchyard enclosure due west of the church, and shallow near-rectangular cut [5196] with fill [5195] similar to the mixed layer above. Cut [5196] is

suspiciously similar in size to a large stone with a flat top which sits askew just north of the cut. It seems likely that this stone originally sat in the cut (which can be regarded as an extension of the foundation trench of the third phase church), but its function is not immediately apparent. It could have been a step to enter the church, a necessity if there was a horizontal beam on top of the foundation stones, but a 0,4 m gap



The large stone besides the cut [5196], looking east.

between the cut and the western extension's foundation may cast doubt on that explanation. Another, only marginally more plausible, is that the stone was a weight for a tether, possibly a chain, to keep the church in place, the removal of which would have entailed shifting the stone from its original location. Whatever its function it is clear that the stone was moved at an early stage and that all the subsequent deposits west of the church accumulated against it in its dislocated position. That in itself speaks against the main entrance into the church being on its western gable.

As will become clear below the western gable belongs only to the final phase of the church. It is therefore surprising that there is only a single feature in the western side of the churchyard, pit-hearth [5069/5070], which may pre-date this phase (and is more likely coterminous with it). That not a single lens of ash and not a single slump of turf collapse can be associated with the earlier phases must suggest, at least, that this part of the churchyard saw significant remodelling about the same time as the final phase was built, or even that the churchyard enclosure itself and the levelling of the ground west of the church are from a relatively late date in the site's development.

Stratigraphically isolated contexts in the churchyard. Apart from those contexts which can be associated directly with the church and the H-1300 tephra, there is a high number which is either completely isolated, sandwiched between the topsoil and natural, or in sequences which give some sense of the relative age of each context but are nevertheless floating.

Reference has already been made to turf-collapse layers [5007], [5009] and [5079] which are below widespread turf collapse layer [5004] but on top of aeolian deposit [5081]. Also to turf collapse layer [5134/5136] which is stratigraphically at the same level as H-1300 [5123], below [5076] but on top of [5142]. Turf collapse [5076] also caps a number of deposits and features in the southern part of the churchyard which can hardly be later than the first years of the 14th century, most likely considerably earlier. They are:

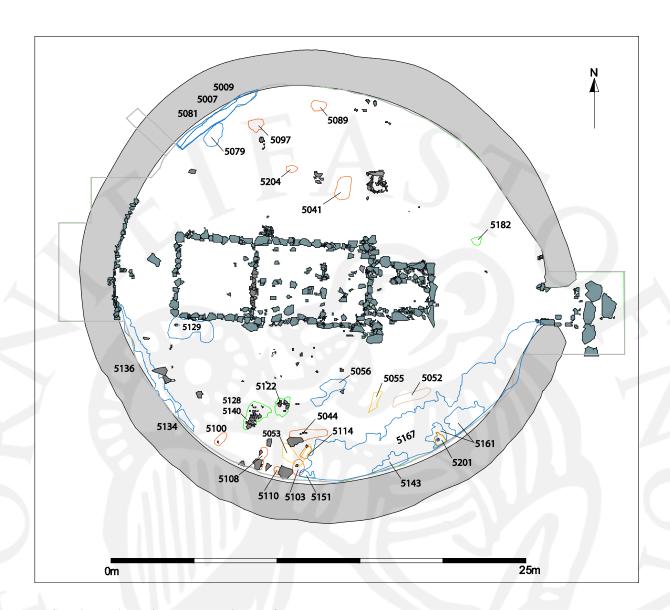
Charcoal pit [5099/5100]. Ceramic sherd (5152) and animal bone (5151) were found at the edge of this pit during final cleaning (ascribed to context [5227]).

Pit hearth [5103], with ash fill [5101] and charcoal fill [5102].

Pit hearth [5108] with fills [5105], [5106] and [5107], all with evidence for in situ burning.

Charcoal pit [5109/5110].

Shallow pit [5114] with charcoal rich fill [5053] (with animal bone 5019), which is a continuation of [5076] rather than below it.



Stratigraphically isolated deposits and features

Mixed silt [5128] around an irregular pile of stones [5140].

Mixed aeolian and turf debris [5129] by the south side of the church, on top of a similar layer [5133] which is also capped by H-1300 [5123].

A small blob of turf collapse [5151] separates [5076] from yet another, similar turf collapse layer [5167] which is spread along the inside of the enclosure wall in the southeast quadrant, stretching all the way to the entrance on the east side. It included a stone manuport (5126), a possible iron buckle (5130), a ceramic sherd (5133), a whetstone (5134), some charred wood (5132) and animal bone (5128). There were two deposits of burnt turf collapse on top of this layer, layers [5143] and [5161], the former unusually rich in finds, with an iron nail (5113), a piece of worked wood (5114), an iron rivet (5117) and animal bone (5115, 5116). [5167] seals a pit hearth [5200/5201] (with animal bone 5139)) dug up against the



Series of fills of charcoal and peatash in pit hearth 5200/5201. Looking south.

enclosure wall, and is above sandy silt layer [5194] which is at the bottom of the sequence of deposits associated with the entrance to the churchyard (see below). Most of the finds in [5167] were found in a relatively small area which included the pithearth [5200/5201] and the upper deposit [5143], suggesting that some relate to the hearth (including the ceramic sherd) and other to a later midden deposit.

Moving to the north side of the

churchyard the widespread turf collapse layer [5004] also sealed two pit features: pit [5089] with ash and charcoal fill [5088] and pit [5097] with sandy silt fill [5096] with a large piece of textile (5032, 5036), some slag (5034) and a piece of possible glass (5035).

Apart from sequences on the northern and southern sides of the church and in the entrance on the east side of the enclosure (described below) there are several contexts which

are completely isolated:

Complex pit (group [5041]) north of the church with mixed fill [5035] of sand and ash with textile (5038), charred wood (5011) and animal bone (5012), re-cut [5040] into earlier fill [5220], also a mix of sand and ash with frequent charcoal with textile (5147). The sandy matrix of the fills in this pit is similar to the pit [5068/5069] described above.



Complex pit group [5041] looking south.

Linear cut [5044] with two charcoal rich silt fills; [5043] with animal bone (5013) and [5113] with iron nail (5037) in the south side of the churchyard.

Lens of aeolian sandy silt [5052], possibly a westwards extension of [5194].

Charcoal rich silt deposit [5055] accumulated against an edge. This deposit is cut by Bruun's trench [5032].

Turf debris [5056] 3 m south of the church, possibly related to [5039] (see below).

Up-cast [5122] accumulated around an irregular pile of stones in the churchyard's south side. This pile of stones is only a metre east of another similar, [5128].

Small ash dump [5182] northeast of the church.

Small pit [5204] with a dump of charred wood [5203] in the northern side of the churchyard.

In addition to these contexts there were small isolated patches of ash, gravelly upcast, aeolian accumulations and turf debris resting directly on natural in several locations within the churchyard. In all cases these were so thin that they did not warrant removal and their distribution is not obviously meaningful, but they are indicated on the post-excavation plan [5227].

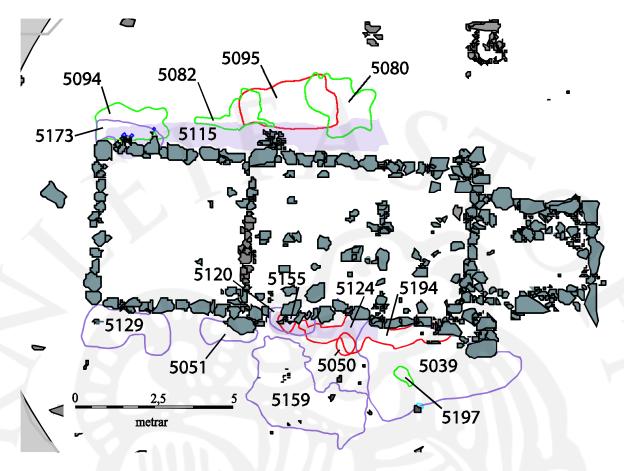
Contexts on the northern and southern sides of the church. On the northern side of the church, below the sequence of deposits post-dating the church and described above, there are three separate but similar layers of sandy silt with some turf debris, gravel and occasional charcoal [5080], [5082] and [5094]. The first two are on top of a fill [5070] of a large sub-rectangular pit [5095], measuring 3x1,5 m. This fill was very heterogeneous and seems partly to have accumulated in situ, and partly to have been dumped into the pit and mixed

with pre-existing material. It is a blend of turf chunks, sandy silt, gravel, ash (both from peat and wood), fire cracked stones and charcoal and had some animal bone (5024), a wooden object (5030) and some textile remains (5031). In addition there was yellowish staining reminiscent of sulphur deposits seen in area Confirmation of this identification is This pit was cut mainly into awaited. natural but it post-dates a layer of sandy silt with some turf debris [5115] which has



Pit [5070], looking osuth. Note the yellowish stains to the left. Possibly sulphur.

accumulated against the foundation stones, stretching from the north-western corner of the church to the middle of the nave where its eastern end was cut by the 1986 trench. This layer respects the stones in the foundations except immediately east of the northwest corner. There it seals another layer [5173] of more definite turf debris which fills a gap in the wall-line, 1,5



Deposits and features on either side of the church, coterminous with it.

m wide, where the stones in the foundation are both smaller and set lower by some 10 cm than on either side. This may be evidence for an entrance.

On the southern side there are fewer contexts and no evidence for industrial activity as on the northern side. The build-up of material is considerably less than on the northern side and amounts really only to a single phase of accumulation. This accumulation is however discontinuous and separated into 4 principal contexts, only one of which has a stratigraphical relationship with layers associated with the H-1300 tephra. That is the previously mentioned turf debris layer [5129] which is below post-1300 [5076] but above pre-1300 [5133] and can on those grounds be dated to around 1300. Further east there is a smaller patch of turf debris [5051] accumulated up against the large stone outside the main line of foundation stones. Only 10 cm further east is a more widespread layer of turf debris [5159] which almost joins another similar [5039] which extends to the southeast corner of the nave and included some animal bone (5014) and an iron nail (5015). A fragment of a baking plate (5156) was found on the natural below [5159] but is probably associated with it. All these layers are quite mixed, with sand and gravel, and charcoal inclusions increasing in the more easterly layers. [5039] is above a patch of mixed up-cast [5197] (with iron object (5135), possibly a nail)

accumulated in a small irregular depression, and it is also above the fill [5049] (incl. animal bone 5016) of a 0,12 m deep sub-circular hole [5050]. The fill [5049] is similar in nature to [5039] and can be regarded as an extension of it. The hole may have been left by a stone in the foundation, removed in the context of repair or rebuilding. The row of foundation stones in the southern side of the nave is far from straight. It has a decided inward curve which cannot have been the original layout. In the lee of this curve a mixed aeolian layer [5120], similar to and probably an extension of [5159], has accumulated. Below this, as well as [5039], is a more mixed aeolian accumulation [5124], predating the hole [5049/5050]. Below [5120] there is another stone-sized hole [5154/5155], left by the robbing of a stone from the foundation. The surviving stones in the foundation, sit not in the foundation trench [5198] but in its northern edge. The fill [5192] (with animal bone (5136)) of the foundation trench contained the H-1300 tephra, suggesting that this part of the foundation saw some repair after 1300. It is possible that the features and deposits associated with the southern foundation of the nave represent a recurrent problem which required more than one intervention. It is clear however that the majority if not all the deposits along the southern side of the church postdate 1300 and it may be that they relate mostly to the final years of the church and the immediate aftermath of its removal.

Contexts in the entrance to the churchyard. The entrance to the churchyard is on the eastern side and there the area of excavation was extended outside the enclosure to include the large boulders which have been arranged as steps up into the churchyard. In the entrance itself, an area some 2,5x2,25 m in size, there were a number of deposits, apparently relating mainly to

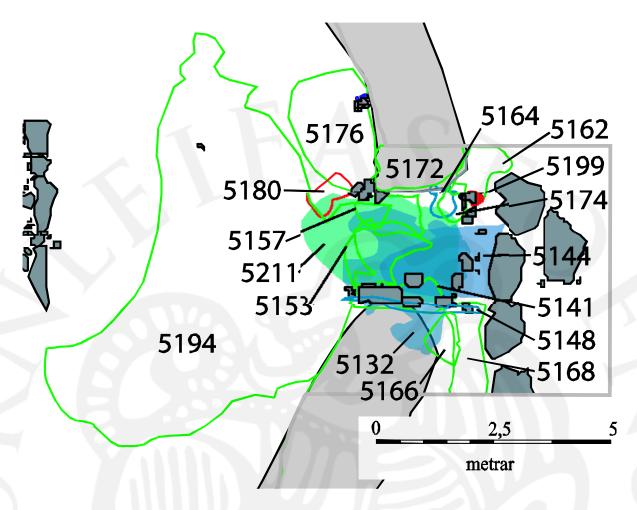
the final and abandonment phases of the site.

The main sequence was capped by a fairly widespread layer of turf debris [5132] with some animal bone (5111), partly sitting on top of the enclosure wall (on the south side). Below this a layer of aeolian silt [5141] had accumulated against the southern side of the entrance, on top of a layer of burnt turf [5144], the closest thing to a surface in the entrance proper, and an elongated lens of aeolian silt



The churchyard entrance after excavation, looking east.

[5148] (with animal bone (5120)) accumulated in a gap between the end of the turf wall in the enclosure and a row of stones demarcating it from the entrance. Another aeolian silt spread



Deposits and features in the entrance to the churchyard.

[5166] with animal bone (5124), has accumulated against the north-eastern corner of the southern enclosure wall, below [5132] but above burnt turf [5168] in the same location. Further north in the entrance the turf debris layer [5144] is above aeolian spreads [5153] (with animal bone (5121) and an iron pin (5122)) and [5157], the latter extending to the northern side of the opening. At the south-eastern corner of the northern entrance wall there is an isolated sequence with humic silt [5162] (with an iron nail (5123)) accumulated against the remains of the wall [5172] (with animal bone (5127) and capping a small patch of turf debris [5164], which in turn is above a small spread of aeolian [5174] and a post-hole [5199] with remains of a wooden post [5191]. This post-hole is the only structural feature in the entrance, other than the turf walls and stones that is, and could be a gate post. There is no hint of a parallel hole on the southern side of the entrance, but a concentration of stones at the southwestern corner of the northern entrance wall may represent a post-pad. There is another similar concentration of stones 1,8 m further north along the inside of the enclosure wall..

Inside the line of the enclosure wall two concentrations of ash had been recorded after initial cleaning [5104]. The more southerly was a thin pit-ash dump on top of [5132] and the

more northerly a more mixed concentration of burnt materials and some slag (5108). Both deposits belong to the top of the sequence and must post-date the regular use of the entrance as a passage for traffic. Below this was a pit [5180] with a fill of wood-ash [5178], partly covered by a layer of heavily bioturbated turf debris [5176] from which a whetstone (5131) was retrieved. The wood-ash pit and layers [5157] and [5148], as well as the widespread turf collapse layer [5167] described above are on top of a widespread layer of sandy silt [5194] which covers the area between the entrance and the foot of the artificial mound which the chancel is built on. Parts of this layer are lenses of pure sand. From it was retrieved some slag (5138) and an iron object (5137). Below this was the lowest deposit in the sequence, a layer of mixed up-cast [5211] with some evidence of trampling. [5194] and [5211] are both surfaces formed on top of the artificially elevated eastern third of the churchyard. This build-up of material was not excavated but a sondage [5224] into it produced some animal bone (5146) and showed it to be some 0,4 m thick (see further below).

That concludes the description of contexts within the cemetery but outside the church. The only exceptions are three features interpreted as buttress foundations, discussed below.

Discussion. The bulk of the contexts examined during the excavation of the Gásir church are deposits and features in the churchyard, the majority of which is linked neither stratigraphically nor functionally to the church. The principal aim of the careful excavation of these contexts had been

- a) to retrieve evidence that would help to date the church and throw light on its structural development
- b) to find inhumations
- c) to understand what type of activities took place in the churchyard and why it is as large as it is.

Objective b) can be summarily dealt with. There are no inhumations in this churchyard and even if it may not have taken its present form until relatively late in the development of the church site there are no indications whatsoever that burial ever took place at Gásir.

Although relatively few deposits are associated directly with the church there are enough to categorically state that its foundations had reached their present layout before 1300. There are also indications that the south wall of the nave saw repairs after 1300 although it may also be that this activity represents post-collapse demolition. Some build-up of material took place immediately after the removal of the timber structure, although there is also a

possibility that some of this accumulation happened while the church was still standing but had become dilapidated with a large hole in its northern side.

Inside the churchyard there was nothing which could with confidence be construed as a surface, attesting possibly to limited traffic within the churchyard. Neither was there anything that could with confidence be characterised as a midden although there was both ash and animal bones, interpreted as food waste. The latter is in small quantities, found in deposits of different types, and is consistent with incidental food preparation and consumption,

The materials encountered within the churchyard represent two basic types of process. On the one hand there is erosion, both of the turf wall of the enclosure, with large and small layers of turf collapse spreading inwards from the wall, and aeolian silt and sand from further afield sandwiched in between the cultural layers. Secondly there is a range of activities involving burning, some apparently quite specialised and some taking place in pits, invariably of very simple construction although they vary in size. Residues from these pits may yet yield information about the function of each one, but at present it can only be stated that there is great variation in the types and mixing of ash residues and the size and shapes of the pits. Some of this burning may have been for cooking, but on the whole the hearths and the residues seem rather to represent a range of industrial processes, having little in common except perhaps being isolated events of limited scale and duration.

In addition there are deposits which may or may not relate to either of these processes. There are deposits which might be related to building activity and repairs to the church and there are deposits which seem to be the remains of burnt timber. These are lenses or concentrations of charcoal, too clean and dense to be considered as hearth remains. Some of them (esp. [5043], [5113], [5048] and [5053] – group [5058]) may represent substantial pieces of timber stuck into the ground during or prior to charring. These include [5203] on the northern side of the church and [5043], [5048], [5053], [5055], [5099] and [5109] on the southern side. It is possible that some of these charcoal deposits (not all because they are not all contemporary) relate to the burning of the turf in the enclosure wall discussed below, but they are too few and small to entertain the notion that the church ever burnt down. It is however possible that unusable parts of it were burnt following demolition.

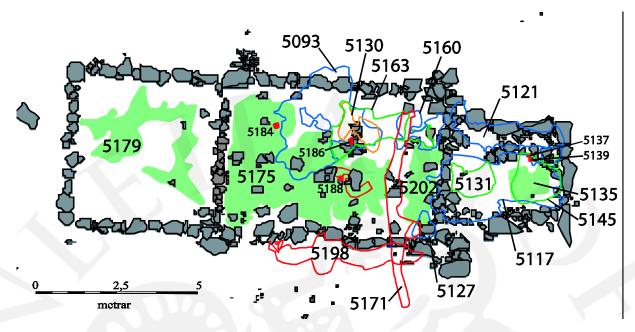
The stratigraphy within the churchyard allows some comments to be made about the phasing and dating of activity within it. The three widespread turf collapse layers ([5004], [5076/5092] and [5167]) are roughly contemporary and represent a period shortly after 1300 when the turf wall of the enclosure was actively eroding. Above them is a relatively short

sequence of alternating turf collapse and ash layers, mostly concentrating in the north-western quadrant. Below this early 14th century turf collapse horizon there is both a greater variety and a greater spread of contexts. All the negative features, including pit hearths, which can be associated with the main sequence, are below this horizon, and there is relatively less turf collapse going on before 1300. At the same time the sequence below H-1300 is curiously short considering that it could be expected to correspond in time to at least three major redesigns of the church. Instead [5158], which is at the bottom of the sequence bar one, overlies the fill of the foundation trench of the western extension, the final addition to a church building evidently of considerable age. This leads to the conclusion that the churchyard took its present form relatively late in the history of the church and that deposits and features associated with the earlier stages of construction have been removed, at least from the western half of the churchyard, and possibly buried in the eastern half. This possibility is discussed further below.

In conclusion the hypothesis can be proposed that the contexts within the cemetery represent activity only from the final phase of the church, possibly less than a century. It seems that industrial activity within the churchyard had reached a peak before 1300 and diminished after that. This does not need to have any implications for the intensity of use of the church and if there is a relationship it might be inverse, i.e. that the industrial activity before 1300 represents a low period in the fortunes of the church and that its cessation represents an increase in reverence and devoutness on the part of those frequenting the church.

Structural remains. The church. In its final phase the church was divided in three distinct parts: a chancel on the east end, a nave and an extension to it on the west end. In each of these there were some, but very limited surface layers and these will be described first before going on to discuss the structural remains, from which the phasing of the church can be deduced.

In the western extension only a single surface layer remained. [5179] is a layer of sandy silt with some turf debris and gravel, 1-5 cm thick. It covers about a quarter of the surface of the western extension and has accumulated on top of a very thin spread of mixed up-cast and turf debris with some ash and occasional charcoal. This latter layer was not removed as it clearly sat on top of natural, but it was spread more evenly over the floor area of the western extension. The lower layer could be associated with the construction of the western extension



Deposits and features inside the church

whereas the much thicker [5179] represents either the period of use or its immediate aftermath. It is later than the fill of the foundation trench [5205] but that is all that can be said about its relative age. It is possible that other layers and features were removed in Bruun's excavation but as argued above there is no positive evidence for this and it seems more likely that the 1907 excavation was really just limited to a few small trenches around the chancel. If this is so the absence of evidence in the western extension becomes rather striking. The absence of a trampled surface suggests that there might have been a timber floor but the absence of supports for such a floor (as are found in the nave) would seem to contradict that. A timber floor supported by beams lying directly on the ground is conceivable but such beams would rot quickly and they might be expected to have left some impressions even if they were not dug in. It is conceivable that material and features were removed from the western extension in the post-abandonment phase (and the cut [5085] might be used to support such a scenario) but as there is no positive evidence for that either. Therefore the flooring of the western extension must remain an enigma.

In the nave the post-abandonment layer [5093] had accumulated on top of mixed silt deposit [5130], with some gravel and occasional charcoal, which was on top of a pile of upcast [5163], which also partly covered by a patch of turf debris [5160] in the very northeastern corner of the nave. In the south-eastern corner of the nave there was a small patch of turf debris [5127] identical to [5117] in the chancel. All these layers may belong to dilapidation and/or post-abandonment phases of the church. They are all later than the fill [5152] of a ditch [5171] which runs north-south from the northeast corner of the nave through



Ditch [5171] inside the church, looking north.

the southern foundation and ends 2 m south of the church. It is 1,5 m west of the partition between chancel and nave and describes a wide arc. In all it is 6,2 m long, mostly some 0,4 m wide and has a 0.7 m long eastwards extension under the easternmost section of the foundation in the south side of the nave. It is carefully dug, some 0,2 m deep, with vertical sides and a flat base. The fill [5152] is up-cast and the ditch seems to have been backfilled in one

go not long after it was originally dug. The ditch cuts the demolition trench [5198] along the southern side of the nave, the fill of which [5192] contained the H-1300 tephra. That dates the ditch and the later deposits inside the nave to after 1300.

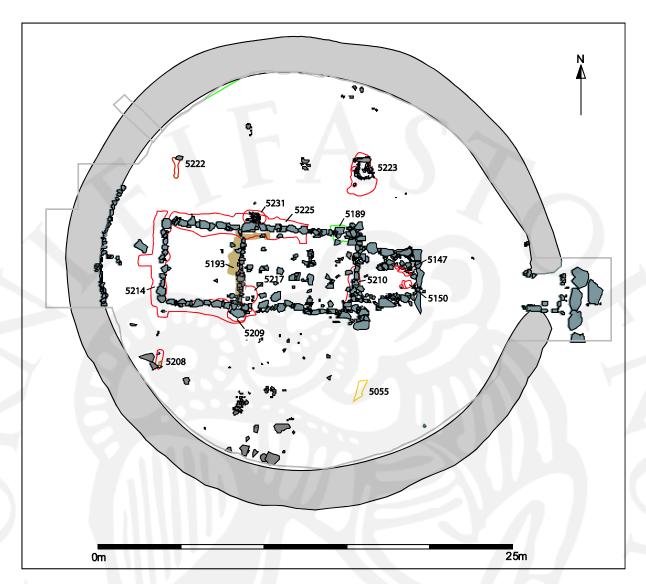
The purpose of the ditch [5171] is far from clear. It does not have any obvious structural function and can hardly have been a drain – its sides are too freshly cut and the backfill clearly a single event deposit. It should probably be seen as evidence for repairs, possibly related to the same problem as is evident with the southern foundation of the nave. It is clear that the stones in the foundation of the south side must have been reset after the ditch was backfilled. The ditch therefore belongs to the last phase of the church but was clearly dug and backfilled and the foundation reset some time before its demolition.

The ditch [5171] cuts a widespread layer [5175/5202] (with animal bone 5140) which is the only thing that could be described as a surface within the nave. It is a mixed deposit, up to 15 cm thick in places, mainly up-cast with some gravel and traces of ash. It is softer to the northern and southern sides but quite clearly trampled along the central axis of the building. It covers two small postholes ([5183/5184] and [5185/5186] in the northern half of the nave and an irregular cut [5188] with fill [5187] similar to [5175]. [5175] has formed around a number of stones which are arranged in 5-6 rows across the nave, from north to south. Some stones are missing from the rows, particularly in the north-eastern part, where there is most evidence for later disturbance. The stones have all been placed directly on natural. They can be interpreted as supports for beams on which floorboards rested. [5175] is then presumably in origin a deposit accumulated during construction, possibly augmented by dust filtering through the cracks between the floorboards. The trampling evident along the central axis is consistent with short but intensive periods of traffic, presumably in the course of construction

and any subsequent repairs – the floorboards must have been taken up at least once, when ditch [5171] was dug. Although the stones align themselves primarily in rows from north to south and this must have been the direction of the supporting beams, there is also a suggestion of an east-west orientation which is however not in complete alignment with the foundations. Rather the stones seem to align better with the second phase of the church and it may be that they are relics of that earlier phase. The contrast between western extension and nave in the final phase then becomes less striking, and in fact the idea of a structurally separate narthex becomes obsolete. The final phase simply had a nave that was 5 m longer than the earlier phases and that nave had no divisions.

In the chancel modern excavations (esp. [5072]) had taken a relatively heavy toll but the recovered sequence is nevertheless comparable to that of the nave. A layer of turf debris [5117] is identical to the small patch [5217] in the south-eastern corner of the nave and most likely represents also a dilapidation or post-abandonment phase of the church. It included a stone manuport (5104). [5117] has accumulated in the southern two thirds of the nave and is probably contemporary with [5121] in the northern one third. The latter deposit is similar except that it has a high frequency of small stones and some sand lenses. [5121] extends over the wall-line at the junction of chancel and nave, supporting the interpretation that it belongs to a post-abandonment phase. The two deposits are divided by a row of stones. Below [5117] there is a layer of up-cast [5131] and a surface [5135] (with a stone manuport (5110)) in the south-eastern part of the chancel, formed on a layer of up-cast [5145] identical to [5131]. These latter two represent levelling events, infilling cuts and depressions from earlier phases and can be associated with the construction of the final phase. To this final phase belong also two small but deep post holes side by side in the northern part of the chancel ([5138/5139] and [5137] - the latter was a 0,32 m deep cavity). Up-cast/levelling layer [5145] in-filled an elongated cut [5147], with a steep 0,23 m high north side but a more gradual south side in the northern half of the chancel. It also caps the fill [5149] (with stone manuport (5118)) of a complex posthole [5150]. [5150] is two postholes within the same cut, with a ridge between them. The more easterly hole is more substantial, sub-rectangular, 0,4x0,4 m and 0,36 m deep. The more westerly is also sub-rectangular, 0,18x0,18 m in size and 0,24 m deep. These holes along with cut [5147] most likely belong to an earlier phase of the church.

Although there is no positive evidence for it, it seems most likely that the chancel also had a wooden floor. Again the absence of other types of flooring is the main argument, and



Foundation trenches, structural post-holes and buttress foundations.

the chancel, unlike the western extension, is small enough that special supports for floorboards need not be expected.

Unlike the nave and western extension the stone foundations for the chancel do not sit in trenches. The stones in the chancel foundations are also much larger, substantial angular blocks set on edge, standing 0,5-0,8 m high. They rest on the H3 tephra – suggesting that some truncation was made to get them in place, but the edges of this do not remain. On the outside turf-debris and up-cast has been piled up against the foundation stones, creating a U-shaped collar of earth around the chancel. This pile post-dates the fill (not excavated) in the foundation trench/pit around the large boulder that is suggested to have been the southeast corner post pad of the second phase (see below). That suggests that the chancel in its preserved state belongs only to the final, third phase, of the church.



The foundations of the chancel, looking south.

The rest of the church's foundations are placed in shallow trenches. A row of stones defines the division between the chancel and nave sitting in trench [5210], but the fill [5206] (with baking plate (5142)) is below a number

of stones by the southwestern corner of the

chancel which clearly belong to the foundations of the last church. This suggests that the original construction of this foundation must predate the final re-arrangement of the foundations. It should probably be considered to belong the third phase however as it clearly is too far west to align with the south-eastern corner of the second phase. On the northern side of the nave the fill of the foundation trench east of the 1986 trench was recorded as [5189] and its continuation west of the 1986 trench as [5205] (with remains of wood (5143)). This fill, as well as the foundations themselves and the underlying cut [5225] extend all the way to the northwest corner of the western extension, suggesting that the whole northern side, of both nave and western extension, was built in one go. Although there is a break at the north-western corner of the western extension this same construction event is represented by the foundations of the western and southern sides of the western extension [5190/5214]. This cut has two out-shots, one already mentioned, at the middle of the western gable where a large boulder lies askew besides the cut, and it has been suggested that this boulder originally sat in this cut, either as a step or as a weight. The other out-shot is by the south-western corner of the western extension, and has a southerly direction. No stone is associated with this but it is likely that it represents a robbing of a pre-existing stone, possibly associated with earlier phases of the church. At the southern side of the nave the later repair trench [5198] has obscured the original foundation trench. Associated with this construction event a robbing of stones from the foundations of an earlier west side of the nave has taken place. An upper layer of stones has been removed from this foundation ([5165] and [5177] (with possible whetstone (5129)), group [5193]) and the backfill [5165] also extends along a section of the



The church at the end of excavation in 2006, looking southeast.

northern wall of the nave, suggesting that an earlier row of foundation stones was also removed there before the final construction event. The original cut [5216] for the foundation trench under the west side of the nave seems to be contemporary with the cut [5209] in which the large boulder outside the southwest corner of the nave is set. If that is true then both can be regarded as belonging the second phase of the church. Both of these second phase cuts postdate a large pit [5212/5217] inside the southwestern corner of the nave. It is semi-circular, 0,5 m deep, 1,1 m in diameter and has signs of robbing and backfilling before the construction of the second phase foundations. It is probably contemporary with another similar pit [5229/5230/5231], more oval in shape (1,4x0,85 m),



Foundation for the western gable of phase 2, looking north. [5209] in the foreground, pit [5217] to the right.



Pit [5217], looking southwest. Southwest corner- of the phase 1 church, partly filled by the foundation for the western gable of the phase 2 church.



Pit [5231], looking south. Northwest corner of the phase 1 church, partly filled by the phase 3 foundations.

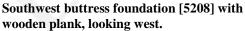
outside the north western corner of the nave. It is also 0,5 m deep. This pit had also been robbed and backfilled but a pile of stones has been left in its base. It is suggested that these two pits, possibly along with the post-hole [5150], represent the first phase of the church. A cut observed under the stones in the southwest corner of the chancel, predating foundation trench [5210] could also belong to this earliest phase, representing the southeast corner post of the nave.



Post-hole [5150], right, and cut [5147] in the chancel, looking east.

Structural remains. Buttresses. In the churchyard there are three features interpreted as foundations for buttresses. In the western half there are two identical elongated features, aligned roughly with the western gable of the western extension, 2,5 m south and north from the south-western and north-western corners of the church respectively. The more northerly of the two [5221/5222] is 1,1 m long and 0,2 m wide. It is 0,1 m deep in the southern end (closer to the church) but 0,19 m at the northern end where there is a single stone sat on edge, which has functioned as a stopper to wedge down the wooden buttress. The pressure from the weight of the buttress has been greatest by the stone and this presumably explains why the cut is deeper at that end. The corresponding, more southerly buttress foundation [5207/5208], is 1 m long and 0,3 m wide and also has a stone sat on edge at the end facing away from the







Northwest buttress foundation [5222], looking west

church. Here a small wooden plank (5145) was found in the cut, pressed against the stone. 0,2 m of its length remained but it can be surmised that the plank originally filled the length of the cut. The plank is 0,1 m wide and 0,05 m thick. The fill also contained some animal bone (5144). Both buttress fills were covered by layers predating the H-1300 tephra and this might indicate that they had therefore ceased to function and were not a part of the church structure in last the 60+ years of its life. This is not bullet-proof however as the fills could be capped by layers while the buttresses were still functioning. A resetting of the buttresses after 1300 would however have left traces and it must therefore be considered likely that the buttresses had disappeared when the church was blown of its foundations in 1359.

The third buttress foundation is a much more substantial construction. It is 2,5 m north of the north-eastern corner of the nave. The cut [5223] is close to oval, 2,5x1,5 m in size. The fill [5219] is very mixed and contained a concentration of ash in a limited area by the middle of the western edge of the cut. This may represent a secondary event, a fire pit dug into the side of the buttress cut, but as there associated with was no cut



Northeast buttress foundation [5223], looking west.

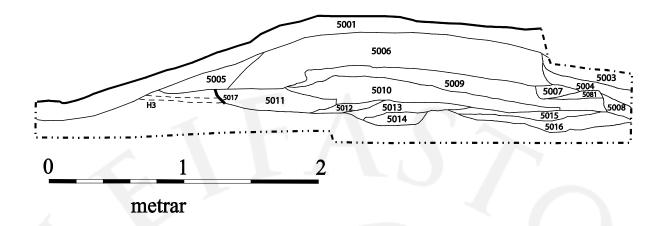
concentration of ash it seems more likely that the fill represents mostly the backfilling of the pit, with material including this ash, after the buttress end had been removed. The design of this buttress foundation is identical to the others, with a large stone sat on edge at the end of

the cut facing away from the church. Here the stone is much larger however and there is also a collar of smaller stones which has surrounded the ground plank, but apparently not supported it – as might have been a good idea. This pit is also much deeper than the other ones, some 0,3 m.

A corresponding buttress foundation on the southern side is missing. In the location where it would be expected there was an elongated charcoal concentration [5055], which had dimensions similar to the more westerly buttress foundations. It had accumulated against an edge on the western side but a cut identical to the others there was not. The southern end of this deposit was cut away by Bruun's trench [5032] and it is conceivable that he placed the trench in this location because a "headstone" was visible at the surface. His trench could also conceivably have removed a more substantial buttress foundation, but that would then have been situated more than 1 m further away from the church than the other three. It is unlikely that this can be satisfactorily resolved.

Structural remains. The churchyard. The churchyard consists of a circular enclosure and an artificial platform. Apart from the excavation inside the enclosure, which was carried down to the original surface of the platform, the investigation of the churchyard involved a trench (called B2) through the wall northwest of the church (the location determined by the necessity of creating a barrow run out of the enclosure); and two extensions of the excavation area outside the enclosure. One at the eastern end where the entrance is and another at the western end where there is a stone facing on the inside of the enclosure wall.

In the west side of the trench B2 layers [5021], [5022] and [5023] represent the base of the wall (group [5018]). [5023] is a layer of turf, presumably for levelling whereas [5021] and [5022] are up-cast deposits, [5022] also for levelling while [5021] may represent a loose core of the wall. Similar deposits are not visible on the eastern side where the wall proper [5006] is much more substantial. There it is 0,3 m thick as opposed to 0,1-0,2 m on the west side. The turf construction is of indeterminate type. It is too short for *strengur* but too narrow for *hnaus* or *snidda*, but something akin to *snidda* seems most likely. [5005] is turf collapse on the outside of the wall and [5007], on the inside, predating the more widespread turf collapse layer [5004] already described. It seems therefore that the elevation of the wall is created partly by a truncation on the inside, an interpretation consistent with the levelling of the platform for the church by removing material from the west side and dumping it on the east



Northeast section of trench through churchyard wall.

side. There is also a cut on the outside, approximately 0,3 m deep, suggesting a shallow ditch running the length of the wall, at least on the western side. It probably is the result of digging material to build the wall but it will also have added a little to its height. The apparent thinning of the turf wall towards the west is consistent with this scenario. More surprising than the limited thickness and what appears as the shoddiness of the turf construction is the fact that the turf wall is built on an accumulation of earlier deposits which are related to some

other function than enclosing the Below the wall there is a churchyard. midden (group [5019]; layers [5009] and [5010] in the east side and [5024] on the west side) which produced a substantial collection of animal bones (finds no. 5003, 5101, 5102), a worked bone (5001), a bronze object, possibly a rove (5008) and iron slag (5150). This is probably a localised dump which the trench has cut through on its western side. It has



The section, looking northeast.

accumulated on top of a number of up-cast deposits (group [5020]; deposits [5011-5016] in the east side and [5025-5029] on the west side) with varying amounts of turf debris mixed in in-filling a shallow ditch [5017] with a NNW-SSE alignment. To the south- and east the continuation of both the midden and the ditch with fills has been truncated by the construction of the platform showing that they must predate it. Considering their proximity to the church and the fact that they do not seem to continue north- or westwards and the absence in that direction of any archaeological features which they might relate to, it must be assumed that



The extension over the west-section of the churchyard wall with the full length of the stone facing exposed. Note the signs of burning on the turf. Looking north.

they are contemporary with earlier (pre-platform) phases of the church and are somehow related to them. The ditch is oriented differently from the earlier phases of the church and it is not clear what function it could have served.

An extension of the excavation area was opened over the western side of the enclosure wall, primarily to investigate the stone construction which was visible on the surface. This turned out to be a stone facing of a 8,5 m long stretch of the inside of the wall. The stone facing is made of 0,2-0,4 m stones, and two courses survive throughout its length. There are no indications that there ever was a stone facing on other parts of the wall. It seems, simply, that this stretch was reinforced with stones, probably some time after the turf wall was originally constructed, but the reason for this is not clear. There does not seem to have been an entrance on the western side of the church in it last and largest phase, which would have meant heavy traffic in the space between church and enclosure, and resulted in wear of the wall at this location. Two other functionalistic explanations that can be proposed, neither of them particularly convincing. One is that the side of the wall became eroded at this place because people were climbing over the wall, which would imply connections with the farming

communities inland, to the west. The other is that there was some sort of bracing for the church that required a firmer support than the turf wall could provide. An aesthetic reason does not seem likely as this was the stretch of the enclosure wall which was least visible to visitors to the churchyard. This could only apply if the stone facing represents work in progress, a never completed restoration of the wall.

In the extension the width of the turf wall, including turf collapse on the outside, is 2,0 m, comparable to the width observed in the trench. The original width of the wall can be estimated as 1,8 m at the base, judging i.a. by the depth of the entrance on the eastern side. In the western extension the turf wall had visible signs of burning and this was also observed in the eastern extension, where the turf on the south side of the entrance was clearly singed. Some of the turf debris deposits in the entrance area showed signs of burning (see above) and small pockets of burnt turf were also observed here and there in the southern side of the churchyard. It is possible that this burning represents the same event as the charred wood deposits in group [5058] (discussed above), and if so may support the idea that the wreck of the church was burnt after it had collapsed or been torn down. The complete absence of any signs of burning in or around the church's foundations speaks against the possibility that the church structure burned while still standing.

Before excavation the entrance on the east side appeared as a wide gap of almost 8 m, associated with a row of large boulders outside and below the enclosure it self. The excavation revealed that the entrance had originally been much narrower or 2,2 m, clearly defined by a row of stones on the south side and a post-hole and some stones on the north side. The ends of the enclosure wall on both sides of the entrance had eroded to a considerable degree, particularly on the northern side where a nearly 4 m stretch has more or less eroded away. Within the extension a thin layer of turf [5172] was interpreted as the remnants of the wall on the northern side, but this was more due to its extent being consistent with the expected lay-out of the wall than it being possible to characterise it as a turf-wall. On the southern side the turf-wall, although thin, was preserved all the way to the entrance (not excavated).

A line of basalt boulders arranged below the entrance give it a monumental aspect. These are up to 1,5 m in length and 1 m in width, and in the centre two of them have been selected for their flat sides, creating steps leading up to the churchyard entrance. The lower step has apparently slid some 0,4 m down-slope to the northeast. Flanking these at both sides there are two higher boulders, framing the steps. There is a fifth large stone to the south of this construction but its function is not clear. These stones come from the same, or similar,



The entrance under excavation, looking west towards the church. The collar of earth around the chancel can be clearly seen.

source as the large stones in the foundations of the chancel. Such stones are not visible on the surface in the immediate vicinity of the church but they may have been found as close to as within 100 m.

A post-hole, with remnants of a wooden post remaining, is by the north-eastern corner of the entrance and this may suggest that it was closed by a wooden gate.

The entrance is due east of the church but does not align with it exactly. It is 1-1,5 m too far south to align with the central axis of the church. It is closer to the central axis of the second phase church (which had a slightly more south-easterly orientation than its successor) but does not align exactly with that either. The discrepancy is not major and will only have been noticeable to those with an eye for such things, but it may add support to the idea that the enclosure was designed around the second phase church. A more prosaic explanation would be that exact alignment simply was not a major concern and/or that the exact location of the entrance was affected more by the placing of the boulders.

The turf wall encloses an area approximately 25 m in diameter (490 m²). It is located on gently sloping land, the difference in height between the area west of the churchyard and

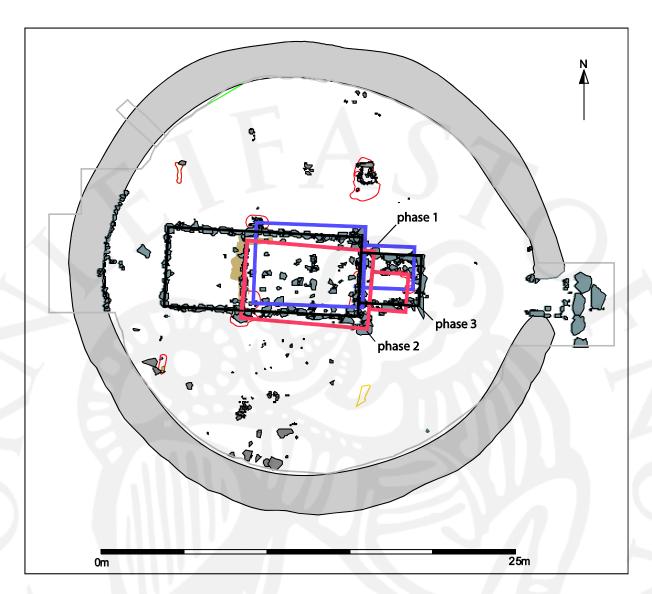


East-West elevation through the churchyard.

east of it being approximately 1,8 m. As far as can be seen the original church was located on a relatively flat natural ledge, at least flat enough not to require any significant levelling. This is suggested by the level of the prehistoric tephra H3 under the chancel compared to its level within the entrance, suggesting a nearly 1 m drop in the prehistoric land-surface over a distance less than 10 m from west to east. In other words the incline of the original landsurface was not even and was steepest towards the northeast. When the enclosure was built the area within it was made more level by shovelling material from the western side, digging to a maximum depth of 0,8 m, more typically 0,5 m, and transporting the material to the north-eastern side where it forms a 0,1-0,3 m thick layer. It is estimated that some 150 m³ of soil were moved – a significant but by no means major undertaking, easily achieved by a group of 10 men in less than a week. It was not investigated whether the east side of the enclosure wall was built on top of the artificial platform, but this seems likely. Despite this landscaping the surface within the churchyard did not become completely flat, and the easternmost third of the area slopes eastwards with a 0,7 m difference in height from the east side of the nave to the entrance to the churchyard. The collar of up-cast around the chancel may have been created at the same time as the platform, but it can also be later. To the west of the chancel however the surface is more or less flat, with less than 0,3 m difference in height from the southwest to the northeast.

Conclusions

The earliest phase of the church is represented by the two large pits at the base of the stratigraphic sequence. It is suggested that these are the foundation pits for the north-western and south-western corner posts of the first church at this site. A truncation observed below the later wall between nave and chancel could be the foundation pit for the south-eastern corner post. This truncation is stratigraphically at the same level as the two pits and is at right angles to them. A fourth feature that could be associated with this earliest phase is the post-



Reconstruction of the three different phases of the Gásir church.

hole inside the chancel which is suggested to have held the south-eastern corner post of the chancel of this first phase church.

The nave of this first church would have measured approximately 6.5x4.5 m, and the chancel 3.2x2.5, making a total length of 9.7 m. It must be stressed however that the argument for the chancel in this first phase is weak and there is no way of knowing if it was built at the same time as the original structure or added later. This building is aligned almost exactly east-west, more so than its successors.

Foundation pits, large pits (+ 1 m in diameter) filled with stones, have been observed at several other early Icelandic church sites, most clearly at Hofstaðir in Mývatnssveit, but also Þórarinsstaðir and Stóraborg. The two former have 11th century dates but Stóraborg is most likely more recent. The constructional technique may therefore not have any implications for the dating of the structure. These large stone-filled pits are not post-holes but

rather stone packing to support, presumably, substantial corner posts, and they may be indicative of an exaggerated height of these buildings. This earliest church at Gásir was a stave-church in the sense that it did not have earth-fast foundations, but apart from its suggested dimensions little else can be said about its construction or appearance. Even less can be said about its dating. None of the deposits in these pits contained anything that could be dated and therefore only a dating relative to the second phase can be hoped for. At present even this is not in hand. However it would not be too hazardous to guess that the first church was built before 1200 as the two later phases predate 1300.

The principal evidence for the second phase of the church comes in the form of two very large flat boulders outside the row of foundation stones in the southern side of the last church. Both sit in truncations that are earlier than the final phase, and the more westerly of the two sits in a cut that postdates the large pit suggested to be from the south-western corner of the first phase. It is also stratigraphically at the same level as the foundation trench with row of stones running northwards from this point. It is suggested that this was the foundation for the western gable of the second phase church and that the two boulders represent postpads for the south-western and south-eastern corners of that building. The width of the nave of this building is suggested by the eastwards extension of the robber's trench [5165], but the boulders supporting the two northern corner posts have been moved and incorporated into the foundations of the third phase church. In both cases it is however possible to identify the stones and in neither case have they been moved far at all. Indeed the north-eastern post pad seems only to have been tilted to align it to the other stones in the foundation for the northern side of the chancel. It is also possible that the rows of stones, interpreted as supports for floor-beams, in the nave, belong to this phase. Their east-west orientation aligns best with this phase and the absence of such stones in the western extension of the last phase suggests that in that phase there was some other arrangement for supporting the timber floor. This however is circumstantial and the stones could have been used in both phases. There is no direct evidence for a chancel in this phase but it can be suggested that the truncation [5147] within the later chancel relates to the north-eastern corner of a second phase chancel. Again there is no support for this apart from that it would fit the proposed dimensions and alignment of the nave, and there can well have been a chancel which left no traces.

The nave of this second phase church was slightly larger than its predecessor or 7,7x4,8 m but the putative chancel was smaller, or 2,4x2,2 m, suggesting a total length of 10,1 m. It was situated more than a metre further south than the first phase church and aligned differently with a significantly greater orientation towards the southeast.

The post pads supporting the corner posts of the second phase church suggest a similarly monumental architecture with emphasis on firm support for the corners. In addition this church seems to have had foundation stones sitting in shallow trenches supporting the walls in the same way as in the final phase church. This is unequivocal for the western gable while the earlier trenches have been dug away by later activity along the northern and southern sides of the nave. Unlike the final phase there does not however seem to have been a foundation trench at the junction of nave and chancel in this one. Again it must be stressed that the evidence for the chancel in this phase is very circumstantial. There is no direct dating possible on this phase either although it can be suggested that it lasted until the second half of the 13th century when the third and final phase was built.

The building of the platform and circular enclosure is suggested to have taken place towards the end of the existence of the second phase church. The location of the circular enclosure is more likely to have been decided with reference to an object in its centre (which could be either the first or second phase church) rather than the third phase church which is considerably west off centre. That only a short time can have lapsed between the building of the platform and enclosure on the one hand and the third phase church on the other is suggested by the near complete absence of remains which could predate the third phase church in the area west of it where the stratigraphical sequence is most substantial. There is only the pit-hearth [5169/5170] which could conceivably predate the third phase church, and it could just as well be contemporary with it. This only makes sense if the digging into the slope at the western side of the churchyard occurred very shortly before the construction of the third phase church. It maybe therefore be that the building of the final phase and the construction of the platform and enclosure belong to the same spate of renovation, but that the decision to make the church considerably larger was not reached until after the enclosure had been built.

The third, and final, phase church is the only one which can be described in some detail. Its nave is 11,6 x 5,0 m and the chancel is 3,8 x 3,1 m. It is 0,5-1 m further north than its predecessor and oriented closer to compass east-west. Unlike its predecessors this church did not have any particular arrangements for the foundations of the corner posts. The walls of the nave rested on stone foundations, mostly a single, but in places two, courses of large (0,5 m+) stones, sitting in a trench, typically some 0,2 m deep and 0,6 m wide. The foundations of the chancel are made of larger stones placed directly on the natural, with loose earth piled up around the stones on the outside. The chancel foundations are some 0,3 m higher than those of the nave, suggesting, along with the eastern wall of the nave which is supported in the



The church after excavation, looking west.

same way as the others, that the chancel was a structurally separate unit, possibly with a higher floor level than the nave. The nave was supported by wooden buttresses at each corner (three of which survive) suggesting that the weight of the roof rested entirely on the walls, which as a result required buttressing so that they did not fall apart. There is no evidence for buttressing of the earlier phases, which were more or less of equal width, but neither is there of internal supports (unless the stones suggested as supports for floor beams in the second phase are interpreted as such). It seems therefore that structurally the main difference between the third phase and the earlier phases was that the latter had very substantial corner posts which supported most of the weight of the roof, whereas in the third phase the weight was distributed more evenly along the length of the, possibly more substantial, walls with added supported given by the buttresses.

The main entrance to the church seems to have been by the western end of the northern side and there may have been an additional entrance by the western end of the south side of the chancel. It is postulated that the whole church had a wooden floor. Very few objects were found inside the church and none of them are associated with ecclesiastical functions.

The foundations of this final phase were laid before 1300 but there is evidence for repair work taking place after 1300, probably on more than one occasion and it is possible that this amounted to fairly substantial rebuilding. The floor of the nave must have been taken up at one point and some redesign may be indicated by the displacement of a large regular block of stone which had sat in its own trench by the middle of the western gable and an empty southwards extension of the foundation trench by the south-western corner. It is this church which was broken in 1359 but we do not know if it was rebuilt after that. The evidence for repairs may be consistent with a scenario whereby the church was rebuilt after 1359 although the repairs could equally well have occurred earlier on in the 14th century. Even so there is no particular reason to consider 1359 as the end-date of the Gásir church. There are indications that the church may have become dilapidated before its eventual collapse with floor-boards being robbed and a large hole in the northern wall and also that the wreck of the church was burnt in the southern side of the churchyard, presumably after usable timbers had been salvaged.

There is no evidence for burial within the churchyard and in fact there may not have been any defined churchyard before the building of the enclosure towards the end of the second phase. The evidence for activities within the churchyard belongs primarily to the final phase and suggests that a variety of tasks were carried out there, some of them industrial. Some of the hearths are consistent with ordinary cooking and it may be that this suggests temporary dwelling in or near to the church, possibly in the context of guarding goods stored inside it. The midden preserved under the turf wall in the enclosure suggests that non-ecclesiastical activities were also associated with the earlier phases but the limited amount of comparable evidence from the wedge of the churchyard which was neither truncated nor buried in course of the construction of the platform suggests that such activities may have been less frequent than in the final phase.

	Length of	Width of	Length of	Width of	Total area
	nave in m	nave in m	chancel in m	chancel in m	in m ³
Phase 1	6,5	4,5	3,2	2,5	37,25
Phase 2	7,7	4,8	2,4	2,2	42,25
Phase 3	11,6	5,0	3,8	3,1	69,75

Table 1. Approximate dimensions of the three phases of church foundations at Gásir.

Epilogue

On the basis of this data-structure report and the following reports on the finds and animal bones found at the churchyard site a general account can be given of the church at Gásir.

There were clearly sustained and repeated efforts to maintain a large church at Gásir for more than 200 years, and possibly considerably longer. The church-building was therefore no fluke, it is not a symbol of boom-time extravagance, but rather indicates the seriousness of the commitment of its owners to Gásir, and the activity which the site represents, trading. That it was built and owned by the traders operating at Gásir is beyond doubt. It was clearly not a part of the Icelandic parish system, most clearly demonstrated by the fact that burial was not allowed there. The symbolism of the eastern entrance to the churchyard, facing the booths and the harbour but away from the farms in the hinterlands, speaks volumes about where the congregation of this church came from.

The complete lack of artefacts which could be associated with ecclesiastical functions and the generally limited evidence for traffic within the churchyard and church supports this scenario. This was a church which saw very limited use, probably only a few days a year, and what use it was put to is related more to the primary activity of Gásir, trading. The artefacts, industrial and outdoor cooking debris found within the churchyard is of the same ilk as in the booth area, suggesting that the churchyard could at times (although possibly quite rarely) function as an extension of the activity area around the booths. It is quite possible that the church was used for storage of merchandise and some of the debris may be related to this, e.g. re-packing and repairs as well as everyday activities of guards posted to look after the goods.

Results of radiocarbon analyses are awaited as are results from identification of various residues and finds within the churchyard. These will hopefully provide better indications of the start- and end-dates of the church as well as throwing clearer light on the activities that took place in the churchyard. A full discussion of the implications of the findings, including comparative materials, will have to await those results.

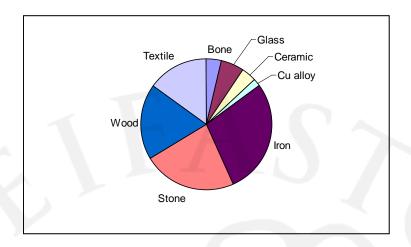
The finds

Textiles were analysed by Margrét Gísladóttir, textile conservator at the National Museum of Iceland; **Glass bottles** by dr. Gavin Lucas, Fornleifastofnun Íslands and University of Iceland and **Ceramics** analysed by Torbjorn Brorson, Ceramic Studies, Sweden.

The finds database from seasons 2004 and 2006 at the church area at Gásir includes 97 finds numbers. Included are unworked animal bones, which are the subject of a separate report by Ramona Harrison, and slag which awaits analysis. One find number, 5021 was discarded and therefore there are 53 finds under discussion here. The finds from 2004 start with 50 and from 2006 start with 51. The preservation at the site is variable; metal objects are in poor condition but most of the organics, textile and bone remains are in good condition.

Material	Sum	%	Find categories. Notes
Bone	2	4	Worked bone. Unworked bone is not included in the count.
Glass	3	6	Indeterminate, bottles
Ceramic	2	4	Vessel
Cu alloy	1	2	Indeterminate
Iron	15	27	Indeterminate, nails, pin, rove.
Slag	X	X	417,4 g
Stone	12	23	Whetstones, manuport, baking plates
Wood	10	19	Object, charred wood, post remains?
Textile	8	15	Woven.
Total	53	100	

All finds were processed at Fornleifastofnun Íslands and registered in the excavation database. Conservation was carried out by the National Museum of Iceland.



METAL

Copper alloy

The assemblage includes one copper alloy find, no. 5008 from midden deposit [5019] below the churchyard wall. It is a flat, now bent rectangular piece with a slit hole in the middle, possibly a rove fragment. It was found with 50g of industrial debris (no. 5150), worked whalebone (no. 5001) and animal bones (food waste 5003, 5110 and 5102).

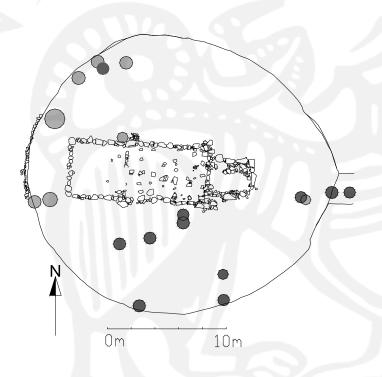
Iron

There are 15 iron finds. All are much corroded and many misshapen. The largest group are nails or probable nails, in total 7: 5004 and 5006 from top soil [5001]; 5015 from turf collapse [5039]; 5037 from fill [5113] in a pit; 5113 from burnt turf [5143] at the south side of the churchyard; 5135 in mixed deposit [5197] south of the church and 5123 in homogenous silt [5162] in churchyard entrance. Two datable nails are from the topsoil [5001] and are both from the 19th century onwards. One rove no. 5117 was found in burnt turf accumulation by the south side of the churchyard wall [5143] but the rest are indeterminate objects corroded and misshapen beyond recognition: 5002 and 5007 from top soil [5001] and 5017 in charcoal patch [5048] at the south side which is a part of group [5058] which are patches of burnt wood. Find no. 5122 is from mixed aeolian accumulation in churchyard entrance [5153]. Find 5137 from mixed bioturbated soil and sand at the east side of the churchyard [5194] and 5155 from context [5227]. Find no. 5130 is a circular ring and a pin (items not attached and very corroded), possibly a small buckle. Those are from widespread deposit [5167] of turf debris in the southeast side of the churchyard, found with ceramic sherd 5133, whetstone 5134, charred wood 5132 and stone manuport 5126. All but one of the iron finds are from the south and southeast side of the churchyard but apart from that general distribution there is no concentration or pattern in the deposition of iron. The 15 iron finds are scattered through 11

different contexts which consist of different elements, turf debris, mixed deposits of aeolian sand and silt, fill of a pit and charcoal dump. Some may originate in the church structure (e.g. 5017, 5037, 5113, 5117, 5135) but the majority can only be seen as generalized rubbish.

INDUSTRIAL DEBRIS

In total 417 g of industrial debris (slag) was found. Half of the amount or 213 g were retrieved from top soil [5001] but the other half is scattered through eight contexts, all from the churchyard. The deposits are mostly mixed midden and peat ash dumps [5003, 5019, 5066 and 5126], but also turf collapse [5078 and 5142], fill in a pit [5096] and a mixed aeolian deposit [5194]. Although the slag is mainly in secondary contexts, mixed deposits rather than



Location of metal objects (dark-grey) and slag (light-grey) in the churchyard at Gásir. Finds from topsoil [5001] not included.

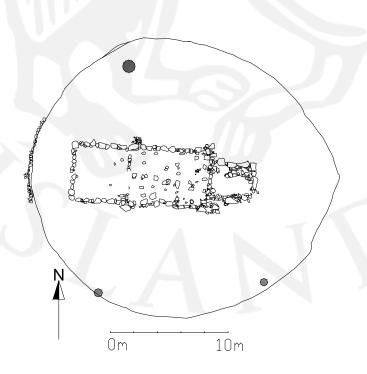
any plausible iron-working features ([5096] might be the exception), its concentration in the northwestern part of the churchyard suggests that small-scale iron-working took place in this area, possibly using the church as shelter from the prevailing southerlies. The iron slag from top soil [5001] is probably from disturbed earlier layers (due to early 20th century excavation at site) rather than later activity. The slag awaits further specialists analysis.

CERAMIC

Two ceramic sherds were found at the site. Find 5133 is a rim and neck fragment of a small jug, of proto-stoneware probably from Lower-Saxony and dates to the 14th century. The other fragment, 5152 is a redware jug from the Netherlands or Denmark and dates to the 13th or 14th century. Most of the pottery from Gásir belongs to the early 14th century and it seems likely that the redware sherd is from this period. Sherd 5152 belongs to the same jug as GAS06-041, found at the trading site in Gásir, placing it above the H-1300 tephra. Sherd 5133 was in a widespread turf debris deposit [5167] in the southeast side of the churchyard, along with possible buckle no. 5130, whetstone 5134, charred wood 5133 and stone manuport 5126. Sherd 5152 was found during final cleaning and was ascribed to multi context [5227]. It was at the edge of cut [5100] and is probably associated with it and belongs stratigraphically to the same phase as the other sherd, to the period around 1300.

GLASS

Two 19th century bottles were found in top soil [5001], a liquor bottle no. 5103 from a two piece mould and medicine bottle no. 5107. Both probably relate to the 1907 excavation. One small spherical (5 mm in diam.) possible glass object no. 5035 was retrieved in pit fill [5096], which also produced slag 5034 and textile 5032, 5036. This find awaits further specialist analysis.



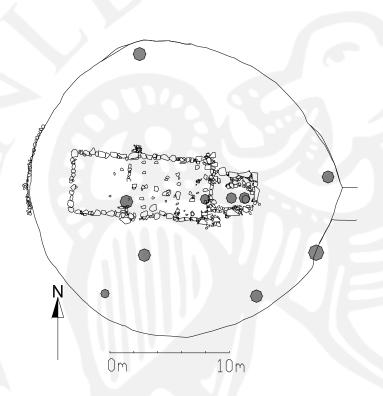
Location of glass (dark-grey) finds (finds from top soil 5001 not included) and ceramic finds (light –grey).



Baking plate 5142

STONE

Three whetstones and one possible whetstone were found. Whetstone 5028 was found in turf collapse [5076] from the southwest churchyard wall; whetstone 5134 was in widespread layer [5167] at the southeast side of the churchyard that consists of turf debris mixed with burnt turf (found along with sherd 5133, possible buckle no. 5130, charred wood 5133 and stone manuport 5126); whetstone 5131 was in bioturbated soil [5176] at the east side of the churchyard. Whetstones 5028, 5134 and 5131 were found at the south site of the churchyard but possible whetstone 5129 was found inside the church - in foundation trench [5177] between nave and the western extension. The whetstones are all small, broken and worn, all schistose and probably Norwegian Eidsborg import. Two baking plates are present; no. 5142 is a fragment with grooves on both sides. It is possibly a rim fragment but the side (on the largest piece) is too short to indicate the original shape. The thickness of the plate is 14 mm but the artefact is broken in 16 pieces. It was found inside the church, in a fill [5206] of foundation trench between chancel and nave. The other plate fragments are no. 5156 found in the churchyard, south of the church, ascribed to multi context [5227] but most likely associated with the layer above, turf debris [5159]. 5156 consists of three main fragments (and ten smaller fragments) all of schistose soapstone that strongly resembles the baking plates stones. No grooves are visible on those fragments. Baking plates found in Iceland are in all probability Norwegian import and are known there from ca. 1100-1400. ²³ It is not known exactly when baking plates first appear in Iceland but they have not been found in well dated contexts after 1500.²⁴ One third of all baking plates found in Iceland have been found at Gásir. The plates have been found in contexts with 13th - 15th century ceramics but all in deposits later than the H-1300 tephra. 25 Six stones under five finds units are 'manuports'unworked stones transported to the site. 5104 is fragmented micaseous stone from turf deposit [5117] in the chancel; 5110 is broken micaseous stone from surface deposit [5135] in the



Location of stone finds in the churchyard at Gásir.

chancel; 5118 is green jasper and one stone pebble that awaits analysis from fill [5149] in post hole in the southeast corner of chancel; 5126 is a blackish micaseous stone that awaits analysis from the above mentioned wide spread deposit [5167] at the southeast side of the churchyard and probably zeolite stone type 5157 from multi context [5227] in the north side of the churchyard. Those above mentioned stones wait further analysis but are probably both of

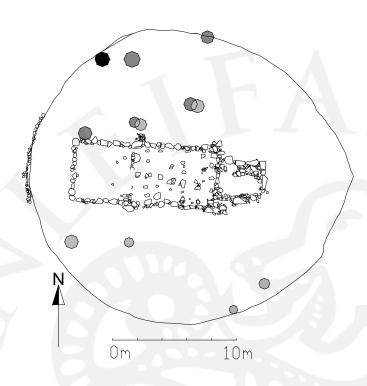
local and foreign origin, some highly micaseous and very fragmented. The only finds that were retrieved from inside the church are stones, those are: Fragmented micaseous stones 5104 and 5110, manuports (Icelandic jasper and unidentified stone, possibly agate) 5118; possible whetstone 5129 and baking plate fragments 5142. The possible whetstone and the baking plate fragments come from foundation trenches and may reflect building activity or general activity on the site as much as any activity within the church itself.

²³ Weber, Birthe: 'Tregjenstander', De arkeologiske utgravninger i Gamlebyen, Oslo, 159.

Gásauppgraftarins (Gásir excavation database)

²⁴ Guðrún Alda Gísladóttir og Mjöll Snæsdóttir. Steinar fyrir brauð, Forthcoming.

²⁵ Guðrún Alda Gísladóttir og Mjöll Snæsdóttir. Steinar fyrir brauð; Roberts, Howell M., *Gagnagrunnur*



Location of bone (black), textiles (mid-grey) and wood (light-grey) finds in the churchyard at Gásir.

ORGANICS

Bone



Worked bone 5109

One worked bone is in the assemblage, whalebone 5109 from top soil context [5001]. It is carved and has wear-marks. Function unknown.

Textile

Eight textile rags were found, finds no. 5023 and 5105 in turf collapse [5004] at the north side of the churchyard; 5031 in a mixed backfill [5070] of a pit; 5032 and 5036 in mixed fill [5096] of a pit at the north side of the churchyard; 5033 in turf collapse [5094] outside the northwest corner of the church; 5038 and 5147 from upper [5035] and lower [5220] fills with burning marks (charcoal) in a pit [5228] ca. 3,5 m north of the church. Apart from 5036 all of the textiles are woven pieces. 5031 and 5038 are definite vaðmál, the rest is in all probability also of same type but too decayed for accurate characterization. 5032 and 5033 could be a part of the same cloth although they were not found in the same deposit, and one find, 5033, has an edge. The materials vary in coarseness and shape and some are in shreds. Find no. 5036 is a thread of probably two bands turned together. All the textile remains from the site are of wool and most of it – now – is in small pieces except 5023 which is larger but in shreds. Finds 5105 and 5147 await analysis. Most of the textiles are found in pits, both fire pits and pits with mixed fills. Five of eight pieces are retrieved from pits with mixed fills, sometimes charcoal was also found within the pits, slag and animal bones. It is difficult to determine the original use of the textiles found at Gásir but the presence of the rags within the pits may suggest that they were cess pits/rubbish pits. Similar contents (e.g. textiles rags, animal bones, ceramics) are known from what are considered to be cess pits in York, England, 26 but samples taken from these deposits at Gásir await analysis.

Wood

In total 10 pieces of wood are registered in the finds database under 7 finds numbers. 7 of those pieces are charred wood: 5011 in fill [5035] in pit north of the church (where textiles 5038 and 5147 were also retrieved); 5114 in burnt turf accumulation [5143] by south churchyard wall; 5132 in the find rich and widespread above mentioned deposit [5167] in the southeast side of the churchyard and 5154 retrieved under final cleaning [5227]. The rest of the wood finds are unburned: 5030 found in a pit fill [5070] of turf, ash and sand ca. 1,5 m north of the church (along with textile 5031); 5143 in a fill [5205] in a foundation trench for the north wall of the nave; 5145 in fill [5207] of a buttress cut ca. 3,5 m south of the southwest corner of the church and 5154 found in [5227] ca. 3 m south of the church. All of the wood awaits analysis and will not be discussed further here. It is clear however that some of it is structural.

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²⁶ Hall, Richard. The Viking dig, 47.

Discussion

The finds from the church area in Gásir are retrieved from 47 contexts. [5001, 5227 and 5167] are the deposits richest in finds. Top soil [5001] had seven finds of which four are datable to the 19th century, along with bones/food waste and industrial waste/slag. The 19th century artefacts no doubt relate to Daniel Bruun's excavation in 1907 while other finds in the top soil may derive from earlier deposits disturbed by the digging. The table below lists finds from the top soil:

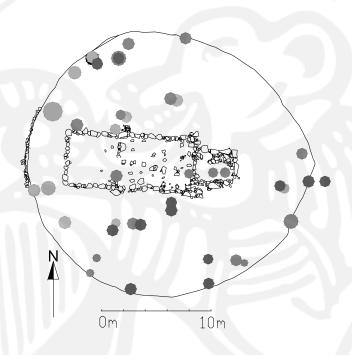
Fi	nd no	Context	Туре	Material	Count
	5002	5001	Object	Iron	1
	5004	5001	Nail	Iron	1
	5005	5001	Industrial waste	Slag	Х
	5006	5001	Nail	Iron	1
	5007	5001	Object	Iron	1
	5009	5001	Slag	Slag	х
	5010	5001	Food waste	Bone	х
	5103	5001	Bottle	Glass	1
	5106	5001	Food waste	Bone	Х
	5107	5001	Bottle	Glass	1
	5108	5001	Industrial waste	Slag	Х
	5109	5001	Worked bone	Bone	1

4 artefacts and 4 fragments of charred wood were ascribed to multi context [5227]. These were found during final cleaning mostly in places where no contexts had been recorded between the top soil and the underlying natural. The pottery sherd dates to the 13th-14th century and the baking plate can be dated to ca. 12th -15th century. The table below lists finds from [5227]:

Find				
no	Context	Туре	Material	Count
5151	5227	Food waste	Bone	Х
5152	5227	Pottery	Ceramic	1
5153	5227	Food waste	Bone	X
5154	5227	Charcoal	Wood	4
5155	5227	Lump	Iron	1
5156	5227	Baking plate	Stone	1
5157	5227	Manuport	Stone	1

Widespread deposit [5167] consisting of turf debris mixed with burnt turf at the southeastern side of the churchyard contained five finds. The ceramic sherd can be dated to 14th century. The table below lists finds from [5167].

Find no	Context	Туре	Material	Count
5126	5167	Manuport	Stone	1
5128	5167	Food waste	Bone	Х
5130	5167	Buckle?	Iron	1
5132	5167	Charred wood	Wood	1
5133	5167	Pottery	Ceramic	1
5134	5167	Whetstone	Stone	1



Location of all finds within the excavation area.

As can be seen from Fig. X most of the artefacts were found in the churchyard. Only four come from within the church (probable whetstone fragment, baking plate fragments and manuports) most of which relate to the construction rather than the use of the building. The finds in the church are remarkable mainly for their small number, supporting both the notion that the church had a wooden floor and that it was in quite limited use, possibly only for several times a year for little more than a century. The finds assemblage as a whole suggests interesting and multiple actions within the churchyard none of which can be directly connected to the religious function of the church. Interestingly there are not either any finds of a personal nature, accessories or other small objects people are likely to loose and which would be expected in a place of frequent gathering of large groups of people. On the other

hand the finds demonstrate industrial activity (slag) and food consumption (animal bones, baking plates and ceramics) while the textile rags in pits (cess pits or rubbish pits?), the whetstones, miscellaneous iron artefacts (mostly not identifiable due to poor preservation) and the diverse assemblage of manuport stones (probably both foreign and local in origin) attest to the congregation of people in the churchyard, with more varied aims and for longer periods than strictly necessary for attending church. The finds are chiefly retrieved from the churchyard, scattered all over except the northeastern quadrant where there were next to no deposits between the top soil and the platform/natural. There are however general patterns in the distribution of individual finds groups. The textiles are all from pits north of the church, industrial waste (slag) mostly concentrating under the northeastern side of the churchyard wall whereas the iron objects come primarily from the southern half of the churchyard.

While the majority of the finds come from contexts belonging to the post-1300 phase of the site, and some may be in contexts post-dating the church, it is not possible to argue that the industrial and other non-religious activity belongs to an abandonment phase of the churchyard. Several finds of slag, iron and other finds types come from contexts that clearly are contemporary with the church and some pre-date it.

Datable finds suggest two major periods at the church side in Gásir: the late-middle ages and modern times; the time when the church was in use and then later disturbance in connection with the 1907 excavation.

Literature

Guðrún Alda Gísladóttir og Mjöll Snæsdóttir, 'Steinar fyrir brauð.' forthcoming in Gavin Lucas & Orri Vésteinsson eds.: *Upp á yfirborðið. Nýjar rannsóknir í íslenskri fornleifafræði*, Reykjavík.

Hall, Richard, The Viking dig. The Excavations at York. The Bodley head, London 1986. Roberts, Howell M., *Gagnagrunnur Gásauppgraftarins* (*Gásir excavation database*).

Weber, Birthe, 'Tregjenstander.' De arkeologiske utgravninger i Gamlebyen, Oslo 7. Dagliglivets gjenstander 1, Erik Schia & Petter B. Molaug eds., Övre Ervik 1990, s. 11-180.

Faunal analysis - interim report

Summary

The excavation of the churchyard at Gásir produced faunal materials that have been analyzed by the author at the CUNY Northern Science & Education Center laboratories as part of the North Atlantic Biocultural Organization cooperative effort, with funding provided by the UK Leverhulme Trust.

Zooarchaeological data from the years 2004 and 2006 has been used for this report, producing a total NISP (Number of Identified Species) of **246** out of a TNF (Total Number of Fragments) of **334.** The species present include domestic cattle, sheep, and dog, as well as seal and whale elements; furthermore bird and fish remains as well as a relatively large amount of Mollusks (roughly 12%). Context [5019], a midden deposit under the churchyard wall, receives special focus throughout the report. It contains a mixed number of species, most notably a large amount of bird remains speciated to the Guillemot family. The bird remains found in this midden amount to 98% of the total site-assemblage.

The total number of NISP is very low and the only context that has a considerable number of faunal elements (169) that could be identified to species or family is the midden [5019] under the churchyard wall, dating to before 1300. There are a number of ways to interpret this deposit, but the limited quantity of the overall archaeofauna makes it difficult to draw any firm conclusions. The neonatal seals could come from local seal populations and the Guillemot should probably not be seen as particularly surprising either, since these alcids are home to the general Eyjafjörður region and have nesting grounds (on cliffs) on the island of Grímsey (Bárðarson 1986, Hilmarsson 2000), located not too far north of Eyjafjörður. One hypothesis could be that locals provisioned the early travellers with predominantly wild species (McGovern, personal communication, May 2007). At the moment, it may be most prudent to assume that this context presents an *early provisioning deposit*, containing a mix of wild and domestic species.

Table 1 displays the distribution of elements per species:

Table 1: Gásir Area B	
Taxon	no. of Elements
Domestic Mammals	no. or Elements
Cattle (Bos taurus dom L)	29
Dog (Canis familiaris. L)	3
Sheep (Ovis aries dom. L)	2
Caprine	32
total Caprine	34
total Domestic sp.	66
Wild Mammals	00
Seal species	14
total Seal species	14
Whale species	4
total Whale species	4
Birds	
Guillemot family (<i>Uria</i> sp.)	22
Gull species (Larus sp.)	2
Razorbill (Alca torda L)	1
Bird species indeterminate	86
total Bird species	111
Fish	
Cod (Gadus morhua L)	2
Haddock (Melanogr. aeglef. L)	1
Gadid sp	1
Trout (Salmo trutta L)	3
total Fish species identified	7
Fish species indeterminate	14
Total Fish species	21
Mollusca	00
Periwinkle (Littorina. lit. L)	1
Mussel (Mytilus edulis L)	4
Clam (Mya sp.)	13
Common whelk (Bucc. Und. L)	2
Moll. Species	10
total Moll. Species	30
total NISP	246
Large Terrestr. Mammal	11
Medium Terrestr. Mammal	37
Small Terrestr. Mammal	0
Unidentified Mammal Frag.	40
total TNF	334

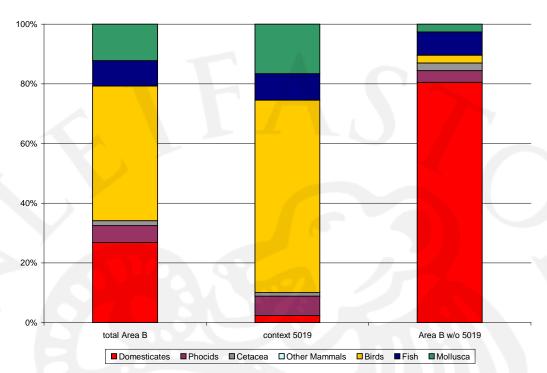


Figure 1: Area B - Major Taxes comparatives (% NISP)

Domestic Mammals

Figure 1 demonstrates that the Domesticates are prevalent everywhere, but for context 5019. The profile of taxa distribution in that one context is strikingly different from the overall site distribution. The context contained a far lower number of domesticates than the other site contexts.

Cattle bone is present, and the caprine/cattle ratio is about 1.17 caprine bone for every cattle bone. The total number of *Bos taurus* remains is 29, including three cattle horn cores, found in contexts 5078, 5207, 5227 (fig. 2). These horn cores are potential indicators for horn craft working. Four of the long-bone remains showed chop marks and at least half of all the elements exhibited signs of heavy erosion or exfoliation.



Figure 2: Cattle Horn Core, posterior view (context 5227)

There were 34 elements speciated to the *Caprine* (Goat/Sheep) category. None of the elements were articulated butchery units. However, 12 caprine bones (35%) did show butchery marks, which were found almost entirely on long-bone fragments, especially metapodials. Two elements were split for marrow consumption: a metapodial from [5004] and a phalanx (PH1) from [5167]. One split Caprine skull, presumably butchered for *svið*, was found in [5019].

There were no bi-perforated caprine metapodials, but two mono-perforated ones, both in [5200]. Post-Viking age Icelandic archaeofauna usually yields a certain number of bi-perforated caprine metapodials and their complete absence at Gásir could potentially indicate either that some of the elements were deposited earlier than 1200, that non-Icelanders handled the marrow-yielding bones, or that the sample size is too small (for a more thorough discussion, see Bigelow 1985, & Harrison in Roberts, 2005).

The two dog (*Canis familiaris*) elements recovered from [5019] could be from the same individual. One element is a distal tibia and the other either a maxillary or mandibular canine. A third dog element, also a canine fragment, was found in [5167]. The presence of one tooth does not necessarily imply death of an animal.

No cat (*Felis cattus*), horse (*Equus caballus*) or pig (*Sus scrofa*) remains were analyzed from the Gásir churchyard archaeofauna.

Wild Mammals

Seals. There were 14 seal remains in total, and 11 of them in midden [5019]. None of the elements could be speciated beyond family. The three neonate elements could be a seasonal indicator, since seal pups are mainly born in May-June (McGovern, personal communication May 2007). They were all from [5019] and may be from the same individual. Since the elements come from different parts of the body and were not found together, they will still be counted as three seal elements rather than only one seal individual (for MNI and NISP see Reitz & Wing 1999). One part of an innominate found in [5019] was scorched and had signs of chopping. No other butchery or burning evidence was found on the seal elements.

Whales. Three of the four whale elements found in Area B were potential bone working debris. It was not possible to speciate the individuals beyond family, since three of the elements were ribs and the fourth was too fragmented to be identified.

Birds. Table 2 breaks down the bird species that could be identified. Guillemot species were most abundant, and all of them found in midden [5019]. Guillemots nest on cliffs and Grímsey, north of Eyjafjörður could be the point of origin for birds travelling the waters of the fjord. Albeit a potential seasonal indicator, guillemot species in general are present along Iceland's coastline during the winter.

	Absolute	
Table 2 : Gásir, Area B: Identified Bird Species	#	%
Migratory Waterfowl		
Mallard Duck (Anas platyrhynchos, L)	0	0
Eider Duck (Somateria mollissima, L)	0	0
Sea birds		
Murre species (Uria species)	22	88
Atlantic puffin (Fratercula arctica, L)	0	0
Razorbill (<i>Alca torda, L</i>)	1	4
Gull species (Larus species)	2	8
Total	25	100

Gásir is located along a coastal inlet and the lack in Eider duck remains in the churchyard is noticeable. Quite a number of them were recovered from Area A (Harrison in Roberts, 2005).

Fish. Few fish remains were recovered from area B; a total of 21 elements, of which 4 could be identified as gadids (Cod and Haddock) and three as trout fragments. The remaining 14 fish fragments were beyond speciation. All of the identifiable fish elements were found in midden [5019], and the Haddock cleithrum may have a knife mark on it.

Mollusks. Mollusk remains made up roughly 12% of the total bone assemblage, and 17% of the [5019] assemblage. Clam fragments were the most abundant, and mussels the second highest in number. Midden [5019] contained 28 of the 30 elements of mollusks and two of them were speciated to *Buccinum undatum* or common whelk that lives in the waters of the North Atlantic. Figure 3 presents the various identified Mollusk species.

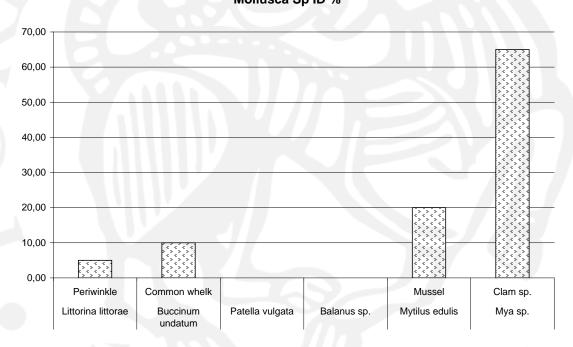


Figure 3: Gásir Area B Mollusca Sp ID %

Conclusions

While this is a preliminary report of an archaeofauna that is limited in number, certain trends can be detected by analyzing the data from Gásir churchyard:

- The midden deposit [5019] contains a faunal assemblage high in wild species and few domesticates.
- The rest of the site contexts reflect a better known pattern of medieval Icelandic subsistence strategy (McGovern 2001, 1999).

- The Guillemot, Seal, and Mollusk remains could be potential seasonal indicators that could further specify the time of year of occupation/consumption activities.
- Due to assemblage size, none of the results are conclusive.

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Literature

Information on the Common Whelk: http://www.weichtiere.at/Mollusks/Schnecken/meer/wellhorn.html

Bárðarson, H. R. 1986. Birds of Iceland. Reykjavík.

Bigelow G.F. 1985. 'Sandwick Unst and the Late Norse Shetlandic Economy.' in B. Smith (ed.) *Shetland Archaeolog.*, *New Work in Shetland in the 1970's*, Shetland Times Press, Lerwick, pp. 95-127.

Driesch, A von den. 1976. A Guide to the Measurement of Animal Bones from Archaeological Sites, (Peabody Museum Bulletin 1), Peabody Museum of Archaeology and Ethnology, Harvard University, Cambridge, Ma.

Enghoff, I. B. 2003. Hunting, fishing, and animal husbandry at the Farm Beneath the Sand, Western Greenland: an archaeozoological analysis of a Norse farm in the Western Settlement, (Meddelelser om Grønland Man & Society 28), Copenhagen

Grant, A. 1982. 'The use of tooth wear as a guide to the age of domestic ungulates.' in B. Wilson, C. Grigson, and S. Payne (eds.) *Ageing and Sexing Animal Bones from Archaeological Sites*, (BAR British Series 109), Oxford, pp 91-108.

Grayson, D. K. 1984. Quantitative Zooarchaeology. Academic press, Orlando.

Halstead, P. 1998. Mortality Models and Milking: problems of uniformitarianism, optimality, and equifinality reconsidered,.' *Anthropozoologica* 27, 3-20.

Hillson, S. 1986. *Teeth*, (Cambridge Manuals in Archaeology), Cambridge Univ. Press: Cambridge.

Hilmarsson, J. Ó. 2000. *Icelandic Bird Guide*, Bay Foreign Language Books.

Lyman, R.L. 1996. *Taphonomy*, Cambridge Univ. Press: Cambridge.

McGovern, T.H. 1985. 'The arctic frontier of Norse Greenland.' in: S. Green & S. Perlman (eds.) *The Archaeology of Frontiers and Boundaries*, New York: Academic Press, pp. 275-323.

McGovern T.H., S. Perdikaris & C. Tinsley, 2001. 'Economy of Landnam: the Evidence of Zooarchaeology.' in Andrew Wawn & Thorunn Sigurðardottir (eds.) Approaches to Vinland, (Sigurður Nordal Institute Studies 4), Reykjavik, pp. 154-166.

McGovern, T.H. & S. Perdikaris 2002. *Preliminary Report of Animal Bones from Hrísheimar N Iceland*. Report on file Fornleifastofnun Íslands and National Museum of Iceland.

McGovern, T.H., I. Mainland & T. Amorosi 1998, 'Hofstaðir 1996-1997. Preliminary Zooarchaeological Report.' *Archaeologia islandica* 1, 123-28.

North Atlantic Biocultural Organization Zooarchaeology Working Group 2003. *NABONE Zooarchaeological Recording Package* 8th edition, CUNY, NY.

Ogilvie, A. 1991. 'Climate Changes in Iceland AD 865 to 1598.' In Bigelow, G. (ed.) *The Norse of the North Atlantic*, (Acta Archaeologica 61), Copenhagen, pp. 233-51.

Perdikaris, S. 1999. 'From chiefly positioning to commercial fishery: Long-term economic change in Arctic Norway.' *World Archaeology* 30, 388-402.

Reitz E.J. & <u>E.</u>S. Wing 1999. *Zooarchaeology*. Cambridge University Press: Cambridge, UK/New York.

Roberts H.M. 2002. Archaeological Investigations at Gásir 2002. A preliminary report. Fornleifastofnun Íslands FS180-01072:Reykjavík.

Roberts H.M. 2005. *Gásir 2004, an Interim Report*, Fornleifastofnun Íslands FS194-01073:Reykjavík.

Roberts H.M. 2006. *Excavations at Gásir 2001-2006. A Preliminary Report*, Fornleifastofnun Íslands FS335-01079: Reykjavík.

Roberts H.M. & Pálsdóttir, L.B. 2006. *Excavations at Gásir 2005 – An Interim Report/Framvindskýrsla*. Fornleifastofnun Íslands FS312-01078: Reykjavík.

Samantekt

Eitt af markmiðum Gásarannsóknarinnar 2001-2006 var að grafa upp kirkju og kirkjugarð í brekkunni ofan við búðasvæðið. Grafið hafði verið í kirkjuna í tvígang áður, fyrst árið 1907 af Finni Jónssyni og Daniel Bruun og í seinna skiptið árið 1986 af Bjarna F. Einarssyni og Margréti Hermanns-Auðardóttur. Stærðarhlutföll kirkjunnar og kirkjugarðsins voru þekkt en fyrri rannsakendur greindi á um hvort kirkjan hefði verið með torfveggjum eða úr timbri eingöngu.

Á árunum 2004 og 2006 var allt svæðið innan kirkjugarðsveggja grafið upp auk skurðs í gegnum kirkjugarðsvegginn á einum stað og tveggja stækkanna út fyrir vegginn, austast og vestast. Alls var opnað um 550 m² svæði og var það grafið í botn að undanskildum þeim stöðum þar sem byggingaleifar voru skildar eftir. Á það einkum við um austasta hluta kirkjunnar og eru þar örugglega ókannaða leifar undir.

Meginniðurstöður voru þær að í þrígang hafa verið byggðar undirstöður undir kirkju á þessum stað. Þær hafa allar verið trékirkjur, þær tvær eldri áþekkar að stærð og lögun en sú yngsta sýnu lengri. Kirkjugarðsveggurinn í núverandi mynd hefur verið hlaðinn skömmu áður en yngstu kirkjuundirstöðurnar voru gerðar en auk þess að hlaða hringlaga torfvegg 830 m frá austri til vesturs og 28 m frá norðri til suðurs að utanmáli), fól það verk í sér að skófla u.þ.b. 150 m3 af mold undan brekkunni til norðausturs. Þannig var búinn til nærri flatur pallur í brekkunni fyrir kirkjugarðinn. Yngstu kirkjuundirstöðurnar eru eldri en 1300 en sennilega ekki miklu eldri og er líklegt að kirkjugarðurinn og yngstu kirkjuundirstöðurnar hafi verið byggð um eða eftir miðja 13. öld. Hversu lengi eldri kirkjurnar stóðu er ekki vitað en líklegt má telja að fyrsta kirkjan á þessum stað hafi verið byggð alllöngu fyrir 1200. Vitað er að kirkju braut á Gásum árið 1359 og hefur hún staðið á yngstu undirstöðunum en ekki er útilokað að hún hafi verið reist aftur á sama stað. Ummerki fundust um viðgerðir á undirstöðunum sem áttu sér stað eftir 1300 en einnig eru vísbendingar um að kirkjan hafi verið orðin hrörleg áður en hún hvarf af undirstöðunum og jafnvel að hlutar úr timburverki hennar hafi verið brenndir í suðurhluta kirkjugarðsins.

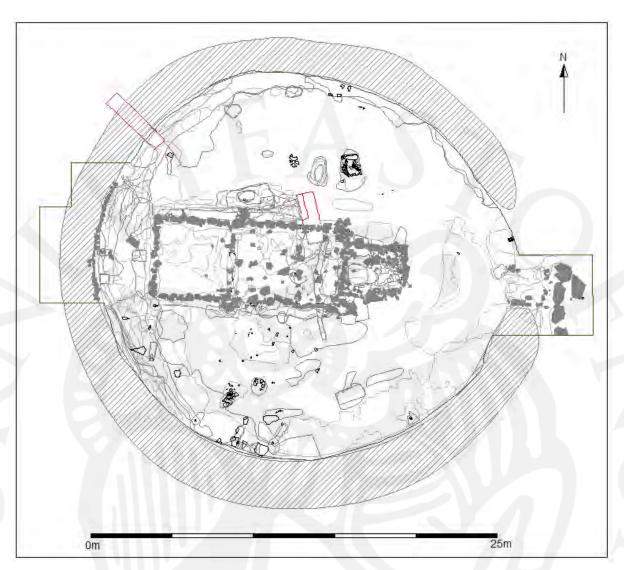
Yngstu kirkjuundirstöðurnar eru gerðar úr samfelldri röð steina í grunnum skurðum. Aurstokkar kirkjunnar hafa hvílt á þessum undirstöðum og þyngd þaksins hefur alfarið hvílt á



Vesturendi yngsta byggingarstigsins, horft í suður. Undirstaða undir vesturgafl miðstigsins sést til vinstri sem og gryfjurnar undir hornstafi elsta stigsins.

útveggjunum. Til að hindra að kirkjan gliðnaði undan þunganum hafa verið skástífur við horn kirkjuskipsins og fundust þrjár af fjórum undirstöðum undir þær. Skipið er 11,6 x 5,0 m en kórinn er undir minna formi, 3,8 x 3,1 m að stærð. Alls hefur þessi yngsta kirkja því verið 15,4 m að lengd. Timburgólf hefur verið í henni allri og virðist gólfið í kórnum hafa verið um feti hærra en í kirkjuskipinu, en undirstöður kórsins eru gerðar úr mun stærri steinum sem hafa staðið hærra upp úr jörðinni en steinarnir í undirstöðum skipsins. Dyr hafa verið á vesturenda norðurveggjar og hugsanlega einnig á suðurvegg kórsins.

Ennþá minna verður sagt um eldri kirkjurnar en fara má nokkuð nærri um stærðir þeirra og grundvallargerð. Miðkirkjan hefur eins og arftaki hennar haft steinaraðir í grunnum skurðum sem héldu uppi aurstokkunum, og slík ummerki hafa varðveist undir vesturvegg hennar, en hornstafir hennar hvíldu á stórum steinum sem voru rammlega niðurgrafnir. Sá umbúnaður bendir til að í þessari kirkju hafi þyngd þaksins hvílt fyrst og fremst á hornstöfunum, en ekki dreifst á veggina eins í þeirri yngstu. Skip miðkirkjunnar var 7,7x4,8 m en meiri vafi leikur á um kórinn. Ef tilgáta um að niðurgröftur undir kór yngstu kirkjunnar sé undan norðausturhorni miðkórsins þá hefur hann verið 2,4x2,2 m, og hefur þá



Kirkja og kirkjugarður á Gásum. Myndin sýnir öll uppgrafin lög.

heildarlengd miðkirkjunnar verið 10,1 m. Miðkirkjan hefur haft sýnu suðaustlægri stefnu en hinar tvær.

Af elstu kirkjunni var ekki annað varðveitt en tvær undirstöðugryfjur undan suðvestur og norðvestur hornstöfum kirkjuskipsins. Auk þess sást í niðurgröft sem gæti verið sambærileg gryfja undir suðaustur horni skipsins og stoðarhola er undir yngst kórnum sem gæti verið suðausturhorn elsta kórsins. Sé sú tilgáta rétt hefur elsta kirkjan verið samtals 9,7 m á lengd, skipið 6,5x4,5 m og kórinn 3,2x2,5 m. Elsta kirkjan hefur í grundvallaratriðum verið eins byggð og miðkirkjan. Eini munurinn er sá að í stað stórra steina undir hornstöfum hefur hún haft djúpar gryfjur með púkki.

Engir gripir fundust í kirkjunni sem tengja mætti hlutverki hennar og ekki hefur verið greftrað við þessa kirkju. Allir gripir og önnur ummerki sem fundust í kirkjugarðinum tengjast hversdagathöfnum eins og matargerð en einnig fundust vísbendingar um iðnað, bæði járnsmíði og meðhöndlun brennisteins. Öskuhaugur undir kirkjugarðsveggnum styður aðrar

vísbendingar um að veggurinn hafi verið byggður tiltölulega seint í sögu kirkjustæðisins. Í öskuhaugnum voru bein af nýfæddum sel sem benda til mannaferðar að vorlagi en einnig var mikið um svartfuglabein (langvíu/stuttnefju) sem benda til tengsla við Grímsey. Að öðru leyti voru bæði dýrabeina- og gripasöfnin í kirkjugarðinum áþekk því sem fannst í verslunarbúðunum. Annað af tveimur leirkersbrotum sem fannst í kirkjugarðinum er raunar úr sömu könnu og brot sem fannst í búðunum.

Athygli vekur að inngangur í kirkjugarðinn er á austurhlið hans, sem veit að búðasvæðinu, en ekki á vesturhlið eins og hefð er og vænta mætti ef kirkjan hefði verið sótt reglulega af bæjum í nágrenninu. Í innganginum hefur verið hlið og stórum björgum hefur verið komið fyrir neðan við hann til að gera tröppur. Þessi hönnun undirstrikar skýrt að kirkjan var ætluð þeim sem voru á Gásum og takmörkuð ummerki í kirkjugarðinum styðja að hún hafi verið lítið notuð, sennilega aðeins í nokkur skipti á hverju sumri.

Kirkja á Gásum hefur verið endurbyggð að minnsta kosti í tvígang og sennilega mun oftar því ekki hefur alltaf verið þörf á að endurhlaða undirstöður þó skipt væri um tréverkið. Hún hefur staðið í tvær aldir hið skemmsta, a.m.k. frá seinni hluta 12. aldar til seinni hluta 14. aldar, og sennilega mun lengur. Vel er hugsanlegt að stækkun kirkjunnar um meir en helming á seinni hluta 13. aldar endurspegli aukin umsvif á Gásum og aukinn mannfjölda sem þar vildi geta hlýtt á messu, en líklegt er að stærð kirkjunnar sé fyrst og fremst vitnisburður um metnað eigenda hennar, norskra Íslandskaupmanna frá Bergen.

Appendix 1. Unit register

No	NoType	Group	Description	
5001	Deposit	No	Top soil	
5002	Group	5002	Churchyard enclosure	
5003	Deposit	5002	Peatash and turf debris inside wall	
5004	Deposit	5018	Turf collapse under 5003 inside wall	
5005	Deposit	5018	Turf collapse outside wall	
5006	Deposit	5018	Turf wall	
5007	Deposit	5018	Turf collapse	
5008	Deposit	5002	Brown silt - aeolian - sitting in cut (?). Same as 5081	
5009	Deposit	5019	Ash and turf debris w. animal bone and shell	
5010	Deposit	5019	Turf debris w. concentrations of bone and shell	
5011	Deposit	5020	Upcast and turf debris, sitting in cut (?)	
5012	Deposit	5020	Lens of turf	
5013	Deposit	5020	Upcast - reddish brown	
5014	Deposit	5020	Upcast - dark brown - less mixed than 5013	
5015	Deposit	5020	Turf, laminated, strengur?	
5016	Deposit	5020	Upcast - dark brown - identical to 5014	
5017	Cut	5020	Cut for N-S trench under wall 5018	
5018	Group	5018	Turf wall (5004, 5005, 5006, 5007)	
5019	Group	5019	Midden deposits under 5018: 5009, 5010	
5020	Group	5020	Upcast and fills in trench 5017: 5011-16	
5021	Deposit	5018	Upcast	
5022	Deposit	5018	Upcast with turf debris	
5023	Deposit	5018	Turf	
5024	Deposit	5019	Ash and turf debris	
5025	Deposit	5020	Reddish brown silt, some mixing	
5026	Deposit	5020	Upcast and turf debris, identical to 5016	
5027	Deposit	5020	Homogenous upcast	
5028	Deposit	5020	Upcast, identical to 5026, 5016 and 5015	
5029	Deposit	5020	Turf debris	
5030	Cut	5020	Cut on W side of bank created by 5017	
5031	Deposit	0	Fill of DB's trench, south side	
5032	Cut	0	Cut for DB's trench, south side	
5033	Fill	0	Fill in cut 5034, sand	
5034	Cut	0	Bjarni and Margrét's 1986 trench	
5035	Fill	5041	Fill (gravel, sand, turf debris) and fire remains/charred remains	
5036	Fill	0	Fill of 5037	
5037	Cut	0	DB's cut for 'entrance' to S-side of chancel	
5038	Deposit	0	Patch of turf, south side of church	
5039	Deposit	0	Mixed turf collapse with some charcoal lensing, S-side of church	
5040	Cut	5041	Cut for firepit N-side of church	
5041	Group	5041	Firepit N-side of church	
5042	Cut		Bruun's cut on N-side of church	
5043	Fill	5058	Fill of linear cut 5044	
5044	Cut	5058	Liner cut, southside	

5045	Deposit	0	Grey gravelly layer, N-side, = 5047		
5046	Deposit	5018	Turf collapse, inside S-wall of enclosure		
5047	Deposit	0	Grey gravelly layer, N-side, = 5045		
5048	Deposit	5058	Patch of charcoal		
5049	Fill	0	Fill of 5050		
5050	Cut	0	Shallow circular pit - S-side		
5051	Deposit	0	Turf collapse - S-side		
5052	Deposit	0	Sand lens - S-side		
5053	Deposit	5058	Charcoal rich deposit (=5048)		
5054	Deposit	0	Turf collapse - N-side		
5055	Deposit	5058	Charcoal rich deposit - S-side		
5056	Deposit	0	Turf collapse - S-side		
5057	Deposit	0	Peatash dump		
5058	Group	5058	Charcoal patches, burnt wood on S-side		
5059	Deposit	0	Charcoal and peat ash rich dump layer		
5060	Deposit	5067	Bioturbated blob		
5061	Deposit	0	Turf collapse		
5062	Deposit	5018	Turf collapse		
5063	Deposit	0	Turf collapse		
5064	Deposit	0	Mixed peatash deposit		
5065	Deposit	5018	Turf collapse		
5066	Deposit	0	Widespread layer of mixed turf debris and ash		
5067	Group	5067	Great pit on N-side		
5068	Deposit	5067	Ash and turf fill of 5069		
5069	Cut	5067	Recut into earlier pit		
5070	Fill	5067	Fill of pit 5067, turf, ash + sand		
5071	Fill	0	Fill of DB's cut 5072 in chancel		
5072	Cut	0	DB's cuts in chancel		
5073	Deposit	0	Turf collapse		
5074	Deposit	0	Turf collapse		
5075	Deposit	0	Turf collapse		
5076	Deposit	0	Turf collapse		
5077	Deposit	0	Turf collapse		
5078	Deposit	0	Turf collapse		
5079	Deposit	0	Turf collapse		
5080	Deposit	0	Turf collapse		
5081	Deposit	0	Aeolian sand under 5079. Same as 5008		
5082	Deposit	0	Turf collapse in great pit		
5083	Fill	0	Fill of DB's trenches 5084		
5084	Cut	0	DB's trenches on N-side of chancel		
5085	Cut	0	DB's excavation in nave		
5086	Fill	0	Fill of DB's cut 5087		
5087	Cut	0	DB's sondage by west side of enclosure		
5088	Fill	5090	Fill of ash pit 5089		
5089	Cut	5090	Pit		
5090	Group	5090	Ash filled pit = hearth		
5091		0	Ash fined pit = nearth Aeolian layer		
JUJ1	Deposit	10	Acuitan layer		
5091	Deposit Deposit	0	Turf collapse		

5094	Deposit	0	Turf collapse by NW-corner		
5095	Cut	5067	Cut for large pit at N-side		
5096	Fill	5098	Mixed fill of pit 5097		
5097	Cut	5098	Cut of pit		
5098	Group	5098	Pit		
5099	Fill	0	Fill of pit 5100		
5100	Cut	0	Oval pit		
5101	Fill	0	Secondary fill of cut 5103		
5102	Fill	0	Primary fill of cut 5103		
5103	Cut	0	Oval pit, with signs of in situ burning		
5104	Group	0	Multi-context. 2004 end of excavation plan		
5105	Fill	5111	Final fill of pit 5108		
5106	Fill	5111	Secondary fill of pit 5108		
5107	Fill	5111	Earliest fill of pit 5108		
5108	Cut	5111	Cut for pit filled with 5105-07		
5109	Fill	0	Fill of 5110		
5110	Cut	0	Shallow circular pit/posthole		
5111	Group	5111	Pit containing 3 fills		
5112	Group	5112	Series of pits, S-side of churchyard		
5113	Fill	0	Primary fill of 5044		
5114	Cut	0	Shallow pit		
5115	Deposit	0	Upcast along N-wall		
5116	Deposit	0	Mix of aeolian accumulation and turf debris, N of chancel		
5117	Deposit	0	Turf deposit in chancel		
5118	Fill	0	Fill of DB's trench 5119		
5119	Cut	0	DB's trench N-side of chancel		
5120	Deposit	0	Turf debris adjacent to the S-wall		
5121	Deposit	0	Turf debris in N-side of chancel		
5122	Deposit	0	Upcast around a pile of stones, S-side of churchyard		
5123	Deposit	0	Hekla 1300 in situ		
5124	Deposit	0	Mix of aeolian and turf debris, S-side of nave		
5125	Deposit	0	Mix of turf debris and sandy silt		
5126	Deposit	0	Mix of peat ash and turf debris		
5127	Deposit	0	Turf debris in SE corner of nave. Same as 5117		
5128	Deposit	0	Mixed deposit around a pile of stones, S-side of churchyard		
5129	Deposit	0	Mixed deposit over foundation trench by S -wall		
5130	Deposit	0	Mixed deposit in N side of nave		
5131	Deposit	0	Upcast in chancel		
5132	Deposit	0	Burnt turf in churchyard entrance		
5133	Deposit	0	Mixed turf collapse and aeolian silt, SV of church		
5134	Deposit	0	Turf collapse from churchyard wall, same as 5136		
5135	Deposit	0	Surface in chancel		
5136	Deposit	0	Turf collapse from churchyard wall, same as 5134		
5137	Cut	0	Post hole in chancel		
5138	Fill	0	Fill of post hole 5139		
5139	Cut	0	Cut of post hole in chancel		
5140	Deposit	0	Pile of stones in a shallow depression, S-side of churchyard		
5141	Deposit	0	Aeolian accumulation in churchyard entrance		
5142	Deposit	0	Turf collapse from churchyard wall		

5143	Deposit	0	Burnt turf accumulation by churchyard wall, S-side		
5144	Deposit	0	Burnt turf in churchyard entrance		
5145	Deposit	0	Upcast - leveling layer in E side of chancel		
5146	Deposit	0	Mix of turf debris, peat ash and upcast accumulated against churchyard wall, W-side, similar to 5156, 5158		
5147	Cut	0	Cut in E side of chancel		
5148	Deposit	0	Wind blown in entrance (mixed)		
5149	Fill	0	Fill of cut 5150		
5150	Cut	0	Complex pit in SE corner of chancel		
5151	Deposit	0	Turf collapse from churchyard wall, S-side		
5152	Deposit	0	Mixed deposit, mainly upcast, partly filling ditch 5171 in E-end of nave		
5153	Deposit	0	Mixed aeolian accumulation in churchyard entrance		
5154	Fill	0	Fill of hole 5155		
5155	Cut	0	Hole in S-wall of nave		
5156	Deposit	0	Mix of turf debris, peat ash and upcast by SW corner of church, similar to 5146, 5158		
5157	Deposit	0	Mixed aeolian in churchyard entrance		
5158	Deposit	0	Mixed turf debris, peat ash and upcast along W-wall of churchyard, similar to 5146, 5156		
5159	Deposit	0	Mixed aeolian with turf debris and charcoal, S of church		
5160	Deposit	0	Turf debris in NE part of nave		
5161	Deposit	0	Burnt turf accumulation by churchyard wall, SE-side		
5162	Deposit	0	Homogenous silt in churchyard entrance		
5163	Deposit	0	Upcast in E-side of nave		
5164	Deposit	0	Burnt turf in churchyard entrance		
5165	Deposit	5193	Sandy silt in foundation trench btw. nave and narthex		
5166	Deposit	0	Aeolian accumulation in churchyard entrance		
5167	Deposit	0	Widespread layer of turf debris mixed with burnt turf in SE churchyard		
5168	Deposit	0	Burnt turf in churchyard entrance		
5169	Deposit	0	Charcoal and peatash fill of fire pit 5170		
5170	Cut	0	Fire pit by churchyard, W-side		
5171	Cut	0	Trench across E-end of nave		
5172	Deposit	0	Aeolian accumulation on churchyard wall by entrance		
5173	Deposit	0	Turf debris in possible entrance at NW-corner of church		
5174	Deposit	0	Aeolian accumulation in churchyard entrance		
5175	Deposit	0	Surface in nave, same as 5202		
5176	Deposit	0	Bioturbated soil inside churchyard entrance		
5177	Fill	5193	Fill in southern part of foundation trench btw. nave and narthex		
5178	Deposit	0	Ash fill of 5180 inside of churchyard entrance		
5179	Deposit	0	Turf debris/surface in narthex		
5180	Cut	0	Cut of pit		
5181	Fill	5193	Earlier fill in foundation trench btw. nave and narthex		
5182	Deposit	0	Ash dump in churchyard, E-side		
5183	Fill	0	Fill of posthole 5184		
5184	Cut	0	Cut of posthole in NW-nave		
5185	Fill	0	Fill of posthole 5186		
5186	Cut	0	Cut for posthole in NE- nave		
5187	Fill	0	Fill of cut 5188		
5188	Cut	0	Irregular cut in centre of nave		
5189	Deposit	0	Fill of foundation trench, NE corner of nave		

5190	Fill	0	Fill in foundation trench of W and S wall of narthex		
5191	Fill	0	Fill with wooden post - in post hole 5199		
5192	Fill	0	Fill of foundation trench of S wall of nave		
5193	Group	0	3 fills in foundation trench of older W- wall		
5194	Deposit	0	Mix of bioturbated soil and sand, E-side of churchyard		
5195	Fill	0	Fill of cut 5196		
5196	Cut	0	Cut truncating the foundation trench of the church at W-end		
5197	Deposit	0	Mixed deposit south of church		
5198	Cut	0	Original foundation trench - S-side of nave		
5199	Cut	0	Cut for posthole in churchyard entrance		
5200	Fill	0	Fill of pit 5201		
5201	Cut	0	Pit hearth, by churchyard wall, SE-side		
5202	Deposit	0	Surface in E-end of nave, same as 5175		
5203	Deposit	0	Patch of charcoal - N-side		
5204	Cut	0	Cut for charcoal dump 5203		
5205	Fill	0	Fill of foundation trench of N-wall of nave		
5206	Fill	0	Fill of foundation trench between chancel and nave		
5207	Fill	0	Fill in buttress cut 5208		
5208	Cut	0	Buttress cut - SW corner		
5209	Cut	0	Foundation trench/pit for SW corner of nave		
5210	Cut	0	Cut for foundation trench between chancel and nave		
5211	Deposit	0	Deposit in entrance of churchyard. Mixed upcast		
5212	Fill	0	Fill of original foundation pit, SW corner of nave		
5213	Stone	0	Stone foundation of W and S wall of narthex		
5214	Cut	0	Foundation trench for W and S wall of narthex		
5215	Stone	0	Stone foundation of older W - wall		
5216	Cut	0	Foundation trench for W-wall of nave		
5217	Cut	0	Cut for original SW-corner foundation pit		
5218	Group	0	East-west elevation		
5219	Fill	0	Fill of buttress cut 5223		
5220	Fill	5041	Lower fill in fire pit 5228		
5221	Fill	0	Fill of buttress cut 5222		
5222	Cut	0	Buttress cut - NW corner		
5223	Cut	0	Buttress cut - NE corner		
5224	Deposit	0	Upcast - foundation for E-part of churchyard		
5225	Cut	0	Foundation trench for N-wall of narthex		
5226	Deposit	0	Natural		
5227	Group	0	Multi context. 2006 end of excavation plan		
5228	Cut	5041	Cut for pit N of church		
5229	Fill	0	Fill 2 in cut 5231		
5230	Fill	0	Stone packing in base of 5231		
5231	Cut	0	Cut for original NW-corner foundation pit		
5232	Deposit	0	Turf debris truncated by 5225. Not excavated		

Appendix 2. Find register

Coun	C	Weight (g)	Material	Type	Context	Find no
			Bone	Worked bone	5019	5001
		9	Iron	Object	5001	5002
	7		Bone	Food waste	5019	5003
		14	Iron	Nail	5001	5004
		3	Slag	Industrial waste	5001	5005
		2,5	Iron	Nail	5001	5006
		7	Iron	Object	5001	5007
		6	Cu-alloy	Rove?	5019	5008
		203	Slag	Industrial waste	5001	5009
			Bone	Food waste	5001	5010
		6	Wood	Charred wood	5035	5011
			Bone	Food waste	5035	5012
7			Bone	Food waste	5043	5013
			Bone	Teeth	5039	5014
	/ /	5	Iron	Nail	5039	5015
			Bone	Food waste	5049	5016
		16	Iron	Object	5048	5017
		12	Slag	Industrial waste	5003	5018
		12	Bone	Tooth	5053	5019
			Bone	Food waste	5003	5020
d	Discarded	Discarded	Wool	Textile	5004	5021
	Discurded	Discarded	Bone	Food waste	5063	5022
٠,			Wool	Textile	5003	5023
			Bone	Food waste	5070	5024
			Bone	Food waste	5004	5025
			Bone	Food waste	5078	5026
		6	Slag	Industrial waste	5078	5027
<i>H</i> :		15	Stone	Whetstone	5076	5027
-4		13		Food waste		
W.			Bone Wood		5076	5029
				Object	5070	5030
			Wool	Textile	5070	5031
-			Wool	Textile	5096	5032
			Wool	Textile	5094	5033
		4	Slag	Industrial waste	5096	5034
		0	Glass?	Indeterminate	5096	5035
			Wool	Textile	5096	5036
		10	Iron	Nail	5113	5037
			Wool	Textile	5035	5038
		20	Slag	Industrial waste	5066	5039
			Bone	Food waste	0	5040
		112,5	Bone	Food waste	5019	5101
		26,2	Bone	Food waste	5019	5102
		584,3	Glass	Bottle	5001	5103
		4,8	Stone	Manuport	5117	5104
			Wool	Textile	5004	5105
		9,8	Bone	Food waste	5001	5106
		48,1	Glass	Bottle	5001	5107

5108	5001	Industrial waste	Slag	7,94	
5109	5001	Worked bone	Bone	15	1
5110	5135	Manuport	Stone	311,7	1
5111	5132	Food waste	Bone	7,5	
5112	5142	Industrial waste	Slag	14,1	
5113	5143	Nail	Iron	5,3	1
5114	5143	Worked wood	Wood	8,5	1
5115	5143	Food waste	Bone	18,9	
5116	5143	Food waste	Bone	9,1	7// "
5117	5143	Rivet/rove	Iron	6,7	1
5118	5149	Manuport	Stone	12,49	2
5119	5146	Food waste	Bone	29,8	
5120	5148	Food waste	Bone	0,7	
5121	5153	Food waste	Bone	49,7	
5122	5153	Indeterminate	Iron	2,9	1
5123	5162	Nail?	Iron	6,5	1
5124	5166	Food waste	Bone	2,6	
5125	5158	Food waste	Bone	19,5	
5126	5167	Manuport	Stone	26,1	1
5127	5172	Food waste	Bone	0,8	
5128	5167	Food waste	Bone	42,3	
5129	5177	Whetstone?	Stone	56,4	1
5130	5167	Buckle?	Iron	9	1
5131	5176	Whetstone	Stone	42,4	1
5132	5167	Charred wood	Wood	4,1	1
5133	5167	Jug	Ceramic	8,9	1
5134	5167	Whetstone	Stone	16,3	1
5135	5197	Nail?	Iron	5,7	1
5136	5192	Tooth	Bone	2,5	
5137	5194	Object	Iron	6,9	1
5138	5194	Industrial waste	Slag	97	
5139	5200	Food waste	Bone	65,3	/ AA
5140	5202	Food waste	Bone	6,1	$r = \omega r$
5142	5206	Baking plate	Stone	129,5	1
5143	5205	Buking place	Wood	125,5	1
5144	5207	Food waste	Bone	39,3	
5145	5207	1 ood waste	Wood	37,3	1
5146	5224	Food waste	Bone	140	
5147	5220	Textile	Textile	110	1
5148	5190	Food waste	Bone	6,4	
5149	5126	Food waste	Bone	10	
5150	5019	Industrial waste	Slag	49,7	
5151	5227	Food waste	Bone	53,5	
5152	5227	Jug	Ceramic	13,5	1
5153	5227	Food waste	Bone	5	1
5154	5227	Charcoal	Wood	2,1	4
5155	5227	Lump	Iron	17,5	1
5156	5227	Baking plate	Stone	19,3	1
5157	5227	Manuport	Stone	19,5	1
		Industrial waste			1
5158	5126	muusurar waste	Slag	0,7	

Appendix 3. Sample register

Sample No	Context No	Grid	Process Type	Notes
5001	5001		Identification	Charcoal
5003	5003	8170/7710	Floatation	Peat ash deposit
5002	5035		Floatation	Fill: charcoal, peatash, turf and sand
5007	5039	8175/7700	Floatation	Charcoal lens
5004	5043	8170/7695	Floatation	
5005	5043	8170/7695	Identification	Charcoal
5006	5043	8170/7695	Identification	Stone
5008	5048		Identification	Charcoal
5009	5053		Identification	Charcoal
5010	5068	8170/7705	Floatation	Charcoal and peat ash
5012	5070	8170/7705	Identification	1 small bag, possible sulphur
5013	5070	8170/7705	Identification	1 small bag, possible sulphur
5014	5070	8170/7705	Floatation	Ash in fill
5011	5088	8175/7715	Floatation	Charcoal and ash
5017	5093	8170/7700	Identification	Stone for ID
5015	5096	8170/7710	Identification	Fill full of textile
5016	5099		Floatation	Charcoal fill of 5100
5018	5101	8170/7690	Floatation	Charcoal rich fill (secondary fill) of 5103
5019	5102	1000	Floatation	Charcoal and peat ash (in situ burning)
5020	5105	8170/7690	Floatation	Primary fill in pit
5021	5106	8170/7690	Floatation	Secondary fill of pit 5108
5022	5107	8170/7690	Floatation	Primary fill in pit 5108
5023	5109	8170/7690	Floatation	Fill of 5110
5024	5113		Floatation	Charcoal fill of 5114
5025	5123	8160/7705	Identification	1/2 bag - Hekla 1300
5026	5126	8160/7705	Floatation	Mix of peat ash and turf debris
5027	5131		Identification	1 bag - yellow chrystaline substance
5028	5135		Identification	1 bag - fragment of mineral
5029	5146	8165/7695	Floatation	Mix of peat ash and turf debris
5046	5152		Dating	1 bag - charcoal for C14
5034	5167		Identification	1 bag - charcoal (from lens)
5030	5169	8160/7705	Floatation	Temporay hearth
5031	5178		Floatation	Wooden ash dump
5033	5181		Identification	1 bag - white stone
5043	5182		Floatation	Ash dump
5048	5190		Identification	1 bag - wood (very fragm.)
5051	5190	8165/7705	Floatation	Fill of foundation trench
5032	5191		Floatation	Cut with wooden post
5035	5192		Identification	1 bag - tephra - Hekla 1300?
5036	5192		Identification	1 bag - tephra - Hekla 1300?
5037	5192		Identification	1 bag - tephra - Hekla 1300?
5038	5192		Identification	1 bag - tephra - Hekla 1300?
5039	5192		Identification	1 bag - wood
5040	5192		Identification	1 bag - wood
5041	5192		Identification	1 bag - wood

5042	5192	Identification	1 bag - wood
5044	5192	Floatation	Fill of trench
5045	5192	Identification	1 bag - wood
5047	5200	Floatation	Charcoal fill
5049	5203	Identification	Charred wood - bulk
5052	5205	Floatation	Fill of foundation trench
5050	5209	Identification	1 bag - tephra from the fill in [5209]
5053	5220	Identification	1 bag - grayish white ash from firepit
5054	5220	Floatation	2 bags - charcoal + burnt turf from firepit
5055	5220	Identification	1 bag - colour stained soil/clay
5056	5220	Identification	1 bag - colour stained soil/clay
5057	5220	Identification	1 bag - possile organic material. Found with textile 5147
5058	5227	Identification	1 bag - charcoal