

Hofstaðir 2004

Interim Report



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Fornleifastofnun Íslands

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**The cover photograph is of Anies Hassan
excavating grave [1826], skeleton SK062.**

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Table of contents

1. Introduction.....	3
1.1 Aims & Methods.....	3
1.2 Contributors and Acknowledgements.....	3
2. Results.....	4
2.1 The structural remains.....	4
2.1.1 Group [1908].....	4
2.1.2 Group [1909].....	5
2.2 The cemetery.....	5
2.2.1 Group [1750].....	7
2.2.2 Group [1905].....	7
2.2.3 Group [1746].....	8
2.2.4 Group [1747].....	8
2.2.5 Group [1748].....	9
2.2.6 Group [1907].....	9
2.2.7 Group [1906].....	10
3. Discussion.....	12
3.1 The structural remains.....	12
3.2 The cemetery.....	13
4. Finds - Guðrún Alda Gísladóttir.....	14
4.1 Ceramics.....	14
4.2 Iron.....	15
5. Osteoarchaeology.....	16
5.1 Methodology.....	16
5.2 Results.....	17
5.2.1 Preservation.....	17
5.2.2 Sex.....	18
5.2.3 Age.....	19
5.2.4 Stature.....	20
References.....	24
APPENDIX 1 – Units.....	26

APPENDIX 2 – Finds.....	30
APPENDIX 3 – Samples	31
APPENDIX 4 – Osteoarchaeological analysis	32
APPENDIX 5 – Grave summary	34

1. Introduction

1.1 Aims & Methods

The 2004 season at Hofstaðir was the tenth consecutive season of archaeological excavation at the site and the fifth season of excavation of the church and cemetery. This season the entire cemetery excavation area from 2003 was reopened and no extensions were made.



Figure 1. Overview of the site, facing north-east

The methodology of excavation this year followed that of previous seasons, i.e. single context excavation and recording. All units were given unique context numbers and the usual *pro forma* sheets employed. As after every season, the site has been protected by the laying down of terramatt and re-turfing.

1.2 Contributors and Acknowledgements

As always, the work at Hofstaðir would not be possible without the involvement of a large number of people, both professionals and students, who provide their expertise and labour as part of an international team. Continuing its dual role as research excavation and field school, the excavations were greatly aided by the co-operation of Colleen Batey, University of Glasgow, who organised the intake of European students and Tom McGovern at Hunter College who organised American student involvement through City University of New York (CUNY). A total of six students worked on the excavations at Hofstaðir for all or part of the season, Judith Bischoff (USA), Deidre Collins (Ireland), Martin Jurgensen (Denmark), Florian Preiss (Germany), Konrad Rydz (USA) and Óskar Sveinbjörnsson (Iceland). The excavation was supervised by Hildur Gestsdóttir (FSÍ) with the assistance of Anies Hassan (FSÍ), Rúnar Leifsson (FSÍ) and Mjöll Snæsdóttir (FSÍ). Ágústa Edwald (FSÍ), Sólveig Guðmudsdóttir Beck (FSÍ) and Monica Castro

(volunteer) assisted with the post-excavation. The project was funded by a grants from the Icelandic Research Council (Rannís - Öndvegisstyrkur) and Fornleifasjóður. As before, the landowners of Hofstaðir, Ásmundur Jónsson and Guðmundur Jónsson, were generous in their support of the project.

2. Results

The aims of the 2004 season were twofold. Firstly to investigate the area in the centre of the cemetery where the structures were excavated to ensure that all archaeological features in the area had been investigated and secondly to continue the excavation of the burials, aiming to complete the excavation of all the graves in the northern, eastern and western parts of the excavation area.

2.1 The structural remains

2.1.1 Group [1908]

In previous seasons, three postholes pre-dating structure Z2 had been excavated, [1695], [1667] and [1743] marking the north-western, south-western and south-eastern corner of a structure. A fourth posthole, [1807], 0.55m in diameter, 0.25m deep was excavated during the 2004 season. The posthole was filled with a fine, medium brown silt [1806] with and at its base were three flat stones with a thin layer of charcoal and ash. This was sealed by a small layer of mixed upcast, [1802] and [1799] a small layer of turf debris. These were in turn sealed by a turf debris levelling layer placed down prior to the construction of structure Z2.

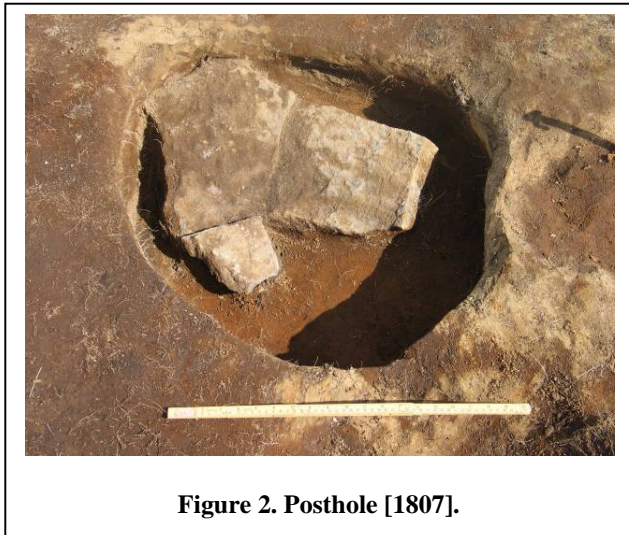


Figure 2. Posthole [1807].

The four postholes, [1807], [1695], [1667] and [1743] mark a structure, Z3, predating structure Z2. This structure was orientated east-west, and measured 4.0x4.3m. No other structural features were associated with these postholes. It appears that the entire area was cleared and levelled prior to the construction of structure Z2, so all remains of the earlier structure, except for the base of the corner post holes were removed (see figure 19).

2.1.2 Group [1909]

Several cut features, mostly circular or oval in plan, ranging in diameter from 0.20 to 0.67m, and in depth from 0.06 to 0.48m were found in the area around and under structure Z3 – [1833], [1845], [1853], [1855], [1857], [1869], [1873], [1885], [1887], [1896] & [1898]. All of these were filled with upcast, silt mixed with prehistoric H4 tephra, respectively; [1832], [1844], [1852], [1854], [1856], [1868], [1872], [1884], [1886], [1895] & [1897]. In the area under structure Z3 was also a large irregular feature, [1841], 1.30x1.50m, with a maximum depth of 0.20m and filled with [1817], mixed turf debris. None of these features could be seen to have a distinct structural function, it is clear, however, that there was some activity in the area prior to the construction of structure Z3 (see figure 19).

2.2 The cemetery

Most of the work during the 2004 season at Hofstaðir involved the excavation of the cemetery. The majority of the graves in the northern, eastern and western part of the excavation area have been excavated, with most of the unexcavated burials in the area lying to the south of the chapels. The limit of the part of the cemetery



Figure 3. Skeleton SK057.

containing graves appears to have been attained, although the boundary wall identified with the geophysical survey carried out in 1999 (Horsley, 1999) has only been exposed in trench Zii.

All the graves in the cemetery were grouped into mainly “geographical” groups. To date there are eight grave groups. Group [1750] consists of four graves within the porch of the later chapel (structure Z2); group [1749] consists of two burials directly north of the porch of the later chapel (Z2), which post-date the use of the chapel. Group [1905] includes four excavated graves to the north of the chapel structures. Four rows of graves running north-south lie east of the chapel, with the row closest to the chapel, being the densest. All the burials in each row have been grouped together, as they are probably mainly contemporary with each other as in most instances they respect each other with little intercutting. The line of graves closest to the chapel is group [1746] and includes fifteen excavated grave cuts. East of that is group [1747] which includes fourteen excavated grave cuts. East of group [1747] is group [1748] including nine excavated grave cuts and east of that group [1907] and five grave cuts. All the burials to the south of the chapel structures were grouped together, [1906]. The density of burials here is much greater than to the north of the structures, with a great deal of intercutting. The graves in this area do not have the organisation of the burials to the east of the chapel structures. To date twenty-four graves in this group have been excavated (see figure 20).

All the grave cuts have vertical to slightly undercut edges, with a flat base and are cut through the natural. In most instances they have been cut down to the bedrock, in particular the adult graves which tend to be slightly deeper than the juvenile graves. The grave fills are all mixed upcast, silt with disturbed prehistoric tephra and occasional turf blocks, probably remnants of the grass surface the graves were cut through. A summary of the burials can be found in Appendix 5.

2.2.1 Group [1750]

Group [1750] includes four burials located within the porch of the later chapel (structure Z2), although they clearly predate its construction as they were all truncated by the postholes marking the entrance to the porch. Two of these ([1716] & [1703]) were excavated in previous seasons. Grave cut [1754], fill [1753] containing skeleton SK031 lay immediately north of grave [1716] and was truncated by it. Grave [1850], fill [1849]

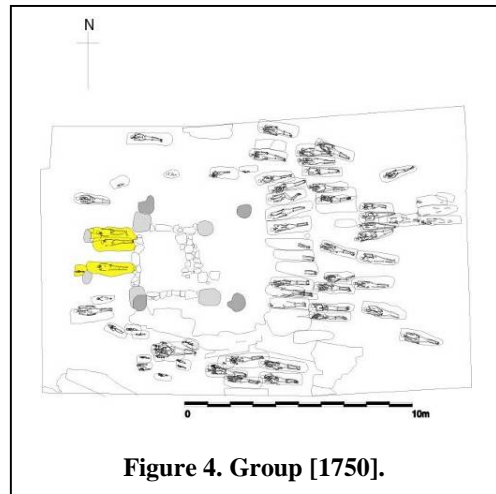


Figure 4. Group [1750].

containing juvenile skeleton SK073 lay immediately west of grave [1703] and although they had a physical relationship it was not clear which grave truncated the other. All the skeletons within the porch, in particular the adult skeletons are quite poorly preserved.

2.2.2 Group [1905]

Group [1905] consists of four graves to the north of the chapel structures, excavated during the 2004 season. The graves in this part of the cemetery were very sparse and had no physical relationship to each other. Furthest west of these was grave cut [1767], fill [1767] containing skeleton SK039. A metre south of this was grave cut [1778], fill [1777] containing juvenile skeleton SK042. Grave [1780], fill [1779] containing juvenile skeleton SK044 lay 1.4m east of grave [1778], and grave [1786], fill [1785] containing juvenile skeleton SK049 immediately east of that.

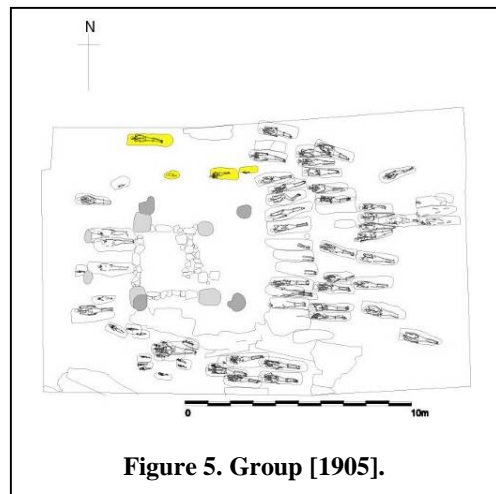


Figure 5. Group [1905].

2.2.3 Group [1746]

Group [1746] is the line of graves directly east of the chapel structures, and clearly respects the earlier structure, Z3. Fifteen graves in this group have been excavated. Ten of these were excavated in previous seasons ([1727], [1734], [1627], [1532], [1633], [1645], [1661], [1699], [1719] & [1738]), and five during the 2004 season. One of these was the northernmost grave in group [1746], cut [1761], with fill [1762] containing skeleton SK042.

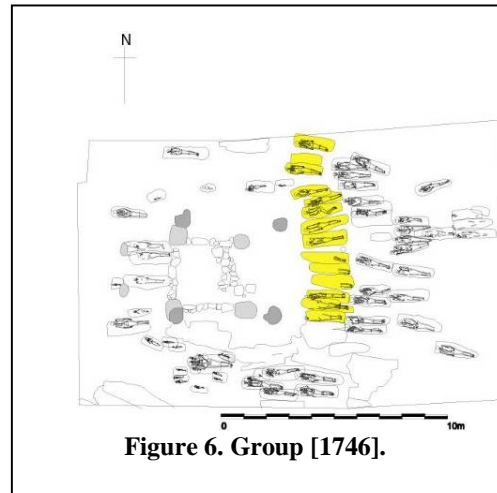


Figure 6. Group [1746].

Southernmost in grave group [1746] were four intercutting graves. The earliest of these were cut [1809], fill [1808] containing partial skeleton SK058. South of this was grave cut [1819], fill [1818] with partial skeleton SK068. Both these graves had been truncated by grave cut [1770], fill [1769] which contained partial skeleton SK043 as well as a disarticulated juvenile skeleton, SK037. This had in turn been truncated by grave cut [1760], fill [1759] which contained skeleton SK048. At least two unexcavated graves belong to group [1746]. All the excavated graves in this group contain adult skeletons.

2.2.4 Group [1747]

Group [1747] consists of the line of graves immediately east of group [1746]. This includes fifteen excavated grave cuts, thirteen of which ([1647], [1638], [1640], [1649], [1657], [1653], [1569], [1567], [1576], [1602], [1628], [1650] & [1607]) were excavated in previous seasons at Hofstaðir. Two intercutting graves belonging to this group were excavated during the 2004 season. These are on the northern end of the line of graves. Grave cut [1796], fill

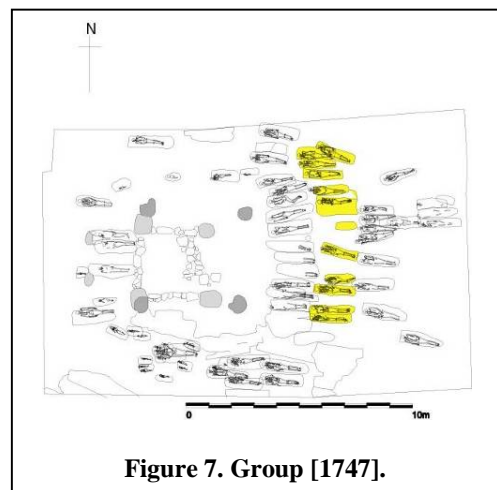


Figure 7. Group [1747].

[1795] containing skeleton SK056 was truncated by grave cut [1792], fill [1791] containing skeleton SK052. At least four unexcavated graves belong to this group.

2.2.5 Group [1748]

Group [1748] consists of the line of graves immediately to the east of group [1747] and includes nine excavated grave cuts. Five of these ([1736], [1715], [1723], [1701] & [1713]) were excavated in previous seasons at Hofstaðir. The northernmost of the graves in group [1748] excavated during the 2004 season, grave cut [1798], fill [1797], containing skeleton SK054, did not have a stratigraphic relationship with any other grave. South of this

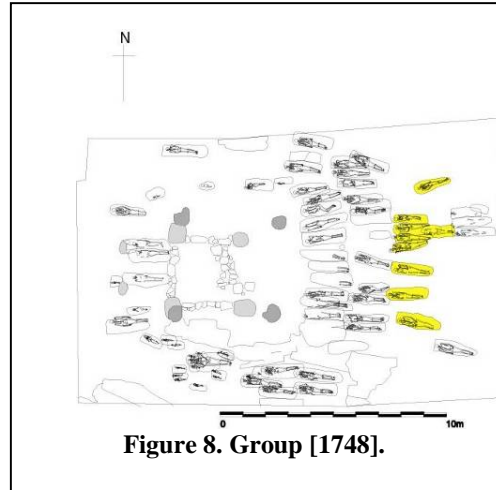


Figure 8. Group [1748].

is grave cut [1801], fill [1800], containing juvenile skeleton SK055. This grave was truncated by grave [1715], excavated in previous seasons. Grave cut [1782], fill [1781] containing skeleton SK045 was similarly truncated by grave [1723]. The southernmost grave in group [1748], [1756], fill [1755] containing skeleton SK033 did not have a stratigraphic relationship with any other grave. There are no unexcavated graves in group [1748] within the excavation area.

2.2.6 Group [1907]

East of group [1748] was a line of graves running north-south, group [1907]. This includes five graves all excavated during the 2004 season. Four of these create a cluster on the northern end of the group. Southernmost of these is grave cut [1883], fill [1882]. No skeleton was recovered, but the size of the cut indicates that it was probably a juvenile burial. The preservation of skeletons in this area is

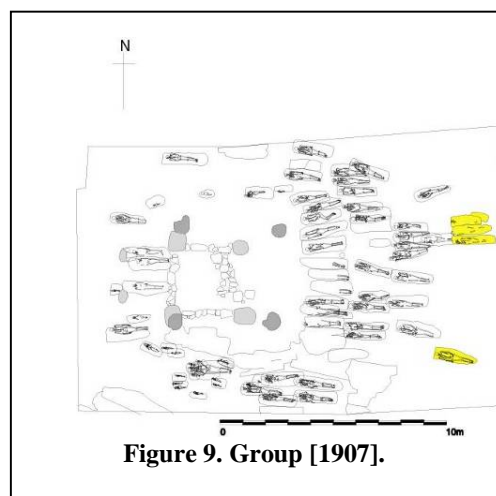


Figure 9. Group [1907].

quite poor, and the fact that this grave has been truncated may explain why no organic

material was preserved. Grave [1883] was truncated by grave [1865], fill [1864] containing skeleton SK072. The southernmost grave in this cluster, grave [1824], fill [1823] containing skeleton SK061 had been truncated by grave [1736], excavated in 2003, which was in turn truncated by grave cut [1839], fill [1838] containing skeleton SK068. One grave in group [1907] lay much further north, and had no physical relationship with other graves; grave cut [1790], fill [1789], containing skeleton SK051.

2.2.7 Group [1906]

The 2004 season at Hofstaðir saw the start of excavations in the southern part of the excavation area. This area lacks the organisation of the area east of the chapel structures, with a lot more intercutting of graves. The graves in this part of the cemetery have been grouped together [1906]. Immediately south of the porch of the later chapel, structure Z2 were two graves with no physical relationship to other graves. Grave cut

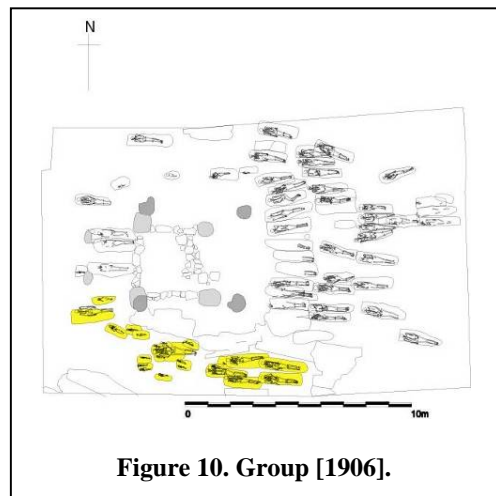


Figure 10. Group [1906].

Grave cut [1766], fill [1765] containing juvenile skeleton SK034 lay 0.2m north of grave [1774], fill [1773] containing skeleton SK038. Immediately southwest of grave [1774] were three intercutting graves. The earlier of these were grave cuts [1788], fill [1787] containing juvenile skeleton SK050 and [1822], fills [1820] & [1821] containing juvenile skeleton SK064. Both of these graves were truncated by grave [1813], fill [1812] containing juvenile skeleton SK059.

Approximately 0.35m southeast of grave cut [1788] there was a cluster of twelve grave cuts. One of these, [1764], fill [1763] containing juvenile skeleton SK032 lay furthest to the south and had no physical relationship with other graves. Two intercutting graves lay furthest west, the earlier was grave cut [1784], fill [1783] containing juvenile skeleton SK046. This was truncated by grave cut [1776], fill [1775] containing a double juvenile inhumation, skeletons SK040 and SK041. The north-eastern part of this cluster contained

nine intercutting graves. The earliest of these, in the north-eastern part, was grave cut [1877], fill [1876] containing partial juvenile skeleton SK074. This had been truncated by grave cut [1867], fill [1866] containing partial juvenile skeleton SK070, which in turn had been truncated by grave cut [1859], fill [1858] containing partial juvenile skeleton



Figure 11. Double inhumation, skeletons SK040 and SK041.

SK069. On the southern edge of the cluster was grave cut [1847], fill [1848] which had been so extensively truncated by grave cut [1830] that no skeletal remains were preserved. Its size indicates however that it was a juvenile burial. This had been truncated on its south-eastern corner by grave cut [1772], fill [1771] containing a double juvenile inhumation, skeletons SK035 and SK036; and on its western end by grave cut [1816], fill [1815] containing juvenile skeleton SK060. Grave [1816] also truncated the southern edge grave cut [1892], fill [1891] containing a double juvenile inhumation, skeleton SK077 and SK078. The north-eastern corner of this grave was in turn truncated by grave cut [1828], fill [1827] containing partial juvenile skeleton SK063. All the graves in this cluster except for grave [1772] were truncated by grave cut [1830], fill [1829] containing skeleton SK065.

Approximately 0.90m southeast of the eastern end of grave [1830] is a cluster of seven intercutting graves. The earliest of these is grave cut [1881], fill [1880] containing skeleton SK076. The western end of the northern side of this grave was truncated by grave cut [1826], fill [1925] containing partial juvenile skeleton SK063. The north-eastern corner of grave [1826] had been truncated by grave cut [1900], fill [1899] containing partial juvenile skeleton SK071, the eastern half of which had in turn been truncated by grave cut [1811], fill [1810] containing skeleton SK057 as well as a disarticulated juvenile skeleton, SK79. The eastern end of grave [1810] was truncated by

grave [1794], fill [1793] containing skeleton SK053. The eastern end of the southern edge of grave [1881], the earliest grave in the group had been truncated by grave [1879], fill [1878] containing skeleton SK075 and the north-eastern corner of that had in turn been truncated by grave cut [1836], fill [1835] containing juvenile skeleton SK067. Several unexcavated graves are within the area marked by group [1906].

Of the forty-eight skeletons excavated in 2004, eighteen (39%) had been buried in a coffin, of which nothing remained except for a stain from the wood in the soil, indicating a simple wooden box with a lid, and in some instances iron nails. In most cases where nails were found there were four, one in each corner, with the exception of the coffin associated



Figure 12. Grave [1759] showing coffin

with skeleton SK066, from which several boat-rivets were recovered, indicating that it was constructed from re-used wood (see discussion on finds). Of the forty-seven undisturbed burials, all had been buried in a supine position with the arms resting on the pelvis in all instances except one, where they were crossed on the torso (SK057). The head was facing forwards or slightly tilted to one side. All had fine black ash deposited on the thoracic area. All tests of this ash in the past have proved inconclusive. One infant skeleton, (SK037), was disarticulated and included within fill [1769].

3. Discussion

3.1 The structural remains

The central part of the cemetery has seen three, possibly four phases of structures. The earliest of these is marked by the cuts, possible postholes, which were sealed by structure Z3, the earliest clear chapel structure on the site, of which nothing remains except for four corner postholes marking a structure 4x4.3m in size, orientated east-west. This was

at some stage demolished and the ground levelled for the construction of the best preserved structure on the site, the later chapel, structure Z2, which stood slightly further west than structure Z3. This was marked by a nave measuring 3x3m and a porched entrance on the western end making the entire structure c. 6m long (for further detail see Hildur Gestsdóttir, 2003). Both structures, Z2 and Z3 appear to have been timber built. The youngest structure on the site, Z1 was a turf structure, built post 1477. It appears to have been orientated east-west, and of a similar dimension to structure Z2. It was however severely damaged by levelling of the site in the 1960's and so nothing remained except for part of the southern wall, and a fragment of the north-eastern wall (for further detail see Hildur Gestsdóttir, 2002) . It is therefore difficult to state whether this was a chapel or a later structure associated with the farm mound which lies to the west of the cemetery site. It is clear that most of the burials on the site pre-date this structure, with the possible exception of the two burials in group [1749].

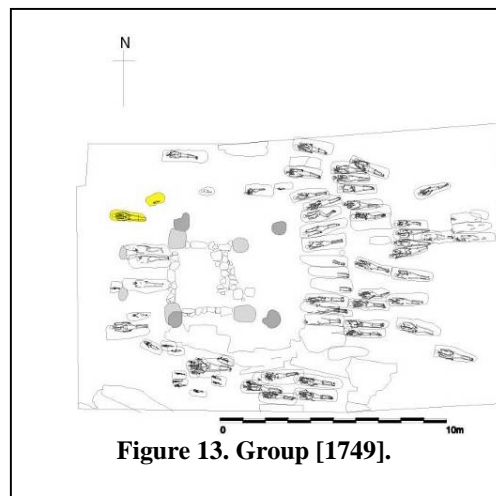


Figure 13. Group [1749].

3.2 The cemetery

At this stage it is difficult to create a clear chronology of the burials in the cemetery, partially due to levelling in the 1960's removing much of the overburden. However, dating of the use of the cemetery from previous seasons indicates that it was in use from the 10th to the 15th century (Hildur Gestsdóttir, 2004). Although there is some intercutting of graves within the cemetery, in particular in the southern part where all the burials predate the V-1300 tephra, there are sections of it which show a great deal of organisation, especially the eastern part, which indicates that the location of earlier burials was in most instances known when new graves were cut. It is clear that the westernmost line of graves in the eastern part of the cemetery, group [1746], respect the earlier chapel, structure Z3, and it is assumed that the further removed east from that line the younger the burials get. At this stage it does however appear that a majority of the

graves excavated so far belong to the earlier part of the period of use of the cemetery (pre-1300). Selective radiocarbon dating of skeletal remains is planned to aid in building a clearer chronology of the cemetery.

There are probably around twenty unexcavated graves that have been exposed within the excavation area, mostly in the southern part of the cemetery.

4. Finds - Guðrún Alda Gísladóttir

A total 33 finds numbers are registered from field season 2004 (see finds register). All finds were cleaned, dried, repacked and registered in the excavation database.

Conservation work is conducted by the National Museum.

Bones are registered under 20 find numbers. Of those 19 are animal bones that are being analysed by specialist in CUNY, USA, and one has been identified as human bone.

Those will not be discussed further here. Other finds are registered under 13 finds numbers and include ceramics, iron and wood, total count of 114 pieces. Two finds are from top soil [001] but others have been recovered from ten contexts, including nine which are grave fills.

4.1 Ceramics

Two ceramics fragments were found during the 2004 field season. Find (*HST04-19*) is a green glazed vessel fragment, of the same type as two fragments that were found in the year 2001 (*HST01-68* and *-178*). Those are of medieval pottery type dated to the 13th or 14th century. In preliminary report from the excavation 2001 says:

Despite the fact of them being loose finds the sherds can with confidence be dated to the 13th or 14th century. The redware body sherds (*HST01-068* and *178*) are fine, sandy and red fabric and external green to yellowish lead glaze. The inside is unglazed. Both clearly belong to the same vessel which can be identified as a jug. Due to the fragmentation it can only be assumed that the sherds are part of a so-called high decorated jug common in northern Europe during the 13th and 14th century. According to fabric, glaze and form the vessel's origins most likely in the area of Netherlands, Denmark and northern Germany. The fabric does resemble the so-called

Aardenburg Ware produced in coastal Flanders, but the often appearing slip beneath the glaze is missing at the fragments found at Hofstaðir. Not much 13th and 14th century pottery has been found in Iceland and most of those excavated fragments are of proto-stoneware or stoneware rather than earthenware. A body sherd of similar fabric was found in Reykjavík identified as Dutch/Belgian earthenware dating to 13th and 14th century. Since the sherds were found in Area Z it can be suggested that the jug was used in the church. If so, it would be first recovered example of earthenware vessel used for church services like the storage of holy water. All other known medieval and post-medieval pottery sherds found in Iceland church sites are fragments of stoneware jugs. (Mehler, 2002; 49).

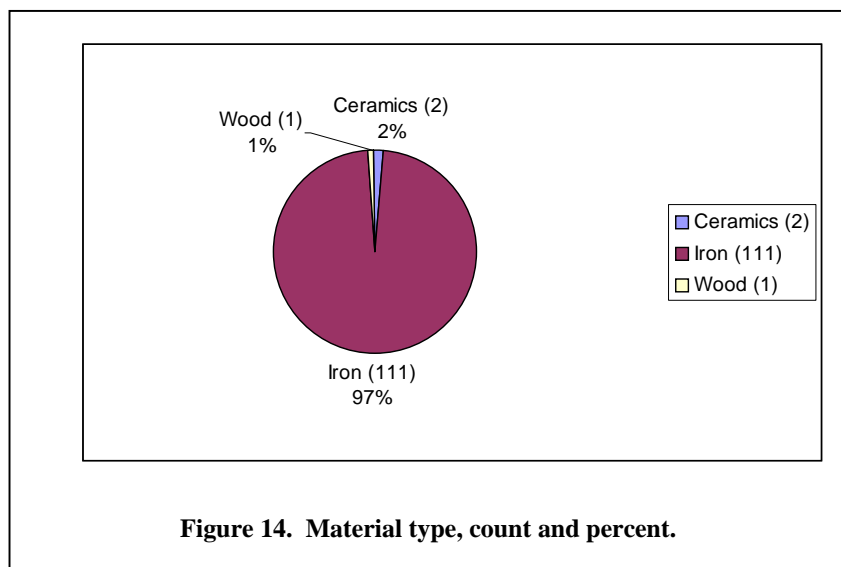
The fragment (*HST04-19*) was found in context [1814]. The other fragment (*HST04-004*) is a small 19th century vessel fragment from top soil [001], with a repair hole.

4.2 Iron

In total 111 iron objects are registered under 10 finds numbers. Many of the objects are very corroded and misshapen.

The majority of the finds are coffin nails from grave fills, 102 in total. They are registered under six finds numbers (*HST04-6, -7, -11, -20, -32, -33*). Fragile wood remains are on many of the nails. From grave fill [1818] are 34 rivets (boat nails) and 58 nails (92 in total), finds numbers. This amount of nails and rivets suggest reuse of ships planks for coffin boards.

Other finds are small corroded spherical iron lumps (*HST04-17 and -18*) both from grave fills. Find (*HST04-3*) is from the topsoil, context [001]. The object has a distinct shape; flat, gently bent, iron strap with hole at one end. Possibly it is a part of a lamp (the handle/suspension strap) as were common in 19th century. The object has tin? plate over the iron, now very corroded. Six fragments of metalworking slag, find number (*HST04-21*) was found in grave fill [1829].



Most of the finds are coffin nails, including boat nails from one individual grave [1818] - those suggest reuse of wood. The ceramic fragment (*HST04-19*) is dated to 13th or 14th century, but finds from the topsoil can with some certainty be dated to the 19th century.

5. Osteoarchaeology

A total of forty-nine individual skeletons were excavated during the 2004 season at Hofstaðir. Forty-seven of these were articulated inhumations. The other two (SK037 & SK079) were disarticulated juvenile skeletons recovered from within the fill of adult burials.

For the purpose of this preliminary report, a very basic analysis was carried out on the skeletal remains, their preservation graded, sex and age diagnosed, and measurements taken to estimate the living stature. No record was made of palaeopathological or other changes at this stage. A full analysis of the material will be carried out at a later date.

5.1 Methodology

The preservation of each skeleton was graded, from 1-5 (see table 1), depending not only on the amount of material present, but also its viability for full analysis.

Grade	Preservation
1	>90%
2	75-90%
3	50-75%
4	30-50%
5	<30%

Table 1. Preservation

The sexing of the skeleton was based, where preservation allowed, on sexually diagnostic characteristics of the cranium and pelvis (see for example Buikstra & Ubelaker, 1994; Schwartz, 1995 and Walrath *et al.*, 2004), measurements of the width of several articular surfaces compared to standards presented by Bass (1995) and Brothwell (1981) and standards based on measurements of the talus and calcaneus devised by Steele (1976).

Age at death of adult skeletons was determined using as many of the following methods as preservation of each skeleton allowed. The Suchey-Brooks system for age determination from the os pubis (Brooks & Suchey, 1990); the auricular surface ageing method devised by Lovejoy *et al.* (1985) and ectocranial suture closure (Meindl & Lovejoy, 1985 and Nawrocki, 1997). Juvenile skeletons were aged using as many of the methods as the preservation of each skeleton allowed. Dental development (Hillson, 1996); the state of fusion of the secondary ossification centres (see for example Schwartz, 1995) and measurements of long bone lengths compared to standards developed by Hoppa (1992) and Scheuer *et al.* (1980).

The calculations of the living stature of adult skeletons were based on measurements of complete long bones compared to standards devised by Trotter & Gleser (Trotter 1970), and in those cases where the long bones were fragmented, on standards developed by Steele & McKern (1969).

5.2 Results

The results of the analysis are presented in appendix 4. Skeletons excavated in previous years are also included, so the total number of skeletons discussed in this section is seventy-eight.

5.2.1 Preservation

The preservation of the material from Hofstaðir is in general very good, with 86% of the material with over 50% preservation (grade 3 or higher). See figure 15.

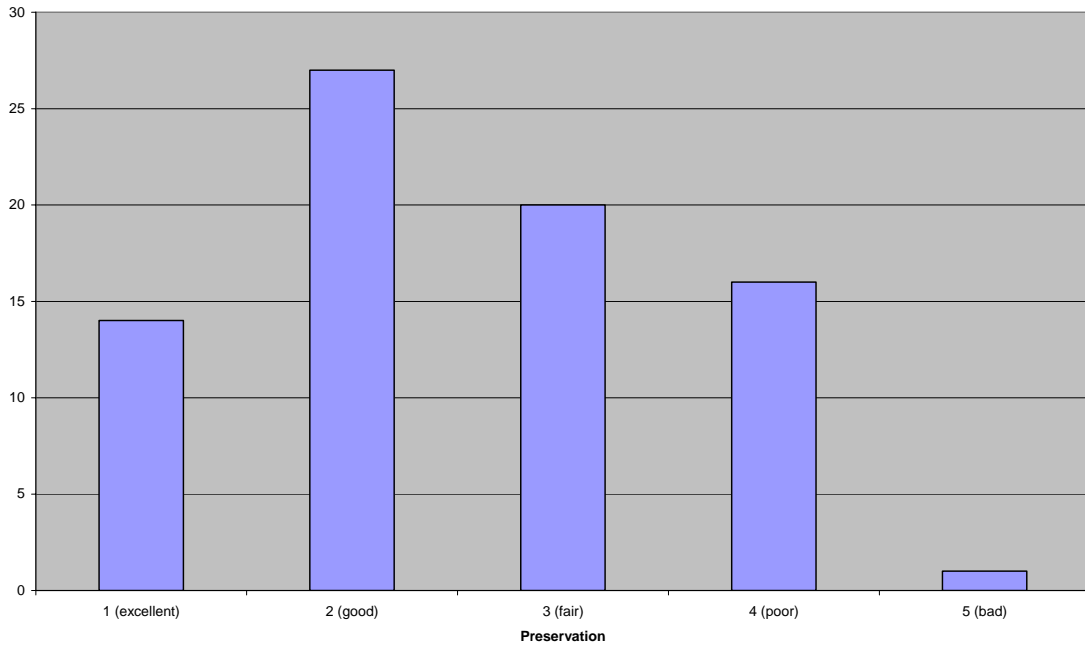


Figure 15. Preservation

5.2.2 Sex

The distribution of males v. females is quite even, with males representing 42.9% and women 57.1% of the adults who could be sexed. The slightly higher percentage of women most likely represents an excavation bias. It appears at this stage that most of the women have been buried in the northern part of the cemetery (78.6% of the adults in the northern part of the cemetery are female) while the men are in the south (71.4% of the adults in the southern part of the cemetery are males), a known practise in medieval Iceland (see for example Matthías Þórðarson, 1943), so this bias is probably explained by the fact that most of the unexcavated burials within the excavation area lie in the southern part of the cemetery (see figure 16). For further detail see appendix 4 and figure 20.

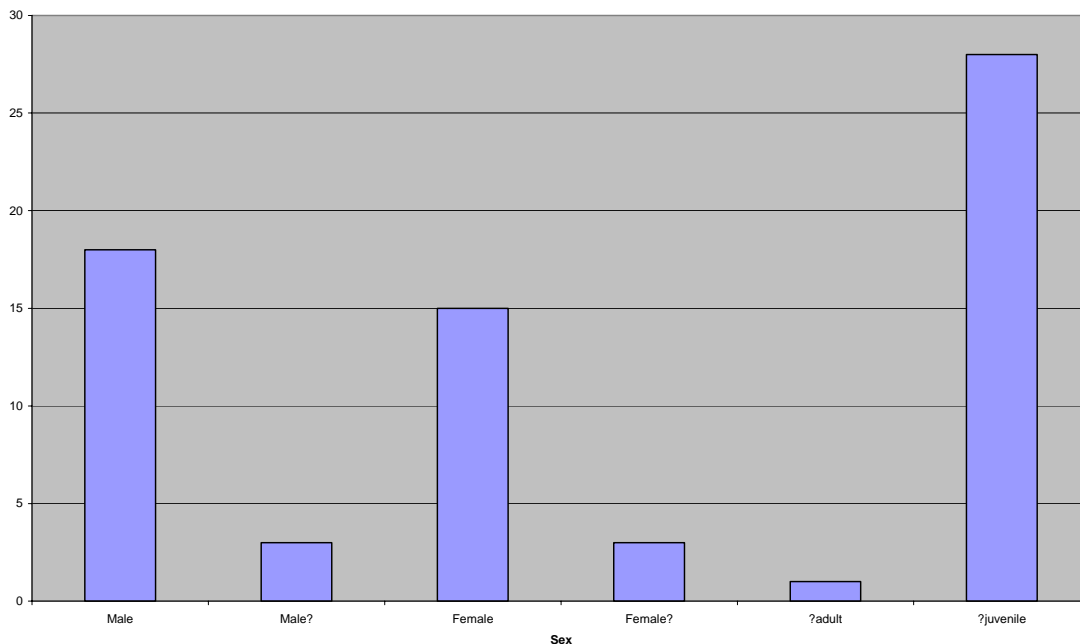


Figure 16. Sex

5.2.3 Age

Of the seventy-eight skeletons excavated so far, fifty (64%) are adults (over 18 years at the time of death). A large proportion of the juvenile skeletons were found immediately north of the chapel structures. Locating the juvenile burials closest to the chapel is a known practise in medieval cemeteries in Iceland (see for example Matthías Þórðarson, 1943 and figure 16.). The age distribution within the cemetery is unusual. Of the juveniles in the population (under 18 years at the time of death) 82% are under six months of age, indicating a high death rate of neonates. A more expected pattern would be a higher death rate around the weaning age (c.9-12 months), and so these results do raise possible questions about the practise of breastfeeding and weaning in medieval Mývatnssveit. The age distribution of the adults within the population is also of interest, with the average age for the skeletons excavated so far, much higher than expected in a population of this date. A total of 38% of the adult population is in the over 45 age group, as opposed to 23% in the Skeljastaðir population, a cemetery dated to c.1000-1104, situated in Þjorsárdalur in south-eastern Iceland (Hildur Gestsdóttir, 1998). The age distribution is shown in figure 17 with the age distribution for the site at Skeljastaðir overlain (please note that the low percentage of juveniles in the Skeljastaðir population is

reflecting the lack of preserved juvenile burials at the site). These factors that will have to be considered when a more detailed analysis of the Hofstaðir material has been completed.

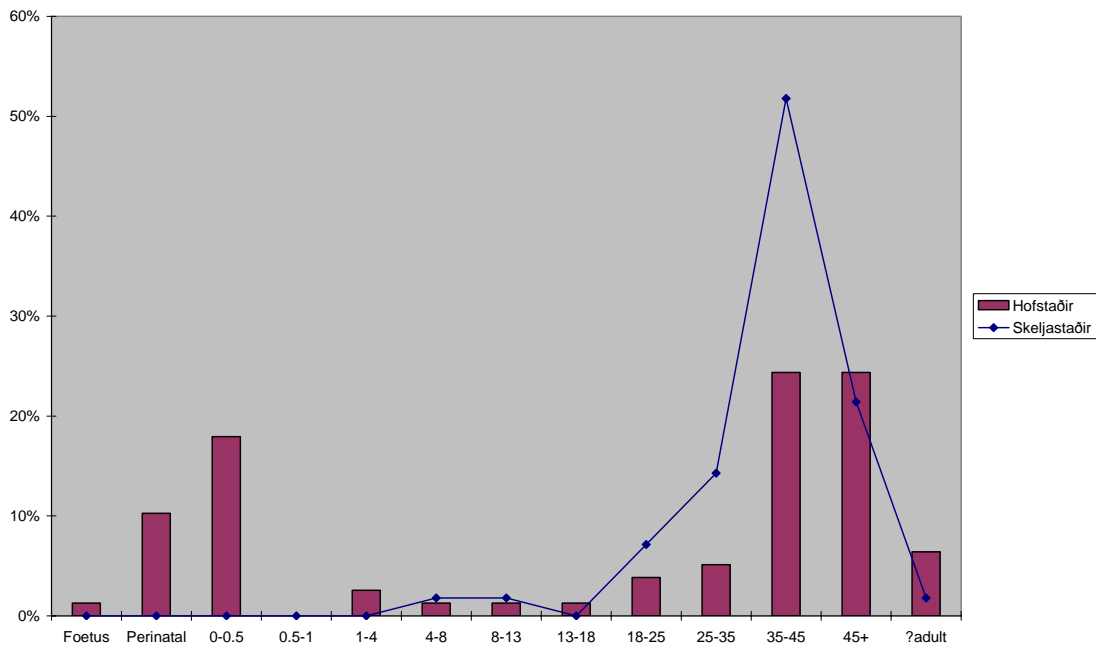


Figure 17. Age

5.2.4 Stature

The average living stature for males in the Hofstaðir population was 172cm (ranging from 163 to 177cm – median 173cm). The average stature for females was 160cm (ranging from 151 to 167 cm – median 161cm). This is considerably above the average stature reported by Jón Steffensen (1974) for the period 1000 – 1500, which was 168.9 cm for men and 154.7 cm for women. See figure 18 for detail.

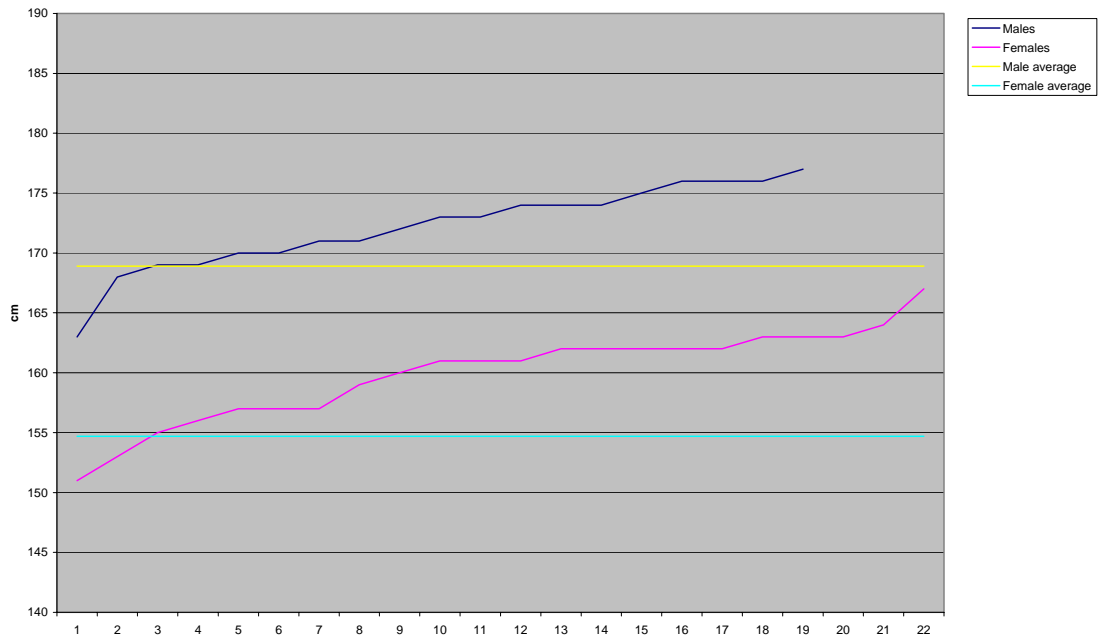


Figure 18. Stature

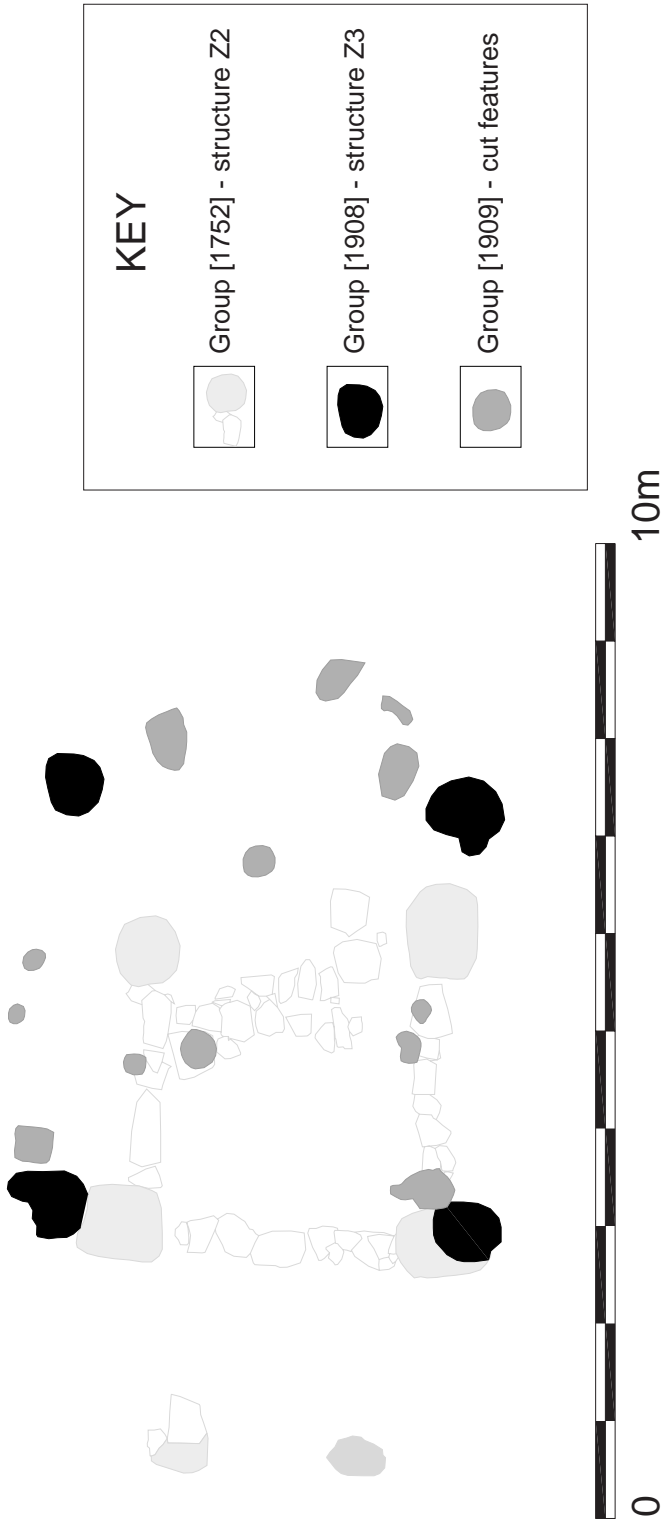
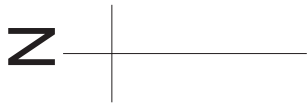


Figure 19. Structural features

N

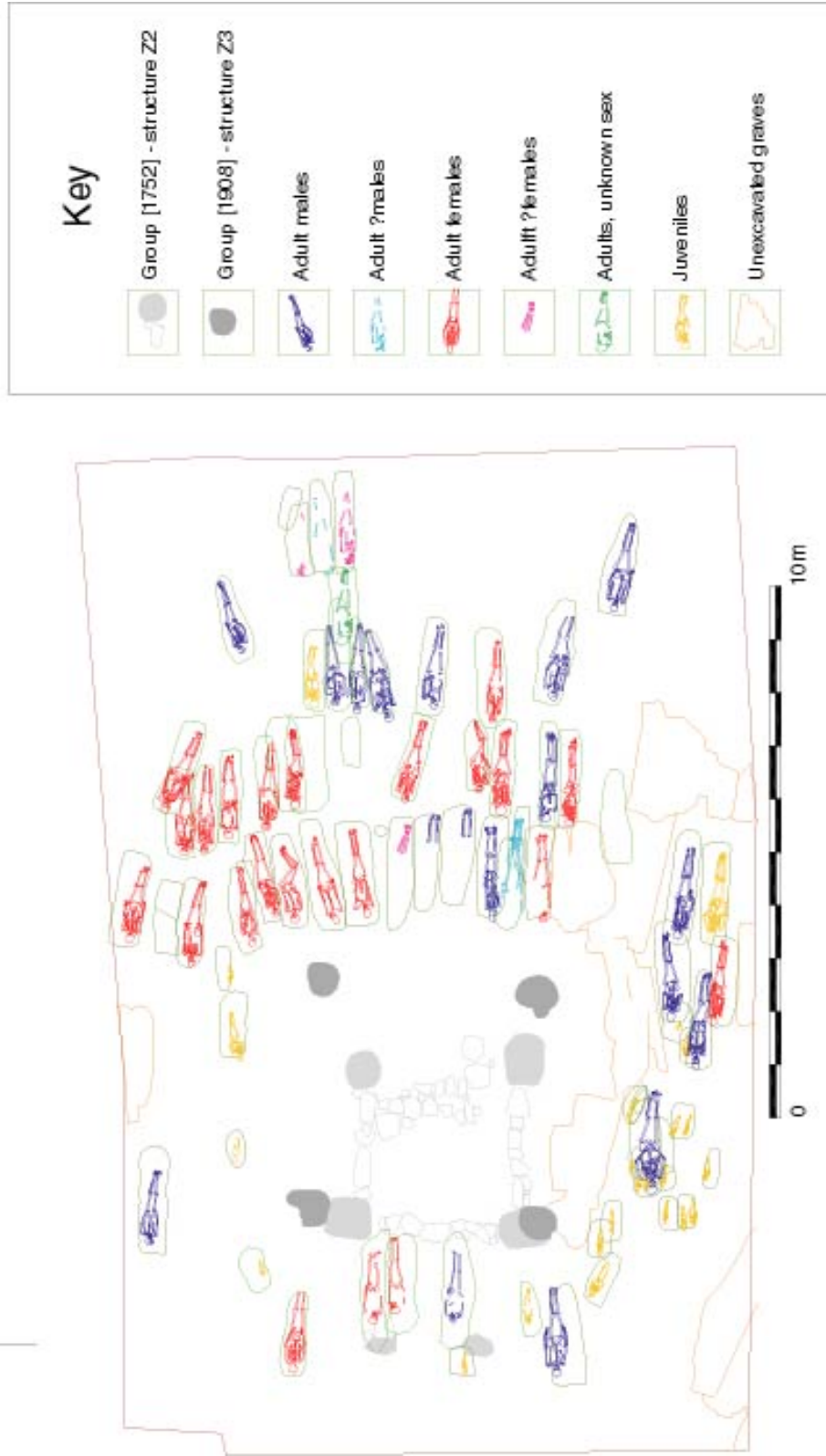


Figure 20. Cemetery

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APPENDIX 1 – Units

Unit	Type	Material	Contextual	Description
1753	Deposit	Mixed Silts	Grave	Grave fill [SK031]
1754	Cut	Cut interface	Grave	Grave cut [SK031]
1755	Deposit	Mixed Silts	Grave	Grave fill [SK033]
1756	Cut	Cut interface	Grave	Grave cut [SK033]
1757	Deposit	Mixed Silts	Backfill	Fill of small pit cut into grave.
1758	Cut	Cut interface	Pit	Small pit cut into grave
1759	Deposit	Mixed Silts	Grave	Grave fill [SK048]
1760	Cut	Cut interface	Grave	Grave cut [SK048]
1761	Deposit	Mixed Silts	Grave	Grave fill [SK047]
1762	Cut	Cut interface	Grave	Grave cut [SK047]
1763	Deposit	Mixed Silts	Grave	Grave fill [SK032]
1764	Cut	Cut interface	Grave	Grave cut [SK032]
1765	Deposit	Mixed Silts	Grave	Grave fill [SK034]
1766	Cut	Cut interface	Grave	Grave cut [SK034]
1767	Deposit	Mixed Silts	Grave	Grave fill [SK039]
1768	Cut	Cut interface	Grave	Grave cut [SK039]
1769	Deposit	Mixed Silts	Grave	Grave fill [SK037 & SK043]
1770	Cut	Cut interface	Grave	Grave cut [SK043]
1771	Deposit	Mixed Silts	Grave	Grave fill [SK035 & SK036]
1772	Cut	Cut interface	Grave	Grave cut [SK035 & SK036]
1773	Deposit	Mixed Silts	Grave	Grave fill [SK038]
1774	Cut	Cut interface	Grave	Grave cut [SK038]
1775	Deposit	Mixed Silts	Grave	Grave fill [SK040 & SK041]
1776	Cut	Cut interface	Grave	Grave cut [SK040 & SK041]
1777	Deposit	Mixed Silts	Grave	Grave fill [SK042]
1778	Cut	Cut interface	Grave	Grave cut [SK042]
1779	Deposit	Mixed Silts	Grave	Grave fill [SK044]
1780	Cut	Cut interface	Grave	Grave cut [SK044]
1781	Deposit	Mixed Silts	Grave	Grave fill [SK045]
1782	Cut	Cut interface	Grave	Grave cut [SK045]
1783	Deposit	Mixed Silts	Grave	Grave fill [SK046]
1784	Cut	Cut interface	Grave	Grave cut [SK046]
1785	Deposit	Mixed Silts	Grave	Grave fill [SK049]
1786	Cut	Cut interface	Grave	Grave cut [SK049]
1787	Deposit	Mixed Silts	Grave	Grave fill [SK050]
1788	Cut	Cut interface	Grave	Grave cut [SK050]
1789	Deposit	Mixed Silts	Grave	Grave fill [SK051]
1790	Cut	Cut interface	Grave	Grave cut [SK051]
1791	Deposit	Mixed Silts	Grave	Grave fill [SK052]
1792	Cut	Cut interface	Grave	Grave cut [SK052]
1793	Deposit	Mixed Silts	Grave	Grave fill [SK053]
1794	Cut	Cut interface	Grave	Grave cut [SK053]
1795	Deposit	Mixed Silts	Grave	Grave fill [SK056]
1796	Cut	Cut interface	Grave	Grave cut [SK056]
1797	Deposit	Mixed Silts	Grave	Grave fill [SK054]
1798	Cut	Cut interface	Grave	Grave cut [SK054]
1799	Deposit	Mixed Silts	Spread	Turf debris
1800	Deposit	Mixed Silts	Grave	Grave fill [SK055]
1801	Cut	Cut interface	Grave	Grave cut [SK055]
1802	Deposit	Mixed Silts	Upcast	Small layer of upcast containing H4 tephra

Unit	Type	Material	Contextual	Description
1803	Deposit	Mixed Silts	Backfill	Fill of small pit containing disarticulate human bones
1804	Cut	Cobbles	Pit	Small pit containing disarticulated human bones
1805	Group		Pit	Pit
1806	Deposit	Mixed Silts	Posthole	Fill of posthole - northeast corner of structure Z3
1807	Cut	Cut interface	Posthole	Posthole - northeast corner of structure Z3
1808	Deposit	Mixed Silts	Grave	Grave fill [SK058]
1809	Cut	Cut interface	Grave	Grave cut [SK058]
1810	Deposit	Mixed Silts	Grave	Grave fill [SK57]
1811	Cut	Cut interface	Grave	Grave cut [SK057]
1812	Deposit	Mixed Silts	Grave	Grave fill [SK059]
1813	Cut	Cut interface	Grave	Grave cut [SK059]
1814	Deposit	Mixed Silts	Construction	Turf debris, associated with demolition of structure Z3 / construction of Z2?
1815	Deposit	Mixed Silts	Grave	Grave fill [SK060]
1816	Cut	Cut interface	Grave	Grave cut [SK060]
1817	Deposit	Mixed Silts	Construction	Turf deposit, levelling the ground prior to construction of Z2
1818	Deposit	Mixed Silts	Grave	Grave fill [SK066]
1819	Cut	Cut interface	Grave	Grave cut [SK066]
1820	Deposit	Mixed Silts	Grave	Upper grave fill
1821	Deposit	Mixed Silts	Grave	Grave fill [SK064]
1822	Cut	Cut interface	Grave	Grave cut [SK064]
1823	Deposit	Mixed Silts	Grave	Grave fill [SK061]
1824	Cut	Cut interface	Grave	Grave cut [SK061]
1825	Deposit	Mixed Silts	Grave	Grave fill [SK062]
1826	Cut	Cut interface	Grave	Grave cut [SK062]
1827	Deposit	Mixed Silts	Grave	Grave fill [SK063]
1828	Cut	Cut interface	Grave	Grave cut [SK063]
1829	Deposit	Mixed Silts	Grave	Grave fill [SK065]
1830	Cut	Cobbles	Grave	Grave fill [SK065]
1831	Group	N/A		Pit
1832	Deposit	Mixed Silts	Backfill	Fill of small pit
1833	Cut	Cut interface	Pit	Small pit
1834	Deposit	Mixed Silts	Construction	Turf debris, associated with demolition of structure Z3 / construction of Z2?
1835	Deposit	Mixed Silts	Grave	Grave fill [SK067]
1836	Cut	Cut interface	Grave	Grave cut [SK067]
1837	Deposit	Turf fragments	Collapse	Turf debris, associated with structures north of excavation area.
1838	Deposit	Mixed Silts	Grave	Grave fill [SK068]
1839	Cut	Cut interface	Grave	Grave cut [SK068]
1840	Deposit	Mixed Silts	Upcast	Small layers of upcast containing H4 tephra, associated with graves north of chapels
1841	Cut	Cut interface	Pit	Irregular pit under east end of structure Z2
1842	Deposit	Loess	Alluvium	Windblown deposit, marking surface from which graves north of chapels were cut from
1843	Group	N/A		Pit
1844	Deposit	Mixed Silts	Backfill	Fill of small pit
1845	Cut	Cut interface	Pit	Small pit
1846	Deposit	Mixed Silts	Grave	Grave fill (no skeleton preserved)
1847	Cut	Cut interface	Grave	Grave cut (no skeleton preserved)
1848	Deposit	Mixed Silts	Upcast	Associated with construction of Z2
1849	Deposit	Mixed Silts	Grave	Grave fill [SK073]
1850	Cut	Cut interface	Grave	Grave cut [SK073]

Unit	Type	Material	Contextual	Description
1851	Group	N/A		Post hole
1852	Deposit	Mixed Silts	Backfill	Fill of posthole
1853	Cut	Cut interface	Posthole	Posthole cut
1854	Deposit	Mixed Silts	Posthole	Fill of posthole
1855	Cut	Cut interface	Posthole	Posthole cut
1856	Deposit	Mixed Silts	Posthole	Fill of posthole
1857	Cut	Cut interface	Posthole	Posthole cut
1858	Deposit	Mixed Silts	Grave	Grave fill [SK069]
1859	Cut	Cut interface	Grave	Grave cut [SK069]
1860	Deposit	Turf fragments	Spoil	Turf debris with charcoal lenses, associated with post-medieval midden.
1861	Deposit	Turf fragments	Undefined	Debris associated with graves.
1862	Deposit	Mixed Silts	Backfill	Backfill of pit containing disarticulated human bone
1863	Cut	Cut interface	Pit	Pit cut through grave, containing disarticulated human bone
1864	Deposit	Mixed Silts	Grave	Grave fill [SK072]
1865	Cut	Cut interface	Grave	Grave cut [SK072]
1866	Deposit	Mixed Silts	Grave	Grave fill [SK070]
1867	Cut	Cut interface	Grave	Grave cut [SK070]
1868	Deposit	Mixed Silts	Posthole	Fill of posthole
1869	Cut	Cut interface	Posthole	Posthole cut
1870				DELETED
1871				DELETED
1872				DELETED
1873	Cut	Cut interface	Posthole	Fill of possible posthole under structure Z2
1874	Deposit	Mixed Silts	Posthole	Cut of possible posthole under structure Z2
1875				DELETED
1876	Deposit	Mixed Silts	Grave	Grave fill [SK074]
1877	Cut	Cut interface	Grave	Grave cut [SK074]
1878	Deposit	Mixed Silts	Grave	Grave fill [SK075]
1879	Cut	Cut interface	Grave	Grave cut [SK075]
1880	Deposit	Mixed Silts	Grave	Grave fill [SK076]
1881	Cut	Cut interface	Grave	Grave cut [SK076]
1882	Deposit	Mixed Silts	Grave	Grave fill (no skeleton)
1883	Cut	Cut interface	Grave	Grave cut (no skeleton)
1884	Deposit	Mixed Silts	Posthole	Posthole fill
1885	Cut	Cut interface	Posthole	Possible posthole under structure Z3
1886	Deposit	Mixed Silts	Posthole	Posthole fill
1887	Cut	Cut interface	Posthole	Possible posthole under structure Z3
1888	Deposit	Mixed Silts	Posthole	Posthole fill
1889	Cut	Cut interface	Posthole	Possible posthole under structure Z3
1890	Deposit	Turf fragments	Dump	Turf with LNL tephra, associated with cutting of graves.
1891	Deposit	Mixed Silts	Grave	Grave fill [SK077 & SK078]
1892	Cut	Cut interface	Grave	Grave cut [SK077 & SK078]
1893	Deposit	Mixed Silts	Posthole	Posthole fill
1894	Cut	Cut interface	Posthole	Posthole cut
1895	Deposit	Mixed Silts	Posthole	Posthole fill
1896	Cut	Cut interface	Posthole	Possible posthole under structure Z3
1897	Deposit	Mixed Silts	Posthole	Posthole fill

Unit	Type	Material	Contextual	Description
1898	Cut	Cut interface	Posthole	Posthole cut
1899	Deposit	Mixed Silts	Grave	Grave fill [SK071]
1900	Cut	Cut interface	Grave	Grave cut [SK071]
1901	Deposit	Mixed Silts	Grave	=[1702]
1902	Cut	Cut interface	Grave	=[1703]
1903	Deposit	Mixed Silts	Posthole	Posthole fill
1904	Cut	Cut interface	Posthole	Posthole cut
1905	Group	N/A	Grave	Graves north of chapel
1906	Group	N/A	Grave	Graves south of chapel
1907	Group	N/A	Grave	N-S graves , 4th east of chapel
1908	Group	N/A	Building	Structural features of Z3

APPENDIX 2 – Finds

Finds no	Context	Area	Type	Material	Weight	Count
1	1757	Z	Animal bone	Bone	2,5	x
2	1	Z	Animal bone	Bone	8,8	x
3	1	Z	Object	Iron	56	1
4	1	Z	Fragment	Ceramic	0,5	1
5	1755	Z	Animal bone	Bone	4,1	x
6	1753	Z	Nail	Iron	2	1
7	1769	Z	Nail	Iron	14	2
8	1769	Z	Animal bone	Bone	18,8	x
9	1773	Z	Animal bone	Bone	53,4	x
10	1779	Z	Animal bone	Bone	4,3	x
11	1771	Z	Nail	Iron	0,5	1
12	1785	Z	Animal bone	Bone	6,3	x
13	1761	Z	Animal bone	Bone	54,1	x
14	1759	Z	Animal bone	Bone	1,7	x
15	1799	Z	Animal bone	Bone	5,9	x
16	1808	Z		Bone	x	x
17	1808	Z	Lump	Iron	0,3	1
18	1812	Z	Lump	Iron	7	1
19	1814	Z	Vessel	Ceramic	2	1
20	1829	Z	Nail	Iron	5,5	3
21	1829	Z	Slag	Iron	193,5	6
22	1829	Z	Animal bone	Bone	462,7	x
23	1797	Z	Animal bone	Bone	x	x
24	1829	Z	Animal bone	Bone	462,7	x
25	1829	Z	Animal bone	Bone	x	x
26	1846	Z	Animal bone	Bone	1,9	
27	1829	Z	Animal bone	Bone	462,7	x
28	1849	Z	Charcoal	Wood	x	x
29	1849	Z	Animal bone	Bone	x	x
30	1860	Z	Animal bone	Bone	78	x
31	1841	Z	Human bone	Bone	x	x
32	1818	Z	Nail/Rivets	Iron	667,5	92
33	1763	Z	Nail	Iron	9,64	3

APPENDIX 3 – Samples

Sample	Unit	Notes	Type	Method
04-001	1755	Soil from cranial area SK033 - 1 bag	Macro	Bulk
04-002	1753	Soil from thoracic area SK031 - 1 bag	Macro	Bulk
04-003	1753	Soil from pelvic area SK031 - 1 bag	Macro	Bulk
04-004	1755	Soil from thoracic area SK033 - 1bag	Macro	Bulk
04-005	1755	Soil from pelvic area SK033 - 1bag	Macro	Bulk
04-006	1767	Soil from pelvic area SK039 - 1 bag	Macro	Bulk
04-007	1773	Soil from cranial area SK038 - 1 bag	Macro	Bulk
04-008	1773	Soil from thoracic area SK038 - 1 bag	Macro	Bulk
04-009	1773	Ash from thoracic area SK038 - 1 bag	Macro	Bulk
04-010	1773	Soil from pelvic area SK038 - 1 bag	Macro	Bulk
04-011	1769	Soil from pelvic area SK043 - 1bag	Macro	Bulk
04-012	1769	Soil from thoracic area SK049 - 1 bag	Macro	Bulk
04-013	1781	Soil from pelvic area SK045 - 1 bag	Macro	Bulk
04-014	1781	Soil from thoracic area SK045 - 1 bag	Macro	Bulk
04-015	1761	Soil from pelvic area SK047 - 1 bag	Macro	Bulk
04-016	1761	Soil from cranial area SK047 - 1 bag	Macro	Bulk
04-017	1761	Soil from right thoracic area SK047 - 1 bag	Macro	Bulk
04-018	1761	Soil from left thoracic area SK047 - 1 bag	Macro	Bulk
04-019		DELETED		
04-020	1759	Soil from pelvic area SK048 - 1 bag	Macro	Bulk
04-021	1759	Soil from thoracic area SK048 - 1 bag	Macro	Bulk
04-022	1759	Soil from cranial area SK048 - 1 bag	Macro	Bulk
04-023	1791	Soil from pelvic area SK052 - 1 bag	Macro	Bulk
04-024	1789	Soil from cranial area SK051 - 1 bag	Macro	Bulk
04-025	1789	Soil from thoracic area SK051 - 1 bag	Macro	Bulk
04-026	1789	Soil from pelvic area SK051 - 1 bag	Macro	Bulk
04-027	1803	Ash from fill - 1 bag	Macro	Bulk
04-028	1800	Soil from thoracic area SK055 - 1 bag	Macro	Bulk
04-029	1800	Soil from cranial area SK055 - 1 bag	Macro	Bulk

Sample	Unit	Notes	Type	Method
04-030	1800	Soil from pelvic area SK055 - 1 bag	Macro	Bulk
04-031	1810	Soil from thoracic area AK057 - 1 bag	Macro	Bulk
04-032	1812	Soil from thoracic area SK059 - 1 bag	Macro	Bulk
04-033	1789	Ash from thoracic area SK051 - 1 bag	Macro	Bulk
04-034	1806	Charcoal from posthole - 1 bag	Macro	Bulk
04-035	1806	Wood from posthole - 1 bag	Macro	Bulk
04-036	1817	Bark - 1 bag	Macro	Bulk
04-037	1817	Bark - 1 bag	Macro	Bulk
04-038	1823	Soil from pelvic area SK061 - 1 bag	Macro	Bulk
04-039	1823	Soil from thoracic area SK061 - 1 bag	Macro	Bulk
04-040	1821	Soil from thoracic area SK064 - 1 bag	Macro	Bulk
04-041	1797	Soil from pelvic area SK054 - 1 bag	Macro	Bulk
04-042	1797	Soil from left thoracic area SK054 - 1 bag	Macro	Bulk
04-043	1797	Soil from right thoracic area SK054 - 1 bag	Macro	Bulk
04-044	1797	Soil from cranial area SK054 - 1 bag	Macro	Bulk
04-045	1797	Soil from thoracic area SK054 - 1 bag	Macro	Bulk
04-046	1829	Soil from pelvic area SK065 - 1 bag	Macro	Bulk
04-047	1829	Soil from thoracic area SK065 - 1 bag	Macro	Bulk
04-048	1844	Bark - 1 bag	Macro	Bulk
04-049	1838	Soil from pelvic area SK068 - 1 bag	Macro	Bulk
04-050	1838	Soil from thoracic area SK068 - 1 bag	Macro	Bulk
04-051	1835	Soil from thoracic area SK067 - 1 bag	Macro	Bulk
04-052	1862	Soil from thoracic area SK072 - 1 bag	Macro	Bulk
04-053	1862	Soil from pelvic area SK072 - 1 bag	Macro	Bulk
04-054	1852	Slag - 1 bag	Macro	Bulk
04-055	1852	Wood - 1 bag	Macro	Bulk
04-056	1852	Charcoal - 1 bag	Macro	Bulk
04-057	1880	Soil from thoracic area SK076 - 1 bag	Macro	Bulk
04-058	1880	Soil from pelvic area SK076 - 1 bag	Macro	Bulk

APPENDIX 4 – Osteoarchaeological analysis

Skeleton	Preservation	Sex	Age	Stature (cm)
HST-001	2	Female	45+	162±2
HST-002	2	Female	45+	159±1
HST-003	2	Female	45+	167±2
HST-004	2	Female	35-45	163±1
HST-005	1	Female	18-25	160±2
HST-006	5	?juv	0.5-1	N/A
HST-007	3	Female	35-45	156±1
HST-008	2	Male	35-45	172±2
HST-009	3	Female	25-35	162±1
HST-010	2	Female	45+	161±3
HST-011	1	Female	35-45	163±1
HST-012	3	Female	35-45	164±3
HST-013	2	Female	35-45	161±2
HST-014	2	Female	35-45	162±1
HST-015	2	Female	45+	157
HST-016	3	Female	18-25	N/A
HST-017	2	Female	18-25	157±1
HST-018	3	Male	45+	176±4
HST-019	4	Female	45+	N/A
HST-020	2	Male	45+	171±2
HST-021	3	Female?	35-45	161±3
HST-022	3	Male	45+	168
HST-023	2	Female	45+	162±3
HST-024	3	Male	35-45	175±1
HST-025	2	Male	35-45	173±1
HST-026	1	Female	25-35	163±3
HST-027	2	Female	45+	162±3
HST-028	4	?ad	?ad	N/A
HST-029	3	Male	35-45	171±3
HST-030	Commingled remains			N/A
HST-031	4	Female	under35	N/A
HST-032	1	?juv	Perinatal	N/A
HST-033	2	Male	45+	174±5
HST-034	4	?juv	1-4	N/A
HST-035	2	?juv	Perinatal	N/A
HST-036	2	?juv	0.5-1	N/A
HST-037	4	?juv	Perinatal	N/A
HST-038	2	Male	45+	174±2
HST-039	4	Male	35-45	164±5
HST-040	1	?juv	0.5-1	N/A
HST-041	1	?juv	0.5-1	N/A
HST-042	4	?juv	0.5-1	N/A
HST-043	4	Male?	?ad	170±2

Skeleton	Preservation	Sex	Age	Stature (cm)
HST-044	3	?juv	4-8	N/A
HST-045	2	Male	35-45	173±4
HST-046	1	?juv	0.5-1	N/A
HST-047	1	Female	35-45	154
HST-048	3	Male	45+	174±2
HST-049	3	?juv	Foetus	N/A
HST-050	3	?juv	Perinatal	N/A
HST-051	2	Male	35-45	169±3
HST-052	2	Female	45+	151±4
HST-053	1	Male	35-45	175±2
HST-054	3	Male	35-45	169±2
HST-055	2	?juv	8-13	N/A
HST-056	2	Female	35-45	157±2
HST-057	1	Male	45+	170±1
HST-058	4	Male?	?ad	177±1
HST-059	2	?juv	0.5-1	N/A
HST-060	1	?juv	Perinatal	N/A
HST-061	4	Female?	25-35	N/A
HST-062	1	?juv	0.5-1	N/A
HST-063	3	?juv	0.5-1	N/A
HST-064	2	?juv	1-4	N/A
HST-065	1	Male	18-25	163±3
HST-066	3	Female	45+	N/A
HST-067	1	?juv	13-18	N/A
HST-068	4	Male?	35-45	N/A
HST-069	4	?juv	Perinatal	N/A
HST-070	3	?juv	Perinatal	N/A
HST-071	4	?juv	0.5-1	N/A
HST-072	4	Female?	?ad	N/A
HST-073	3	?juv	0.5-1	N/A
HST-074	3	?juv	0.5-1	N/A
HST-075	2	Female	45+	155±3
HST-076	2	Male	45+	176±1
HST-077	3	?juv	0.5-1	N/A
HST-078	4	?juv	0.5-1	N/A
HST-079	4	?juv	Perinatal	N/A

APPENDIX 5 – Grave summary

Group	Cut	Fill	Skeleton	Coffin	Length (m)	Width (m)	Depth (m)
1746	1760	1759	SK048	Yes	2.20	0.45	0.42
1746	1762	1761	SK047	No	1.80	0.44	0.62
1746	1770	1769	SK043	Yes	1.90	0.46	0.53
1746	1809	1808	SK058	Yes	1.50	0.29	0.51
1746	1819	1818	SK066	Yes	1.88	0.45	0.47
1747	1792	1791	SK052	No	1.70	0.50	0.50
1747	1796	1795	SK056	No	1.60	0.50	0.45
1748	1756	1755	SK033	No	1.97	0.63	0.75
1748	1782	1781	SK045	No	1.56	0.38	0.58
1748	1798	1797	SK054	No	1.68	0.56	0.74
1748	1801	1800	SK055	No	1.23	0.38	0.64
1750	1754	1753	SK031	Yes	2.30	0.50	0.52
1905	1768	1767	SK039	No	1.80	0.60	0.60
1905	1778	1777	SK042	No	0.70	0.30	0.12
1905	1780	1779	SK044	No	1.30	0.45	0.55
1905	1786	1785	SK049	No	0.85	0.30	0.25
1906	1764	1763	SK032	Yes	0.80	0.30	0.51
1906	1766	1765	SK034	Yes	1.12	0.36	0.50
1906	1772	1771	SK035 SK036	Yes Yes	0.70	0.45	0.34
1906	1774	1773	SK038	No	1.90	0.65	0.64
1906	1776	1775	SK040 SK041	Yes Yes	0.70	0.35	0.55
1906	1784	1783	SK046	Yes	0.70	0.35	0.44
1906	1788	1787	SK050	No	0.75	0.42	0.41
1906	1794	1793	SK053	No	2.20	0.55	0.55
1906	1811	1810	SK057	No	1.90	0.65	0.65
1906	1813	1812	SK059	Yes	0.70	0.50	0.65
1906	1816	1815	SK060	No	0.50	0.35	0.35
1906	1822	1821	SK064	Yes	0.90	0.44	0.54
1906	1826	1825	SK062	No	0.65	0.36	0.24
1906	1828	1827	SK063	No	0.60	0.20	0.55
1906	1830	1829	SK065	No	1.65	0.60	0.55
1906	1836	1835	SK067	No	1.96	0.52	0.67
1906	1847	1846	n/a	No	1.00	0.20	0.15
1906	1850	1849	SK073	Yes	0.54	0.46	0.30
1906	1859	1858	SK069	No	0.60	0.15	0.20
1906	1867	1866	SK070	No	0.55	0.10	0.22
1906	1877	1876	SK074	No	0.25	0.10	0.30
1906	1879	1878	SK075	No	1.70	0.50	0.63
1906	1881	1880	SK076	No	1.88	0.50	0.61
1906	1892	1891	SK077 SK078	No No	0.55	0.40	0.65
1906	1900	1899	SK071	No	0.36	0.54	0.34
1907	1790	1789	SK051	No	1.86	0.58	0.74
1907	1824	1823	SK061	Yes	1.92	0.45	0.58
1907	1839	1838	SK068	Yes	1.62	0.32	0.50
1907	1865	1864	SK072	No	1.32	0.44	0.52
1907	1883	1882	n/a	No	0.82	0.30	0.45