Haddo House & Country Park Ice House, Tarves: Archaeological Mitigation

Data Structure Report



 ${}_{\text{issued }31^{\text{st}}}~\text{May }2017$ on behalf of Landscape Services, Aberdeenshire Council



Quality Assurance

This report covers works which have been undertaken in keeping with the issued brief as modified by the agreed programme of works. The report has been prepared in keeping with the guidance of Rathmell Archaeology Limited on the preparation of reports. All works reported on within this document have been undertaken in keeping with the Chartered Institute for Archaeologists' Standards and Policy Statements and Code of Conduct.

Signed Date31st May 2017....

In keeping with the procedure of Rathmell Archaeology Limited this document and its findings have been reviewed and agreed by an appropriate colleague:

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Quality Assurance Data

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Introduction and Planning Context

- 1. This Data Structure Report represents the findings of a Historic Building Recording required by Landscape Services, Aberdeenshire Council in advance of the proposed restoration works on the Haddo Estate Ice House (Category C Listed Building) (NGR: NJ 86629 34434) (Figure 1). The works were designed to create a competent record of the historic elements of the Ice House before restoration.
- 2. Aberdeenshire Council Archaeology Service, who advise Aberdeenshire Council on archaeological matters, provided guidance on the structure of Historic Building Recording works required on this site to inform the planning process. In particular they have specified an Appraisal survey (Level 1) in accordance with Historic Building Recording Guidance (ALGAO: Scotland, 2012) and Recording Historic Buildings, A Descriptive Specification (RCHME Third Edition, 1996).

Historical Background

- 3. Haddo House is located near Tarves in Aberdeenshire, approximately 20 miles north of Aberdeen. It has been owned by the National Trust for Scotland since 1978 and since then its contents and gardens have been open to the public. The Ice House is part of the Haddo Estate and under their ownership. The extensive surrounding country park is owned by Aberdeenshire Council which includes the main car park.
- 4. The Gordons, who later became the Earls of Aberdeen and Marquesses of Aberdeen, have lived on the site for over 500 years. Haddo House (Canmore ID 19842, Listed Building: 16470, HER ID: NJ83SE0042) sits in or near the site of the Old Kellie Castle, also referred to as House of Kellie (Canmore ID 19819, HER ID: NJ83SE21).
- 5. In the 1642 the Covenanters under the command of the Marquis of Argyll besieged and burnt down the previous dwelling. There has been speculation on the location of the earlier Old Kellie Castle/House of Kellie with previous construction work and recent archaeological work providing possible locations.
- 6. In 1890, during the construction of the large theatre/hall (Canmore ID: 252184, HER ID: NJ83SE 42.32) to the southwest of Haddo House, workmen came across the foundations of an old building. The foundations were approximately 3m thick and were suggested to represent the previous Old Kellie Castle /House of Kellie.
- 7. However, discoveries made in August 2011 suggest the presence of ruins underneath the front lawn of Haddo House, supporting some theories that the current House was built on top of the ruins of the previous building. A watching brief (Canmore ID: 339690) was undertaken in August 2011 during the construction of a new fire main. The work revealed a well and part of a substantial stone wall beneath the lawn to the west of the front facade of 18th-century Haddo House (Murray 2011).
- 8. A geophysical survey of the lawn revealed ranges of buildings surrounding a large courtyard. Five trial trenches targeting the features identified walls still standing to a height of almost 2m. The structural features potentially formed part of a building with several vaulted rooms at ground floor level, along with other sections of the courtyard structure. The structures were identified as part of the Old Kellie Castle/House of Kellie.
- 9. Kelly is first documented in 1261 when it was occupied by Alexander Comyn, Earl of Buchan. The Gordon family acquired it in the 1460–80s adding new accommodation in the 16th century. The excavation suggested that when Haddo House was built the earlier structure was demolished and levelled to create wide level lawns to complement the 18th-century facade.
- 10. The current house was designed by the celebrated architect William Adam and commissioned by the 2nd Earl of Aberdeen. Completed in 1735 the house has gone through modifications, extensions and destruction, notably by a fire in 1930 which devastated the south wing. However, the original Palladian structure designed by William Adam is still at its core.

- The interior reflects the long and changing history of the House and its occupants, with the strongest influence remaining to this day dating back to 1880 and a period of extensive refurbishment carried out by the 1st Marquis and his wife, Lady Ishbel. This period saw the addition of a small chapel (Canmore ID: 145984, HER ID: NJ83SE 42.01) which still conducts weekly Sunday evensongs throughout the summer months, and frequent services at other times of the year. In the grounds is a theatre, Haddo House Hall, and rehearsal rooms known as the Peatyards.
- 12. A notable period in its history was during WW2 when the house became a maternity hospital for the evacuated mothers of Glasgow. Nearly 1200 babies were born at Haddo Emergency Hospital, as it was known, and many of these individuals, known affectionately as the Haddo Babies, still come back to visit.

Ice Houses

- 13. James I of England commissioned the construction of the first modern ice house in Greenwich Park in 1619. Medieval versions, known as ice pits, have not survived but it is likely that what set them apart from the new seventeenth-century design was that later ice houses had brick-lined walls and were cylindrical in shape to help in temperature regulation and strength (Leslie 2017).
- 14. King James commissioned another ice house (or snow conserve) to be built at Hampton Court in 1625-6. It is known to have been a brick-lined round well, 9 m deep and 4.8m wide and covered with a thatched timber building. While there were variations in this design and ice houses also varied significantly in size, this early seventeenth-century model set the standard for future constructions (Leslie 2017).
- 15. Four decades later Charles II, who promoted and patronised science and technology, had an ice house constructed in Upper St James's Park, London in 1660. This scientific project also enabled Charles to entertain and impress by providing chilled drinks and ices to his retinue and guests, even in the height of summer (Leslie 2017).
- 16. Ice houses continued to be introduced to Britain during the mid-seventeenth century by travellers who had seen similar arrangements in Italy, where peasants collected ice from the mountains and used it to keep food fresh inside caves. The buildings are used for the storage of ice throughout the year and commonly used prior to the invention of the refrigerator. Some were underground chambers, usually man-made and close to natural sources of winter ice such as freshwater lakes.
- 17. During the winter, ice and snow would be cut from lakes or rivers and taken into the ice house and packed with insulation most often straw or sawdust. It would remain frozen for many months and could be used as a source of ice during summer months. In the correct conditions the ice could still be frozen until the following winter.
- 18. Primarily only large mansions had purpose-built buildings to store ice and there are many examples of ice houses across the UK, many of which have fallen into disrepair. British ice houses were commonly brick lined, domed structures, with most of their volume underground. They have a varied design depending on the date and builder, but were mainly conical or rounded at the bottom to hold melted ice usually with a drain to take away any water.

Previous archaeological Investigations.

- 19. An evaluation was carried out in February 2004 in the environs of Haddo House (Glasgow University Archaeological Research Division 2004). As part of the evaluation a Geophysical survey was undertaken before trial trenching commenced in order to establish the nature and extent of any archaeological remains within the area. Results of the Geophysical survey and trial trenching recorded a large stone platform of uneven construction, as well as a series of stone-lined drains.
- 20. A ground-penetrating radar survey undertaken at this time in the car park adjacent to Haddo House Hall demonstrated the existence of substantial structural remains. It is possible they are related to the earlier House of Kellie but as no excavation was carried

out to investigate further this could not be concluded with any certainty (Glasgow University Archaeological Research Division 2004)

- 21. In August 2005 a watching brief was maintained during the excavation of a soakaway and related drainage work at Haddo House (Murray 2005). No archaeological features or finds were identified during the excavation of the soakaway, although a small section of V-shaped stone drain of probable 19th-century date was recorded below a pathway on the south side of the chapel which adjoins the house.
- 22. A programme of work by The National Trust for Scotland to restore the terrace gardens to the rear of Haddo House, was undertaken in August 2008 (Murray 2008). The restoration removed the modern beds and also removed any remaining traces of petalshaped 'daisy' beds that were recorded to have been on either side of the house c1920.
- 23. The excavation of two small trenches on the southwest side provided a section across the top of one of the corner 'petal' beds. The trenches showed that the bed had been cut through a path-like surface of fine pink granite dust, which was concluded to represent one of the mid-19th-century paths.
- 24. An evaluation was undertaken in January 2012 for a trench to contain a lightning conductor beside the north wall of the main central block of Haddo House. An early 19th-century brick drain and part of a mid-19th-century garden path were recorded (Murray 2012).
- 25. The excavation of a trench for a new oil tank pipe was monitored in October 2012. It was excavated within the fill of existing services and no archaeological finds or deposits were recorded (Cameron 2013).
- 26. A semi-derelict Wendy House in the private garden of the south-wing of Haddo House was recorded during April 2014. Believed to have been made in the 1950s, the building was built of weather-boarded planks on a timber framework. The roof had been of tarpaper cut to resemble slates. Toy furniture that had been used in the Wendy House was also recorded (Murray 2014).

Historic Mapping

- 27. Robert Gordon's (1636-52) (Figure 2a) Formarten and part of Marr and Buquhan provides the earliest depiction of the Kellie, spelt 'Kelly'. Apart from depicting the water course of the River Ytahn to the northeast and the present Kelly Burn to the southest there is there is no detail on the immediate surrounding landscape to the castle.
- 28. Joan Blaeu's (1654 & 1662) (not shown) *Dvo Vicecomitatvs Aberdonia & Banfia* and Hermon Moll's (1745) (not shown) *The Shires of Bamf [i.e. Banff] and Aberdeen* surveys both depict and label the previous dwelling of Kellie, spelt 'Kellye', but provide no detail on the layout of the castle, simply the location.
- 29. William Roy's (1747-52) (Figure 2b) *Military Survey of Scotland* is the first survey to provide a detailed depiction of the designed landscape of Haddo House, but it does not provide any detail on the form of the house itself. The House and gardens would have been in existence for over ten years by the time of Roy's survey. The area in which the ice house is located is depicted by Roy as land under cultivation.
- 30. James Robertson's (1822) (not shown) *Topographical and military map of the counties of Aberdeen, Banff and Kincardine* is the first to depict the form of Haddo House as a roughly 'C-shaped' range and surrounded by woodland but little other detail on the form of the designed landscape.
- 31. As with Robertson's survey, John Thomson's (1826) (not shown) *Atlas of Scotland:* Northern Part of Aberdeen & Banff Shires, Southern Part depicts and labels the location of Haddo House and the associated surrounding woodland but very little detail of the actual from of the estate and buildings.
- 32. With Alexander Gibb's (1858) (Figure 3a) *Map of the north eastern districts of Aberdeenshire* more detail is provided. The roughly 'C-shaped' range of Haddo House is depicted with a separate structure located on the east side of the house. There is an

avenue/road aligned northeast/southwest that divides a woodland area to reach the Burn of Kelly which in-turn feeds into the lake currently referred to as 'Upper Lake'. This is the first survey that depicts the lakes and is assumed would have formed an element of the designed landscape. The wooded area currently known as 'Icehouse Wood' is depicted to the southwest with the current paths/track depicted.

- 33. The 1st edition OS (1871) (Figure 3b) is the first to depict the location of the ice house as a small square building and to the west of a northwest-southeast aligned path/track. To the west of the ice house another small square building is depicted and to the southwest there is a rectangular enclosure divided in two with a rectangular building aligned northwest-southeast and located on in the southeast corner.
- 34. The 2nd edition 6-inch OS (1901) (not shown) depicts the ice house along with the enclosure that is labelled as a 'nursery. The square building to the west of the ice house is no longer depicted and neither is the rectangular building on the southeast corner of the nursery.

Project Works

- 35. The programme of building recording was undertaken over three days which took place over the 15th-17th May 2017 and the agreed programme of mitigation works were to comprise the following key components:
 - to undertake a desk-based assessment to characterise the evolution of the site and to establish its changing landuse (See below within this document);
 - to undertake a Level 1 building recording of the historic upstanding buildings (both exterior and interior) comprising: photographic record, annotated plans / elevations and descriptive text;
 - the production of a Data Structure Report, detailing the nature, form and extent of the historic buildings(s); including:
 - an assessment of the stability of the structure, as seen, and the identification of any major cracks or tree root issues that could affect the structural integrity of the Ice House, with a view to establishing if it may be robust enough and in good enough condition to be opened to the public without having its long-term future compromised;
 - comments on the appropriate nature of the restoration with regards to the sensitivity of the structure itself. Such issues might include: how much of the structure survives intact, how much original material lies in the vicinity, and how much of this original material (particularly decorative features) might be replaced without affecting the historical and architectural integrity; and
 - the completion of an OASIS form.
- 36. All work were undertaken in accordance with the Written Scheme of Investigation (Klemen 2017) previously agreed with Aberdeenshire Council Archaeology Service and complied with the Chartered Institute of Field Archaeology's Standards and Policy Statements and Code of Conduct.

Volunteer Involvement

37. As part of the building survey works, Rathmell Archaeology provided training in building recording to volunteers each day. Fundamental to the project was the involvement and engagement of volunteers. Over the duration of the project a total of 15 volunteers were involved. The training and education of the volunteers would aim to provide a baseline of knowledge with the aim to promote engagement with the estate's heritage and in the wider geographical area.

Haddo Ice House Restoration Project

- 38. As part of the Year of History, Heritage and Archaeology 2017 the survey work was to be used to inform a restoration project involving the Haddo House Ice House and the project promoted as part of the Aberdeenshire 2017 Year of History, Heritage and Archaeology activities.
- 39. The survey/record information gathered is to be used as the base document for the restoration/stabilisation project of the ice house. The building survey would provide observations on the potential for reconstruction work. The restoration/stabilisation project will include full clearing out of debris and dirt, restoration and stabilising of the built structure as required for all elements of the physical fabric of the Ice House and the removal of trees over and in the immediate vicinity of the ice house, including the removal of roots (as far as is possible without compromising the structural integrity of the building).
- 40. The overall aim is for the cleaned and restored structure to be made accessible for the public. If this is not possible due to structural constraints to enter the building then interpretation boards will be located near to the ice house to enable members of the public to approach the exterior and be informed about the structure's history and function.

Findings: Building Recording

- 41. The Haddo Ice House is a Category C Listed Building (Listed Building ID: 16479, Canmore ID: 145999, HER ID: NJ83SE0076) located in an area of mature woodland approximately fifty metres southwest of the main Haddo Country Park car park (NGR NJ 86629 34434) (Figure 1).
- 42. The structure appears predominately as an uneven dome shape, situated on the woodland floor and located partly below ground level. It is roughly oval in plan with a northeast-southwest axis (Figure 4a & Figure 5). Access to the interior is through an entrance on the northeast side of the structure which is currently sealed off by a wooden fence panel (Figure 4b & Figure 6). A number of trees have grown up both around and over the structure (Figures 7a, 7b, 8a & 8b).
- 43. Due to the erosion that has taken place over the exterior of the dome it is difficult to be certain of its exact dimensions. However, it is possible to deduce these approximately: 12m northeast-southwest (length) by 7-7.5m northwest-southeast (width) (Figure 5). Within this extent there are eleven trees located across the dome.
- 44. Centrally located on the top of the exterior of the ice house earth dome is a square red brick constructed square roof-light with a cement rendered exterior. The outside dimensions are 1.35m by 1.35m by 200mm with the dimensions of the square roof-light itself 700mm by 700mm (Figure 9a). The inside of the square roof-light has been sealed by what appears to be a stone block, although the covering soil and vegetation was not fully cleared so this is not conclusive.
- 45. The main entrance to the ice house is on the northeast side of the building (Figure 6 & 9b) and is formed by roughly worked granite blocks with areas where smaller stones have been used to infill. The visible dimension of the northeast elevation have a maximum width of 2.25m and a height of 1.70m. The rectangular entrance/doorway has dimensions of 1.5m by 760mm in width and a depth of 617mm (Figure 6 & 9b). There is the presence of what would appear to be an original door hinge located on the upper east side of the entrance/doorway. This most likely was to hold an iron grille or gate.
- 46. The entrance passageway leads from the exterior of the ice house to the main chamber with dimensions of 2.18m in length by 1.20m in width and 2.25m in high (Figure 13). Both side walls (Figures 10a) are coursed and constructed of roughly worked granite with the ceiling formed by six rectangular and roughly worked granite blocks (Figure 10b).

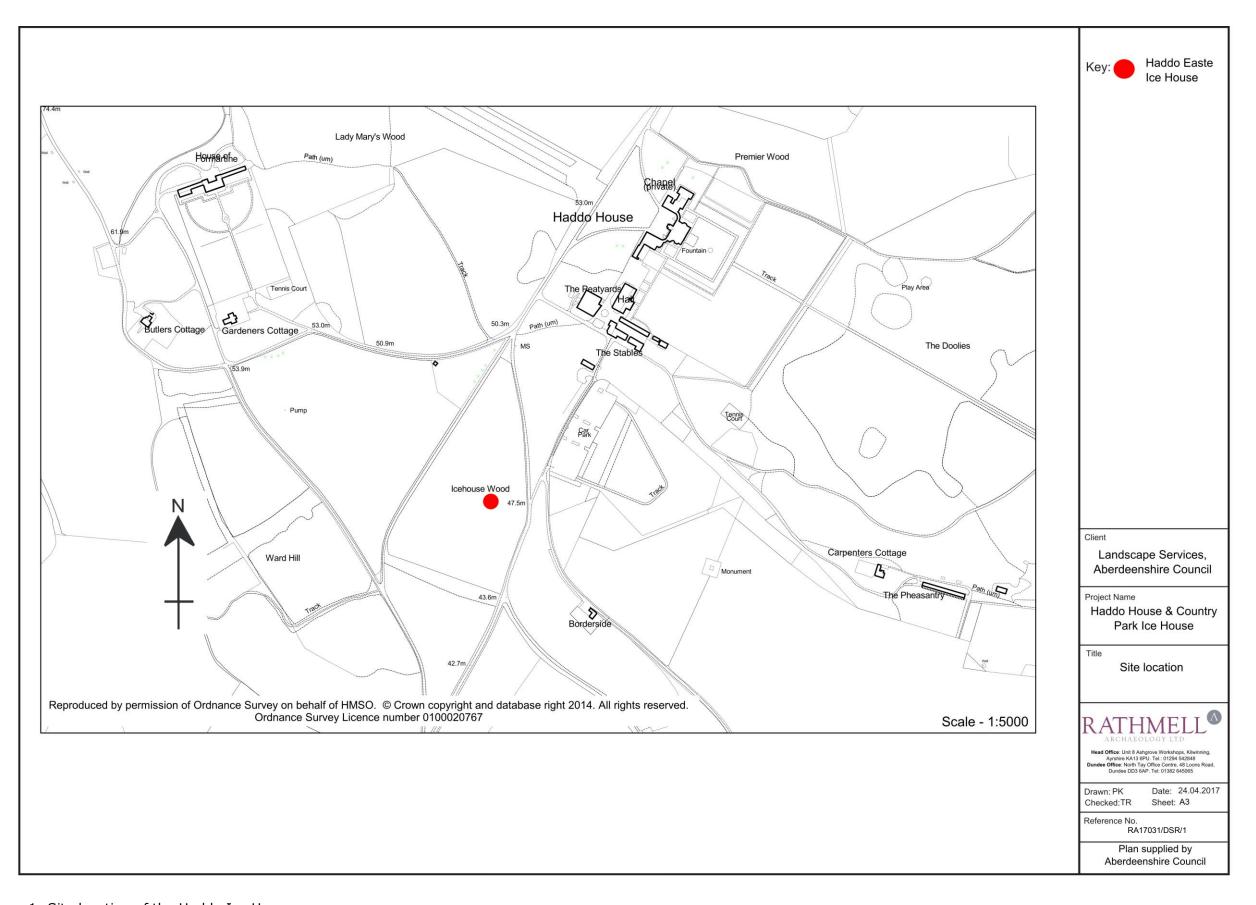


Figure 1: Site location of the Haddo Ice House



Figure 2a: Extract from Gordon's (1636-52) Formarten and part of Marr and Buquhan (right section)

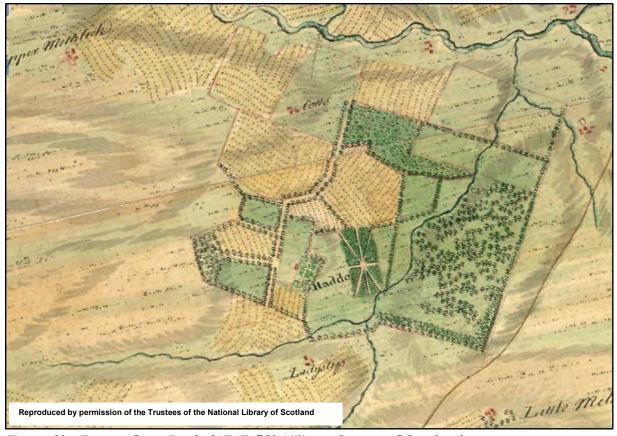


Figure 2b: Extract from Roy's (1747-52) Military Survey of Scotland

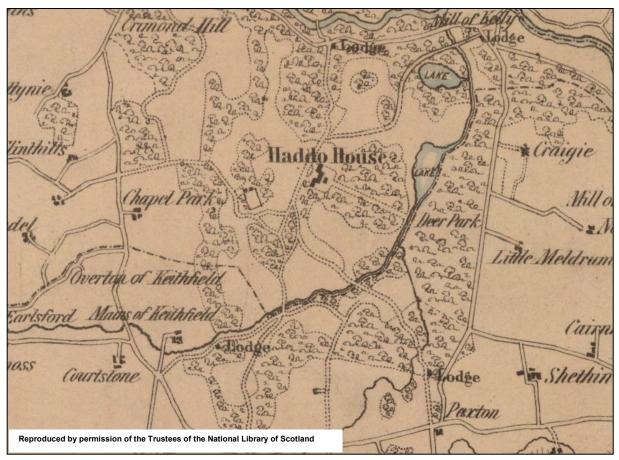


Figure 3a: Extract from Gibb's (1858) Map of the north eastern districts of Aberdeenshire

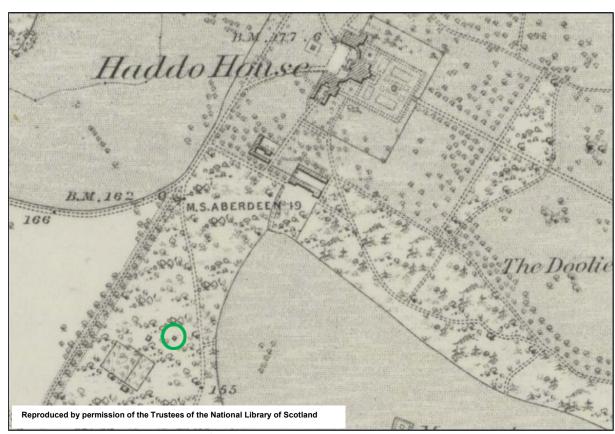


Figure 3b: Extract from the 1st edition Ordnance Survey (1871) Aberdeenshire, Sheet XXXVII (includes: Fyvie; Meldrum; Methlick; Tarves). Green circle depicts Ice house

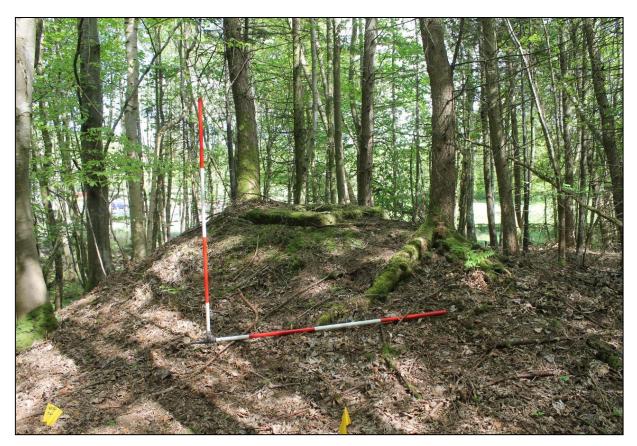


Figure 4a: Demonstrating the earth covered dome shape of the Ice House



Figure 4b: Main northeast access to Ice House and currently sealed off using a wooden fence panel

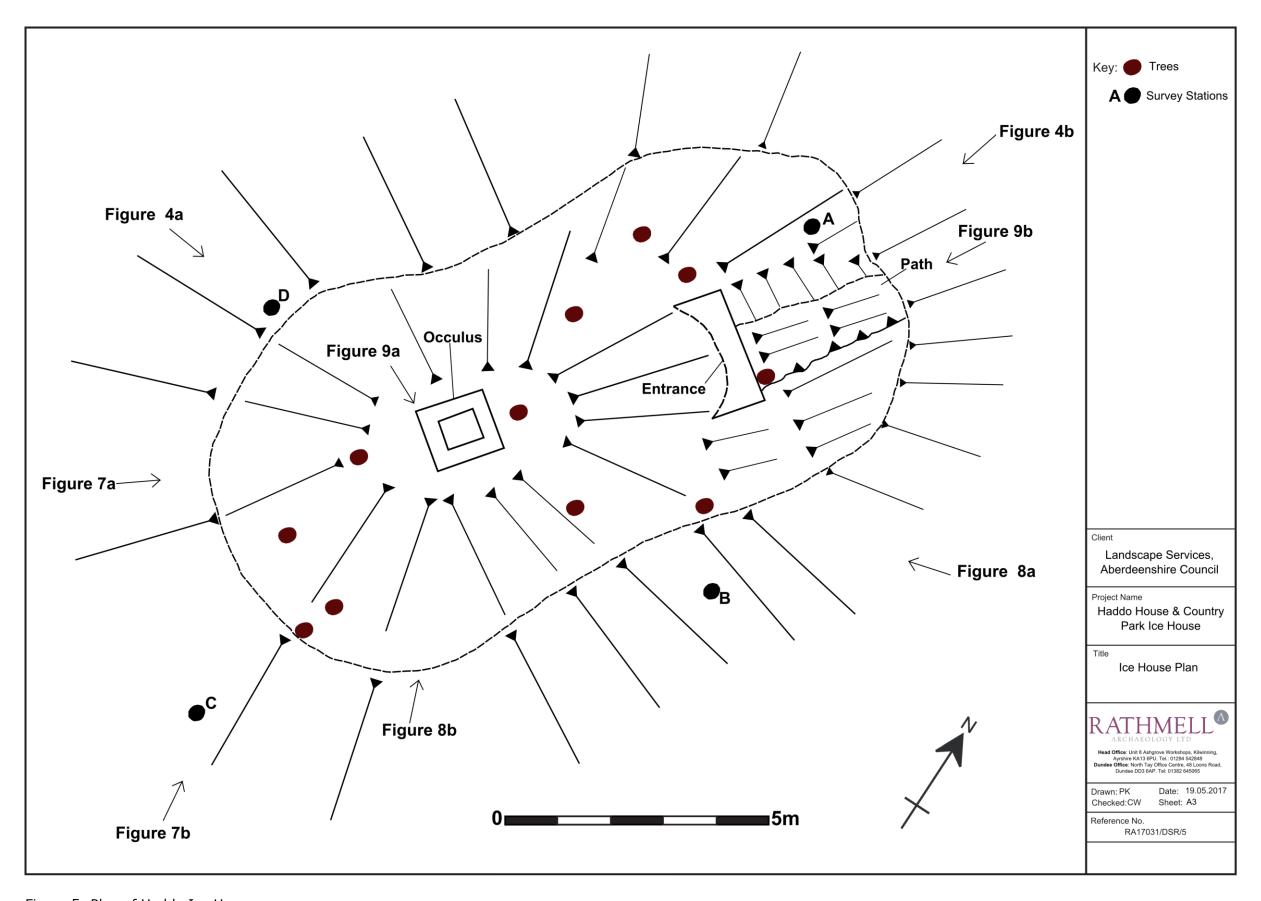


Figure 5: Plan of Haddo Ice House

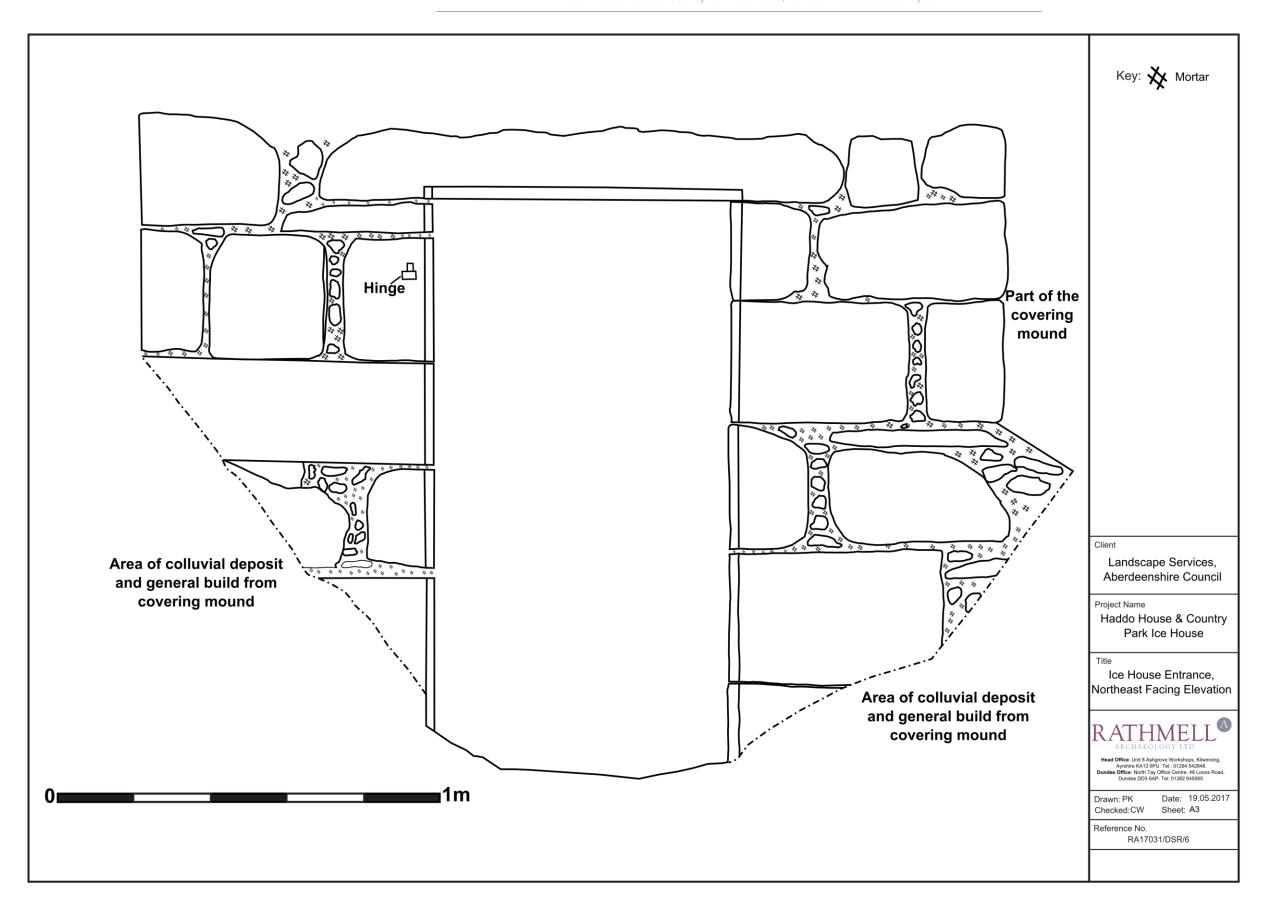


Figure 6: Elevation of the main northeast access to the Ice House



Figure 7a: Demonstrating the tree cover and profile of the exterior earth dome



Figure 7b: Demonstrating the tree cover and profile of the exterior earth dome



Figure 8a: Demonstrating the tree cover and profile of the exterior earth dome



Figure 8b: Demonstrating the tree cover and profile of the exterior earth dome



Figure 9a: Centrally located exterior square roof-light



Figure 9b: Main northeast facing entrance



Figure 10a: West (left) and east (right) entrance passageway walls



Figure 10b: Granite block entrance passageway ceiling



Figure 11a: Doorway (left) into the main circular chamber, doorway (right) to the exterior



Figure 11b: Southwest (back) wall of the ice house main chamber



Figure 12a: Floor of the main chamber Red brick dome roof with central square roof-light

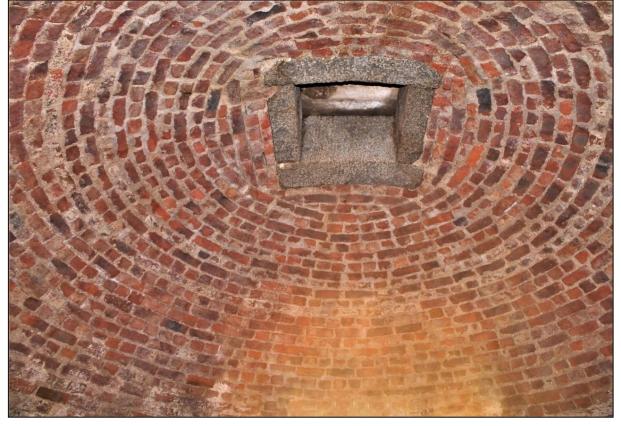


Figure 12b: Red brick dome roof with central square roof-light

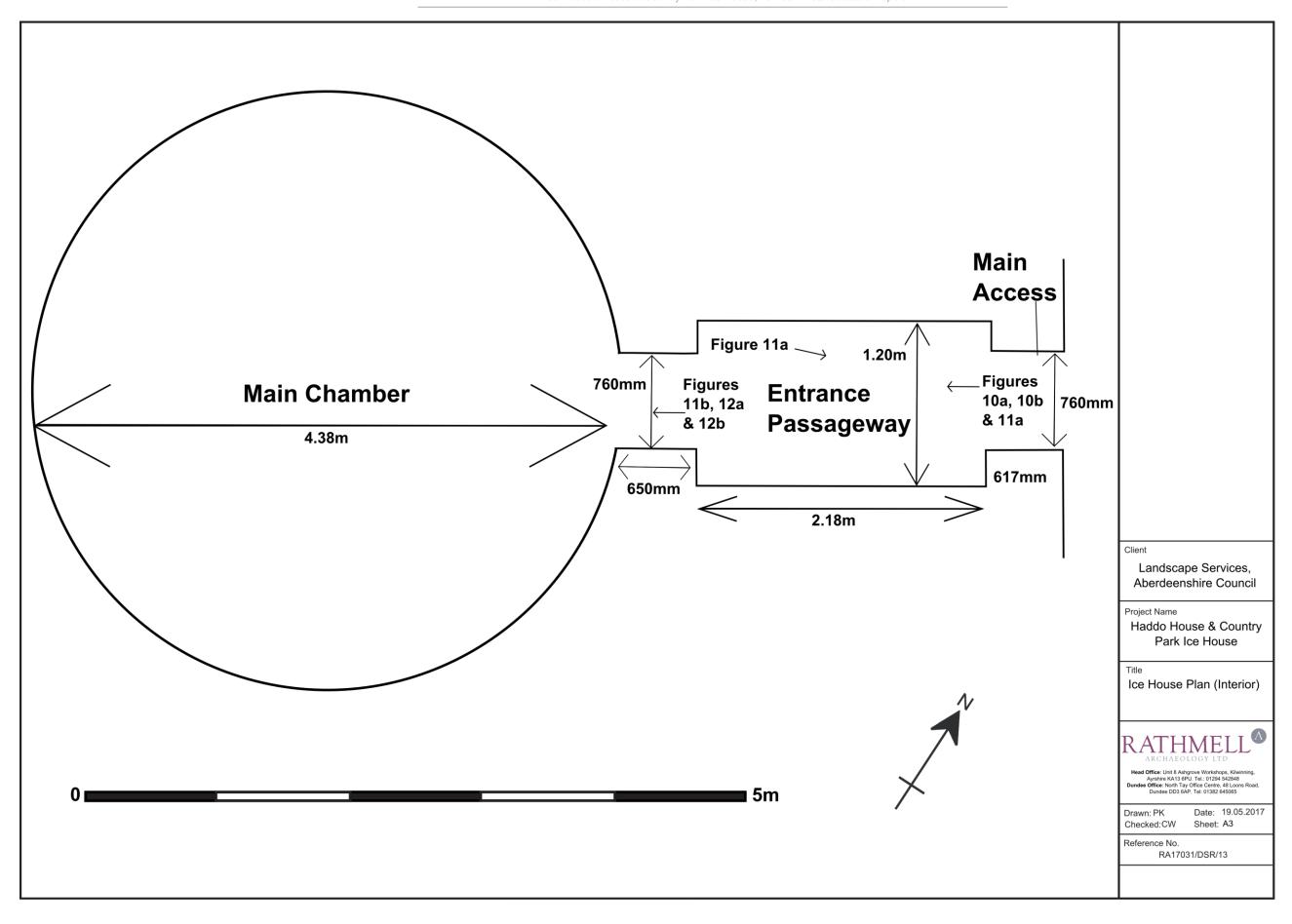


Figure 13: Ice House Plan (Interior)



Figure 14a: Southeast end of the possible nursery located to the SW of the ice house



Figure 14b: East facing wall of the possible nursery located to the SW of the ice house



Figure 15a: Architectural stone identified near to the possible 'nursery'



Figure 15b: Architectural stone identified near to the possible 'nursery'

- 47. There are two doorways at either end of the entrance passageway; one allowing access from the exterior and the other providing access to the main chamber (Figure 13). On both internal faces of the doorways within the entrance passageway, the original hinges are visible (Figure 11a). The rybats are of worked granite. The dimensions for the doorway into the main chamber are 1.76m high by 760mm in width and a depth of 650mm.
- 48. The main chamber is circular with a diameter of 4.38m and a height of 4.20m (Figures 11b, 12a & 13). The overall height may be more than that measured as there has been a build-up of rubbish and detritus on the floor of the chamber (Figure 12a) which may be relatively deep and which may also hide other features that could not be recorded. There is a drop of 1.50m from the doorway leading into the main chamber from the entrance passageway down to the current floor level.
- 49. The lower two thirds of the main chamber is constructed from worked and coursed granite (Figure 11b) with the upper one third of the main chamber comprising a red brick dome. The centrally located square roof-light is visible here, formed of worked rectangular granite blocks (Figure 12b).
- 50. Although there are a number of trees that are rooted into the exterior earth dome of the ice house, there are no visible signs of any cracking caused by the action of tree roots within the brick dome roof. There are also no visible signs of water having penetrated through any of the mortar between the bricks or the course of the granite blocks.

Possible structural feature

- 51. Located approximately 45m to the southwest of the ice house is a possible structural feature (Figures 14a & 14b). The area has been used as a small rubbish dump but there are signs of what appears to be a tumbled wall. The area is flat with a substantial amount of what appear to be roughly worked granite blocks.
- 52. There is a distinct area where the fallen stone suggests the outline of a wall (Figure 13a) measuring 5.5m north-south by 6m east-west. Where the two potential walls meet there would appear to be a return and forming a corner (Figure 14a). Due to vegetation cover across the area and the accumulation of rubbish it is difficult to get a proper understanding of the site as a whole. However, the way in which the stone is concentrated and the way it has tumbled would suggest the location of a wall. The area measures approximately 35-40m by 15m, although these are rough approximations.
- 53. There is also an area along the east side of the site suggestive of a small section of wall approximately 6m in length (Figure 14b). There are also a number of ornate architectural stones within the surrounding area (Figures 15a & 15b). It is possible that the pieces of ornate stonework were coping stones along the top of a wall or derived from an entrance to the possible structural feature.
- 54. On discussion with the Haddo Estate archivists if there was any record of this structural feature in the archives. Unfortunately there was no record of the structure in their archives. This area would provide a good opportunity, under the appropriate supervision, for further investigation to discover the true extent of the feature. This could involve investigating the area when the vegetation is less and may well define more distinct structural features. This would also help in drawing attention away from the accumulation of rubbish over the wider area.

Discussion

55. The masonry used for the ice house and in particular the interior main chamber appears to combine the local vernacular masonry tradition with that of a rusticated style grotto reminiscent of an Italian style feature encountered on the Grand Tour. The use of brick for the dome ceiling would have been substantially lighter and easier to form into a dome compared to the local granite.

- 56. The use of granite would have been a perfect insulating material to use in the construction with the cylindrical shape enabling efficient temperature regulation and strength. The presence of hinges on the exterior and both interior doorways suggests at least three separate doors that would have further acted in the prevention of allowing the outside temperature changes affect the interior temperature and so create a cold and stable environment.
- 57. The dome would have helped in the circulation of cold air around the internal chamber of the ice house with the soil covering adding extra insulation. The centrally located square roof-light would most likely have provided a source of natural light and also extra access should this have been required.
- 58. The possible structural feature located to the southwest of the ice house may well be the structure that is depicted on the 1st edition Ordnance Survey (1871) (Figure 3b) and labelled as 'Nursery' on the 2nd edition Ordnance Survey (1901) (not shown). The presence of a number of architectural pieces of stone may hint to a relatively ornate structure with the architectural pieces representing capping stones at entrances. Vegetation growth prevented the recording of any further pieces and there may well be other pieces to present.
- 59. George Hamilton-Gordon (1784-1860), the 4th Earl of Aberdeen (from 1801 after his father's detah), returned from his Grand Tour in 1804 and has been celebrated as opening up a new era for the estate and referred to as the 'Premier Earl'. He was an energetic laird who instigated a number of reorganisation, development and improvement policies.
- 60. By this time the Haddo estate by this period was huge, and the plans for the designed landscape were of a similarly grand scale. During the first half of the 19th-century, woodland trees were planted on an epic scale, and with the help of labourers and gardeners, virtually all of the main components of the present designed landscape were staked out, built, planted, or excavated, including the parks, drives, paths, terrace garden, the long SE avenue, the walled garden and lakes.
- 61. This fits well with Alexander Gibb's (1858) (Figure 3a) Map of the north eastern districts of Aberdeenshire. Which is the first survey that depicts the wooded area currently known as 'Icehouse Wood' with the current paths/track depicted. It is quite possible that during this period and influenced by his Grand Tour that the ice house was constructed within the wooded area and was to have a duel function as both ice house and an Italian style rusticated style grotto.

Structural Integrity

- 62. The building survey demonstrated that although a number of trees have taken root over the domed roof of the ice house, there has been no intrusion of roots into the internal brick dome roof/ceiling. No cracks were visible across the internal dome roof/ceiling and the bricks all appeared on visual inspection to be in very good condition.
- 63. There was also no evidence of water staining where water has permeated through the joins in the brick or granite blocks. Overall it would appear the internal environment has been a stable one.
- 64. Although on visual inspection the structure appears in very good condition it is strongly recommended that -should the restoration project proceed on the ice house- the advice of a suitably qualified and registered structural engineer should be sought to comment on the structural integrity of the ice-house.
- 65. The growth of trees and associated roots across the extent of the ice house may have helped to prevent the loss and erosion of the soil covering. It is recommended that any removal of the tress and roots must be undertaken by professionally qualified persons and that the advice of a qualified and registered structural engineer is sought to comment on any impacts the removal of trees and roots will have on the structural integrity of the ice house and to advise on any consolidation work required as a result of these changes in the structure's local environment.

Restoration Ethic

- 66. The restoration of the ice house, either with the aim of allowing the public to enter the structure, or –if the former is not appropriate– through the provision of linked information boards, would provide a good addition and further enhancement of the Haddo estate architecture and highlight Scottish vernacular architecture within an important and historically significant Scottish Estate.
- 67. Providing restoration of the ice house is carried out by professionally and qualified architectural conservators using where possible any original material recovered during restoration works or modern equivalents; for example the use of modern granite stone, Rathmell Archaeology do not foresee any major ethical issues with the restoration of the ice house.
- 68. There are however two main ethical questions which have to be considered. The first is whether to reinstate the square rooflight. This would provide illuminating the interior and returning the structure possibly to its original form. There are of course health & safety concerns. A grille could be fixed in place but there is the potential for this to be vandalised, particularly if fixed externally.
- 69. Secondly, there's the reinstatement of the doors. The Haddo Estate archives, as far as is known, have no written record of the construction and use of the ice house. There may well be photos that show which demonstrate the form these doors took. It's possible they were wooden, or possible *yetts* (iron grilles).
- 70. Further research might be able to confirm this. Another option is to consider is adding a more modern or abstract interpretation of the *yett* to create something more artistic and working in close conjunction with Historic Environment Scotland and the National Trust for Scotland, if both bodies consider this a possibility.

Conclusion

- 71. A programme of Historic Building Recording was required by Landscape Services, Aberdeenshire Council in advance of the proposed restoration works on the Haddo Estate Ice House (Category C Listed Building) (NGR: NJ 86629 34434). The works were designed to create a competent record of the historic elements of the Ice House before restoration.
- 72. This Data Structure Report represents the findings of Historic Building Recording works required Landscape Services, Aberdeenshire Council. The historic building recording survey confirmed that although the 19th century, granite-and-brick built structure, comprising circular chamber and narrow rectangular entrance passageway. The Ice House has been disused for many decades, but the structure both externally and internally appears to be intact and good condition, though naturally the advice of a suitably qualified and registered structural engineer should be sought to confirm this.

References

Cartographic

Blaeu, J	1654	Dvo Vicecomitatvs Aberdonia & Banfia			
Blaeu, J	1654	Dvo Vicecomitatvs Aberdonia & Banfia			
Gordon, R.	1636-52	Formarten and part of Marr and Buquhan)			
Moll, H	1745	The Shires of Bamf [i.e. Banff] and Aberdeen			
Ordnance Survey	1871	6-inch 1 st edition Aberdeenshire, Sheet XXXVII (includes: Fyvie; Meldrum; Methlick; Tarves)			
Ordnance Survey	1901	6-inch 2 nd edition Aberdeenshire Sheet XXXVII.NE (includes: Methlick; Tarves)			

Robertson, J	1822	Topographical and military map of the counties of Aberdeen, Banff and Kincardine			
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Thomson. J.	1826	Atlas of Scotland: Northern Part of Aberdeen & Banff Shires, Southern Part			

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Appendix 1: Discovery & Excavation in Scotland

LOCAL AUTHORITY:	Aberdeenshire
PROJECT TITLE/SITE NAME:	Haddo House & Country Park Ice House, Tarves, Stonehaven
PROJECT CODE:	RA17031
PARISH:	Methlick
NAME OF CONTRIBUTOR:	Peter Klemen
NAME OF ORGANISATION:	Rathmell Archaeology Limited
TYPE(S) OF PROJECT:	Historic Building Recording
NMRS NO(S):	None
SITE/MONUMENT TYPE(S):	None
SIGNIFICANT FINDS:	None
NGR (2 letters, 6 figures)	NJ 86629 34434
START DATE (this season)	15 th May 2017
END DATE (this season)	17 th May 2017
PREVIOUS WORK (incl. DES ref.)	None
MAIN (NARRATIVE) DESCRIPTION: (may include information from other fields)	Historic Building Recording was required by Landscape Services, Aberdeenshire Council in advance of the proposed restoration works on the Haddo Estate Ice House (Category C Listed Building) (NGR: NJ 86629 34434). The works were designed to create a competent record of the historic elements of the Ice House before restoration. The findings of Historic Building Recording works required Landscape Services, Aberdeenshire Council. The historic building recording survey confirmed that although the 19 th century, granite-and-brick built structure, comprising circular chamber and narrow rectangular entrance passageway. The Ice House has been disused for many decades, but the structure both externally and internally appears to be intact and good condition, though naturally the advice of a suitably qualified and registered structural engineer should be sought to confirm this. The Historic Building Recording works also involved local volunteers
PROPOSED FUTURE WORK:	None
CAPTION(S) FOR ILLUSTRS:	None
SPONSOR OR FUNDING BODY:	Landscape Services, Aberdeenshire Council
ADDRESS OF MAIN CONTRIBUTOR:	Unit 8 Ashgrove Workshops, Kilwinning, Ayrshire KA13 6PU
E MAIL:	contact@rathmell-arch.co.uk
ARCHIVE LOCATION (intended/deposited)	Report to Aberdeenshire Council Archaeology Service and archive to National Record of Historic Environment.

Appendix 2: Photo Register

Photographic Register:

Image No.	Print		Slide		Digital	Description	From	Date
	Film No.	Neg. No.	Film No.	Neg. No.				
001	-	-	-	-	4966	Volunteers working	NE	15/05/17
002	-	-	-	-	4967	Volunteers working	NE	15/05/17
003	-	-	-	-	4968	Volunteers working	W	15/05/17
004	-	-	-	-	4969	Highest point, looking down onto the SE end of the possible nursery	N	16/05/17
005	-	-	-	-	4970	Looking up to the highest point	S	16/05/17
006	-	-	-	-	4971	Looking up to the highest point	S	16/05/17
007	-	-	-	-	4972	Looking up to the highest point with scale	S	16/05/17
800	-	-	-	-	4973	Showing the possible outline of the SE end of the nursery	S	16/05/17
009	-	-	-	-	4974	Showing the possible outline of the SE end of the nursery	W	16/05/17
010	-	-	-	-	4975	Showing the possible east facing nursery wall	E	16/05/17
011	-	-	-	-	4976	Showing the possible east facing nursery wall	E	16/05/17
012	-	-	-	-	4977	Showing the possible east facing nursery wall	E	16/05/17
013	-	-	-	-	4978	Looking over the possible nursery	N	16/05/17
014	-	-	-	-	4979	Possible structural feature	W	16/05/17
015	-	-	-	-	4980	Possible structural feature with scale	W	16/05/17
016	-	-	-	-	4981	Possible structural feature 1	SW	16/05/17
017	-	-	-	-	4982	Architectural stone 1	N	16/05/17
018	-	-	-	-	4983	Architectural stone 1 with other architectural stones	N	16/05/17

Image No.	Print Slide		Blide Digital		Description	From	Date	
	Film No.	Neg. No.	Film No.	Neg. No.				
019	-	-	-	-	4984	Architectural stone 2	N	16/05/17
020	-	-	-	-	4985	Architectural stone 3	S	16/05/17
021	-	-	-	-	4986	Architectural stone 4	S	16/05/17
022	-	-	-	-	4987	Possible structural feature 2	SW	16/05/17
023	-	-	-	-	4988	Possible structural feature 2	N	16/05/17
024	-	-	-	-	4989	Images around Haddo Estate	S	16/05/17
025	-	-	-	-	4990	Images around Haddo Estate	S	16/05/17
026	-	-	-	-	4991	Images around Haddo Estate	S	16/05/17
027	-	-	-	-	4992	Square roof-light, top of Ice House	N	16/05/17
028	-	-	-	-	4993	Square roof-light, top of Ice House	W	16/05/17
029	-	-	-	-	4994	Square roof-light	W	16/05/17
030	-	-	-	-	4995	Architectural example of stone work	SW	16/05/17
031	-	-	-	-	4996	Section view of the ice house: exterior	NE	16/05/17
032	-	-	-	-	4997	Section view of the ice house: exterior	Е	16/05/17
033	-	-	-	-	4998	Section view of the ice house: exterior	SE	16/05/17
034	-	-	-	-	4999	Section view of the ice house: exterior	S	16/05/17
035	-	-	-	-	5000	Section view of the ice house: exterior	S	16/05/17
036	-	-	-	-	5001	Section view of the ice house: exterior	SE	16/05/17
037	-	-	-	-	5002	Section view of the ice house: exterior	W	16/05/17
038	-	-	-	-	5003	Section view of the ice house: exterior	W	16/05/17
039	-	-	-	-	5004	Section view of the ice house: exterior	W	16/05/17

Image No.	Print		Slide		Digital	Description	From	Date
	Film No.	Neg. No.	Film No.	Neg. No.				
040	-	-	-	-	5005	Volunteers using the dumpy level	N	17/05/17
041	-	-	-	-	5006	Volunteers working	N	17/05/17
042	-	-	-	-	5007	Volunteers working	NE	17/05/17
043	-	-	-	-	5008	Volunteers working	SE	17/05/17
044	-	-	-	-	5009	Door, internal, into the main chamber	NE	17/05/17
045	-	-	-	-	5010	Door, internal, to the exterior of the ice house	SW	17/05/17
046	-	-	-	-	5011	Door, internal, to the exterior of the ice house	SW	17/05/17
047	-	-	-	-	5012	Door, internal, to the exterior of the ice house	SW	17/05/17
048	-	-	-	-	5013	Door, internal, to the exterior of the ice house	SW	17/05/17
049	-	-	-	-	5014	Showing stonework in the entrance passageway	NE	17/05/17
050	-	-	-	-	5015	Showing stonework in the entrance passageway	SW	17/05/17
051	-	-	-	-	5016	Ceiling in the entrance passageway	NE	17/05/17
052	-	-	-	-	5017	Main chamber of the ice house	NE	17/05/17
053	-	-	-	-	5018	Showing the detail of the brick roof and square roof-light	NE	17/05/17
054	-	-	-	-	5019	Showing the roughly worked granite stone blocks	NE	17/05/17
055	-	-	-	-	5020	Showing the brick dome	NE	17/05/17
056	-	-	-	-	5021	Floor of the main chamber	NE	17/05/17
057	-	-	-	-	5022	Volunteers at the end of the survey	NE	17/05/17
058	-	-	-	-	5023	Main entrance to the ice house	NE	17/05/17

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