

The Centre for
Applied
Archaeology



University of
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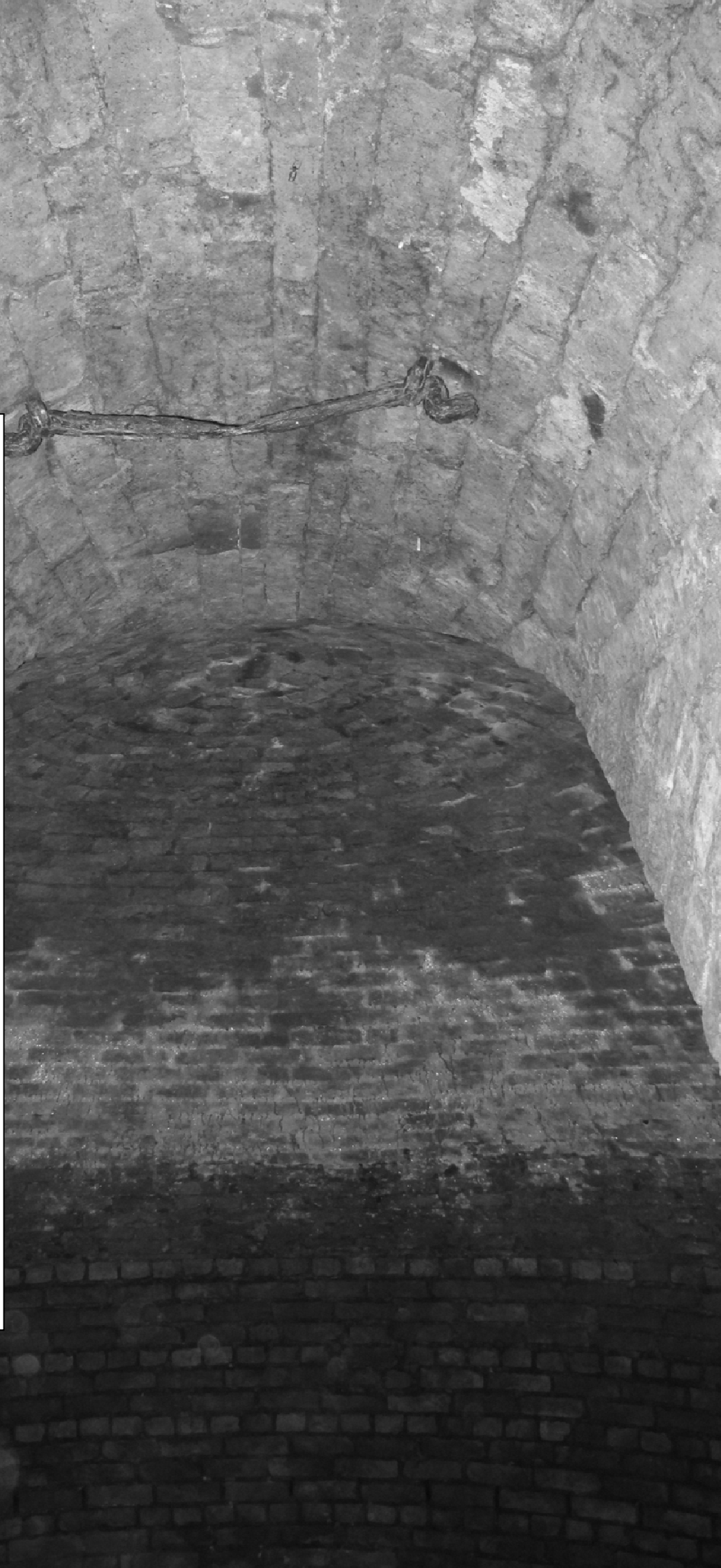
**Archaeological
Building Survey:**

The Gates, Grotto and
Ice House, Worsley
New Hall. Final
Version.

Client: Peel
Investments (North)
Ltd.

Technical Report:
Vicky Nash, Matt
Bishop & Dr Michael
Nevell

Report No: 14/2012





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Summary

The Centre for Applied Archaeology was commissioned by Peel Investments (North) Ltd to undertake a Level 2 Building Survey of the Gates, Grotto and Ice-House, at Worsley New Hall, M28 2LJ. The survey work was carried out in November 2011 by Vicky Nash, Brian Grimsditch and Matthew Bishop and conformed to guidelines as set out by English Heritage in *Understanding Historic Buildings – A guide to good recording practice, English Heritage Guidelines 2006*.



1. Introduction

1.1 Background

The Centre for Applied Archaeology was commissioned by Peel Investments (North) Ltd to undertake a Level 2 Building Survey of the Grade II Listed Gates (GMHER 1854.2), island Grotto and Grade II Listed Ice House (GMHER 1692.1), Worsley New Hall, M28 2LJ (**Fig 1**). The survey work was carried out in November 2011 by Vicky Nash, Brian Grimsditch and Matthew Bishop.

1.2 Location, Topography and Current Land Use

The study area lies within the western half of the town of Worsley, approximately 4km west of Salford City centre, 0.5km east of Boothstown and 0.2km north of the Bridgewater Canal. The study area is centred at NGR SD 73950 00581 and is bounded to the north by Leigh Road (A572), to the east by Junction 13 of the M60, to the south by the Bridgewater Canal and to the west by Booth's Bank Farm. The study area lies on rising ground which measures 25m AOD at its southern boundary and 61m AOD at its northern boundary.

Geology

The overlying drift geology, as mapped by the OS Geological Survey, comprised Glacio-Fluvial Sand and Gravel. The underlying solid geology comprised of mudstone, siltstone and sandstones of the Upper Carboniferous Millstone Grit Group (<http://www.bgs.ac.uk>).

Designation

The study area encompasses two listed buildings entered on English Heritage National Heritage List. These entries are all listed at Grade II and include the Worsley New Hall Ice House (ID: 211998) and the Entrance Gates and Adjoining Quadrant Walls for Worsley New Hall (ID: 211996). In addition the site of Worsley New Hall and its formal Gardens was designated as the Middle Wood Site of Biological Interest (Grade B) by the Greater Manchester Council in 1984.



2. *Methodology*

2.1 *Introduction*

This survey has followed the conventions laid down in *Understanding Historic Buildings. A guide to good recording practice* (English Heritage 2006) and the Institute of Field Archaeologists' *Standard and Guidance for the archaeological investigation and recording of standing buildings or structures* (IFA, Revised Edition 2001).

2.2 *Scope of Works*

In brief this work comprised of:

- Historic research including a historic map regression exercise (scaled to a large, uniform size), examination of Census records, Trade Directories and local history sources from Salford Local History Library.
- A photographic survey showing general view of the building's exterior and setting; the overall appearance of the buildings principle rooms and circulation areas; detailed coverage of the buildings external and internal appearance; and architectural and structural features relevant to the building's design. The photographs have been taken as high resolution digital photographs, with the viewpoint directions shown on plans.
- A measured ground floor and first floor plan at 1:100 scale.
- A written report including a description of the structure; a discussion of the site's development and importance; and a photographic catalogue.



3. *Historical Background*

3.1 *Introduction*

The background history of the Gates, Grotto and Ice House was mainly uncovered from cartographic evidence although a certain amount of information was obtained from local historical sources taken from Salford University Library, Salford Local History Library, the Bridgewater Estate Archive and Census Returns.

3.2 *The Cartographic Evidence (Figs 2-3)*

Gates

The OS map of 1893 suggests that the Gates were positioned at the eastern end of the New Hall Carriageway adjacent to the East Lodge. The gates were moved to their present position in the 1970s after the construction of the M62 through Worsley, and are shown in their current position on OS mapping from the 1980s onwards.

Grotto

Although the boating lake is shown on the 1848-50 OS map it had not reached its developed form and there was not, as yet an island for the Grotto. The first map to show the Grotto is the OS map of 1893. This depicts an irregular-shaped structure on the western side of the Lake's central island. By the OS map of 1909 this structure is depicted as having a small circular clearing to its east, which contained a central pathway which connected the two footbridges. The structure appears unaltered on all subsequent OS mapping, although by the OS map of 1956 the structure had disappeared and only the clearing appeared on mapping from this point onwards.

Ice House

The OS maps of 1893 and 1908 both depict an oval feature abutting the southern side of the Carriage Way to the west of the New Hall. This is the site of the present ice house and probably represented the entrance mound. The mound does not feature on any of the subsequent mapping.

2.3 *The Documentary Evidence*

Gates

Documentary research confirms that the gates were constructed around 1850 by Cottam and Hallen of London, who won award when the gates were displayed at the Great Exhibition of 1851 (Thorp 2009: 12; *The Builder*, Dec. 10, 1853; **Fig 22**). The gates were constructed to a design by Blore (architect of Worsley New Hall and its associated garden structures) and in their original form consisted of a set of double carriage gates, flanked by smaller pedestrian gates, which were supported by intermediate square piers constructed from iron bars (English



Heritage, 1987: EHB211996). The gates were constructed in wrought iron, with decorative cast-iron Baroque-style scroll work above the carriage gates. At either side of the gates were two ashlar piers with recessed panels and moulded caps, which were flanked by pierced quadrant walls (English Heritage, 1987: EHB211996). Documents held within the Bridgewater Estate Archive confirm that in the summer of 1940 a Manchester Corporation bus crashed into the gates, which caused substantial damage resulting in the rebuilding of one of the ashlar piers, repair of the carriageway gates' fitting and the rewiring of the lamps which sat on top of the piers (BEA/IV.C20/Vol: 837).

Grotto

The Greater Manchester Historic Environment Record describes this structure as a Victorian Folly or Grotto. However, the current survey has not located any contemporary documentary evidence relating to the Grotto. There is, however, a photograph from the magazine *Country Life* which shows the stone walls of the Grotto on the island in 1901 (*Country Life* 20 July 1901; **Fig 23**). Site visits have confirmed that the structure consisted of three stone-built circular chambers, which were connected by several internal and external passageways. The larger central chamber had a brick vaulted roof and stone entrance way on its eastern side. The two smaller chambers contained double-arched entrance ways on their western sides which had a central stone support.

Ice House

Contemporary accounts of the Ice House are lacking, although details may yet be uncovered within the Estate archive. The current archaeological survey work has confirmed the form of the structure, it was a 'cup and dome' type, and that it was almost certainly built during the 1840s. It is now a Grade II listed building (Thorpe, 2009: 7).



4. *Building Description I: The Gates*

4.1 *Listed Building Description*

The gates at Worsley New Hall were first listed on 2 September 1987. Their current list entry number is 1162967. The following is the Listed Building entry held by English Heritage.

‘WORSLEY LEIGH ROAD SD 70 SW (south side) 1/38 Entrance gates to former Worsley New Hall and adjoining - quadrant walls G.V. II

Entrance gates. c.1850. Probably by Blore for the 1st Earl of Ellesmere. Made by Cottam and Hallen of London. Cast and wrought iron with ashlar walls to either side. Double carriage gates flanked by smaller pedestrian gates. The gates are supported by intermediate square piers constructed of iron bars. The gates are of similar construction. All have elaborate scrollwork at top and bottom. The carriage gates rise to a Baroque-type scrolled head and are surmounted by the outline of a cartouche. Bold ashlar piers to either side have recessed panels and moulded caps. Pierced quadrant walls. The gates won an award when exhibited at the Great Exhibition of 1851. Illustrated in *The Builder*, Dec. 10, 1853.

Listing NGR: SD7432200752’

4.2 *Description of Current Structure (Figs 4, 9-11, 23)*

The gates were constructed of wrought and cast iron. The main gates were double carriage gates. They were supported by intermediate square piers constructed of iron bars. The carriage gates were crowned by the outline of a cartouche. They rose to a Baroque style scrolled head. The double carriage gates had intricate scrollwork at the top and the base. The main gates had smaller pedestrian gates either side. The gates were flanked by bold ashlar pillars. The pillars had moulded stone caps and recessed chamfered panels.

The gates were adjoined by two symmetrical quadrant walls. These walls were constructed of fine ashlar. The walls had stone pillars at each end. One pillar was attached to the gates and one was adjacent to the road. In between the stone pillars were three sections of wall. They angled out from the gates north, towards the road. The wall had an ashlar plinth and the lower part of the wall had four courses. Atop this was a chamfered stone ledge. Surmounting the ledge was a decorative section. This decorative section consisted of adjoining elliptical colonnettes. Atop this sat a moulded stone balustrade. Dividing the three sections of the walls were two stone pillars. These had a chamfered panel.



5. Building Description II: The Grotto

5.1 Description (Figs 5-7, 12-16, 23)

The Grotto consisted of three chambers and two covered walkways. The building was adjacent to the lake and built to the east of the lake. The larger, main chamber was circular in plan and had two smaller, circular chambers built west of it. The smaller chambers protruded from the north-west and south-west part of the main chamber. These were all linked by covered walkways that connected from the north and south centre points from the main chamber into the eastern centre points of the smaller chambers.

The Grotto was built in an irregular style. Different materials, bonds and styles were used. The majority of the construction was stonework. The walls of the three chambers and walls and roofs of the covered walkways were all rough stonework. These features were a random rubble construction and the stones were an irregular shape and size. The courses of all walls were laid to no pattern. The entrances and doorways had larger and more regular stones as quoins.

Access into the main chamber was an east facing arched entrance. It consisted of three stone pieces. Two stone supports were bonded to the walls of the chamber and these were surmounted by a single arched centre piece of stone spanning the entrance. The doorways into the covered walkways were formed by segmented arches of larger stone quoins bonded into the walls. Walls were brought to course to coincide with the height of quoins and openings. Four recesses were constructed into the walls internally in the main chamber. Separating each recess was a pillar of stones that served as a roof support. The recesses had stone bases that served as seats or ledges. Surmounting the stone walls of the main chamber were brick barrel vaulted roofs. The roof had small circular openings irregularly spaced. These went through the roof and were not covered.

The smaller western chambers were accessed by the covered walkways that protruded from the main chamber between them. They were also accessed by openings at the western part of these smaller chambers. These openings were formed by two segmented archways of stone quoins. The openings had one large stone plinth in between them. This supported one side of each archway and the other sides were built up from floor level. Larger, squared stones were used for the arches. Both had a larger chamfered keystone. The roofs on the smaller chambers were stone and barrel vaulted. Like the walls they were constructed of roughly cut stone and laid irregularly.



6. Building Description III: The Ice House

6.1 Listed Building Description

The Ice House at Worsley New Hall were first listed on 29 July 1966. Its current list entry number is 1162987. The following is the Listed Building entry held by English Heritage.

‘WORSLEY LEIGH ROAD SD 70 SW (south side) 1/40 Worsley Hall 29/7/66
Ice-house – II

Ice-house. 1840s. Built for the 1st Earl of Ellesmere. Hammer-dressed stone; brick internally. A barrel-vaulted structure which creates a mound in the ground level and is entered at one end. All that is visible externally is a blocked up door in a segmental section of stonework which reflects the shape of the vault inside. Interior not inspected but said to contain an unusual vaulted approach chamber with stone-lined doorways, 5 stone steps down and a deep shaft which tapers downwards.

National Grid Reference: SD 74011 00753’

6.2 Description (Figs 17-21, 24)

The structure forms a mound in the earth at ground level. It is a brick barrel vaulted structure. The ice house is a ‘Cup and Dome’ style. Its northern elevation was constructed of a segmented section of hammer dressed stonework. It measured 2.15m in length and 1.50m in height, from the ground. The doorway had been blocked with breezeblocks but the ice house was accessible through a small gap. The doorway measured c1.00m wide. Iron door hinges remained in the doorway.

Internally a vaulted approach chamber led to the ice chamber. The chamber was 1.85m in height and 1.35m in width. Five brick steps surmounted by stone led down from the external doorway to the vaulted approach chamber. The steps were 0.27m wide and 0.19 deep. The approach chamber had walls constructed of large irregular sandstone blocks laid unevenly. The ceiling was formed by two large ashlar slabs. The approach chamber led to the ice chamber and the doorway separating the two was 0.90m in width and 1.49m in height. The doorway was framed by hammer dressed stone quoins, rounded on the northern side. One iron door hinge pin remained. The doorway had a hammer dressed stone lintel.

The distance from the doorway to the main ice chamber was 0.66m. This led to a drop into the shafted ice chamber that tapered to towards the base. The area immediately behind the doorway, leading to the chamber was barrel vaulted brick. An iron bar fixture remained in the ceiling of this area. The ice chamber was 4.54m in diameter and 4.70m in height. The full height of the chamber was obscured by the base containing rubble. The chamber was barrel vaulted and the brick was laid in an English garden wall bond.





7. Discussion

7.1 Phasing

Phase 1: Establishing the Worsley New Hall Estate, c. 1850

Although documentary evidence for these three landscape structures (Gates, Grotto and Ice-House) is largely lacking (with the notable exception of the Gates), it seems highly likely that all three were built during the establishment of the Estate grounds in 1840s and early 1850s. The Gates are attested from around 1850, whilst the map evidence suggests that the island and its Grotto cannot have been built before the period 1848-50. The 1893 OS map shows the Grotto and the mound for the ice-House entrance.

Phase 2: 20th Century: Decline and Alteration

All three landscape structures appear to have remained largely unaltered whilst the Worsley New Hall estate flourished. However, after the demolition of the new hall in the 1940s significant changes occurred at all three sites. Firstly, the eastern end of the boating lake gradually silted, allowing easier access to the island and its Grotto, whilst the Grotto itself became overgrown and partially ruinous. Secondly, the entrance to the ice-House was blocked so as to stop illegal access. Finally, the original location of the Gates, by the eastern Lodge, was built over by the western access roundabout for the M62 in the 1970s. This led to the Gates being moved c. 100m to the west where a new entrance way was formed into the New Hall estate. This may have been the moment when the lamps and stone vases on the gate piers were lost.

7.2 The Archaeological Context of the Landscape Structures

The Gates, Grotto and Ice-House are typical features of designed landscapes from the 18th and 19th centuries. All three may be described as pleasure structures, designed to be seen by the narrow elite who lived in and visited the hall.

Ornamental Entrances and Gates

Within the Manchester City region there are several notable surviving designed estate landscapes from the 18th and 19th centuries surrounding contemporary hall buildings. These include Dunham Park, Heaton Park, Lyme Park, Tatton Park and Wythenshawe Park. Ornamental gateways with cast-iron work can still be seen at all of these sites, although, only the gates at Worsley New Hall are known to have been exhibited at the Great Exhibition in London. These Gates are thus a notable piece of mid-Victorian ironwork and one of the few pieces of metal-work sculpture to survive from the Great Exhibition of 1851.

Lakes and Follies

Ornamental and boating lakes can also be found at most of the estates mentioned above (the exception being Wythenshawe). However, only Worsley New Hall appears to have had an



island Grotto. The Grotto appears to have been built as part of the tradition of eye-catching garden folly design which stretches back to the 18th century. The Japanese Garden at Tatton Park, with its island folly structures, is a late Edwardian example from the region.

Ice Houses

An ice house is a building built for the storage of ice and they were common landscape structures within the grounds of country houses. The ice was usually carted from a nearby fishpond, ornamental lake, or boating lake, sealed into the ice house and left until the summer when it was used for preserving food and cooling drinks. The process relied on the fact that when ice is packed together into a large mass its relatively small surface area slows down the process of melting (OAU 1995, 2). Most surviving ice houses in Britain were built in the grounds of country houses (records suggest that around 3000 estate ice houses were built between the early 17th and late 19th centuries), and were underground stone or brick chambers. They were thus status symbols of wealth as well as practical structures.

There are thousands of ice houses known from Britain, spanning the early 17th century to the early 20th century, of which 528 are listed in England. The high point in their construction and use came in the 19th century when elaborate architect-designed examples were built for the landed elite, whilst small domestic versions became popular with the growing middle class. The introduction of gas and electric refrigerators in the 1920s and 1930s rendered the ice house redundant (OAU 1995, 2).

The example that survives from Worsley New Hall is a finally engineered and architect-designed estate ice house from the peak of ice house building in the 19th century (OAU 1995, 19-20). The form of the Worsley New Hall ice house is that of the ‘cup-and-dome shape’, characterised by an entrance tunnel and an oval or circular ice chamber with a dome and steeply sloping sides leading down to a drain (OAU 1995, 17; **Fig 24**). Although very common these represented the peak of domestic ice house construction and could only be afforded by the extremely wealthy as it needed the wider infrastructure of lake and labour to maintain it.



8. Sources

Bibliography

Brownbill, J. & Farrer, W. 1911, *A History of the County of Lancaster: Volume 4*. Victoria County Histories.

English Heritage, 2005, *Understanding Historic Buildings. A guide to good recording practice*. English Heritage.

Institute of Field Archaeologists', 2001, *Standard and Guidance for the archaeological investigation and recording of standing buildings or structures* (IFA, Revised Edition 2001).

Irvine, J. 1995, *Worsley Park, Salford: An Archaeological Evaluation*. University of Manchester Archaeological Unit.

Nash, V. 2011, *Archaeological Desk-Based Assessment: Worsley New Hall, Worsley, Greater Manchester*. Centre for Applied Archaeology.

National Planning Policy Framework (Department for Communities and Local Government, March 2012).

Nears, P. 2011, *Worsley New Hall: Presentation to the Eccles and District History Society*.

OAU 1995, *English Heritage Monuments Protection Programme Step 1 Report. Ice-Houses*. Oxford Archaeology Unit.

Special Collections

Bridgewater Estate Archives, 1840 to 1958. University of Salford Library.

Maps

OS 1" to 6 Mile, Country Series Provisional Edition 1949, Lancashire Sheet 103 NW.

OS 1:10,560, National Grid Series 1956, Sheet SD 70 SW.

OS 1:10,000, National Grid Series 1975, Sheet SD 70 SW.

OS 1:10,000, National Grid Series 1991, Sheet SD 70 SW.

OS 1:10,000, National Grid Series 1999, Sheet SD 70 SW.

Web Sources

Census Records for England 1841 – 1901 – Ancestry.co.uk

Catford, N. 2002, Worsley – 4 Group, 70 Brigade AAOR serving the Manchester GDA. - http://www.subbrit.org.uk/rsg/sites/w/worsley/door_to_SOR.html





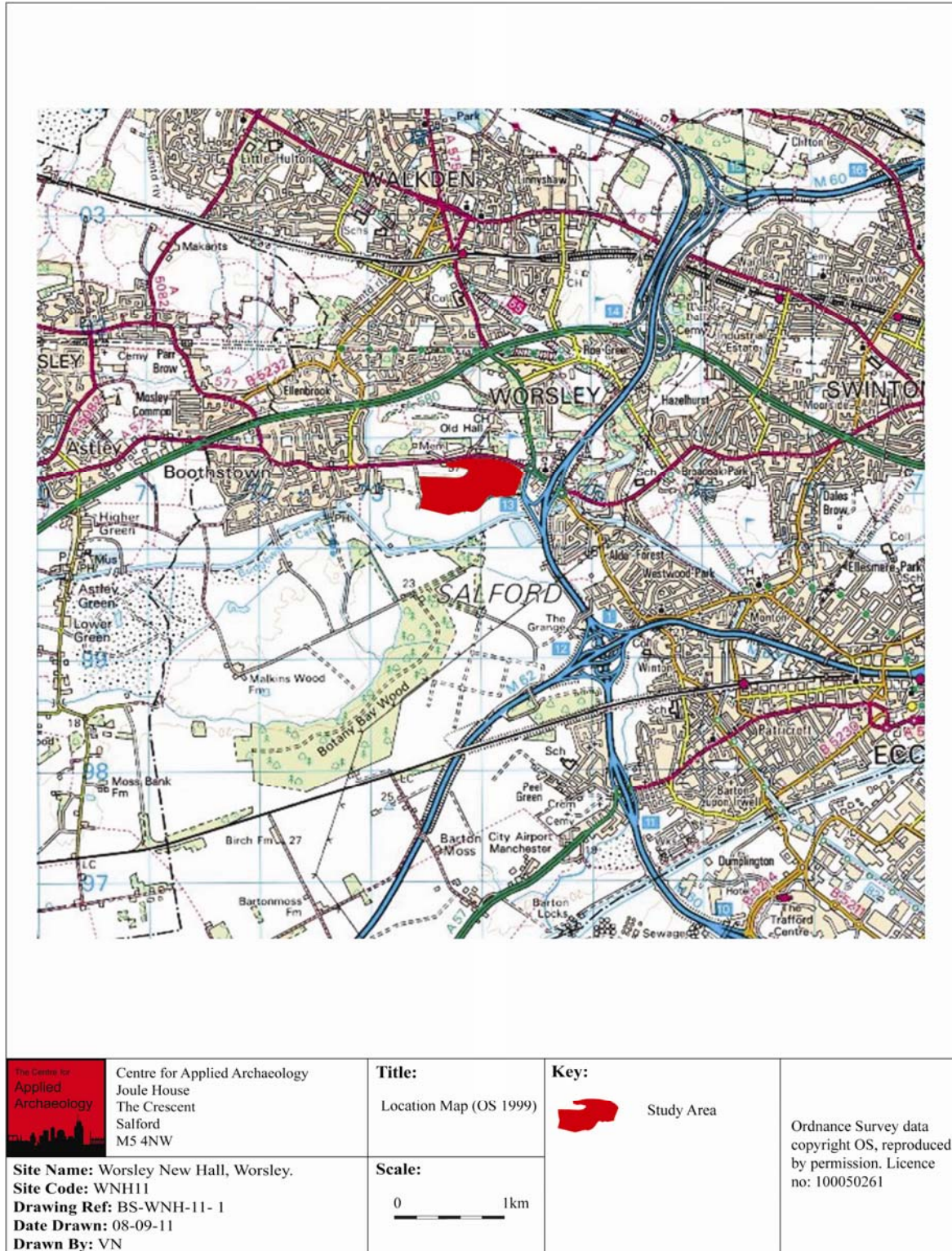
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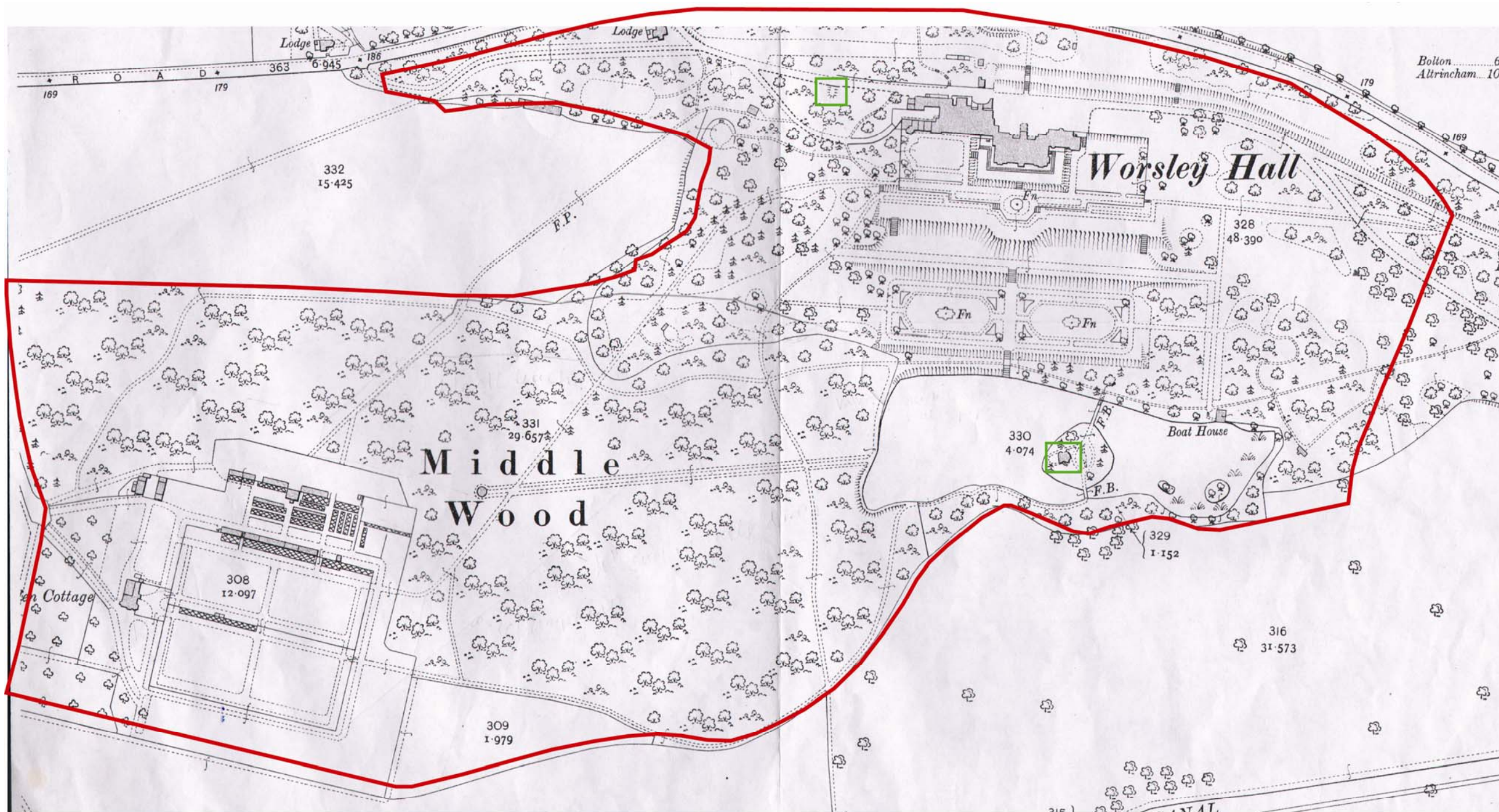
The archive is currently held by the Centre for Applied Archaeology and a copy of this report will be forwarded to the client and deposited with the Greater Manchester Historic Environment Record (HER) held by the Greater Manchester Archaeological Unit.





The archive consists of annotated field drawings, digital photographs, historic and modern mapping, census and trade directory entries along with photocopies of supporting historical documentary material.

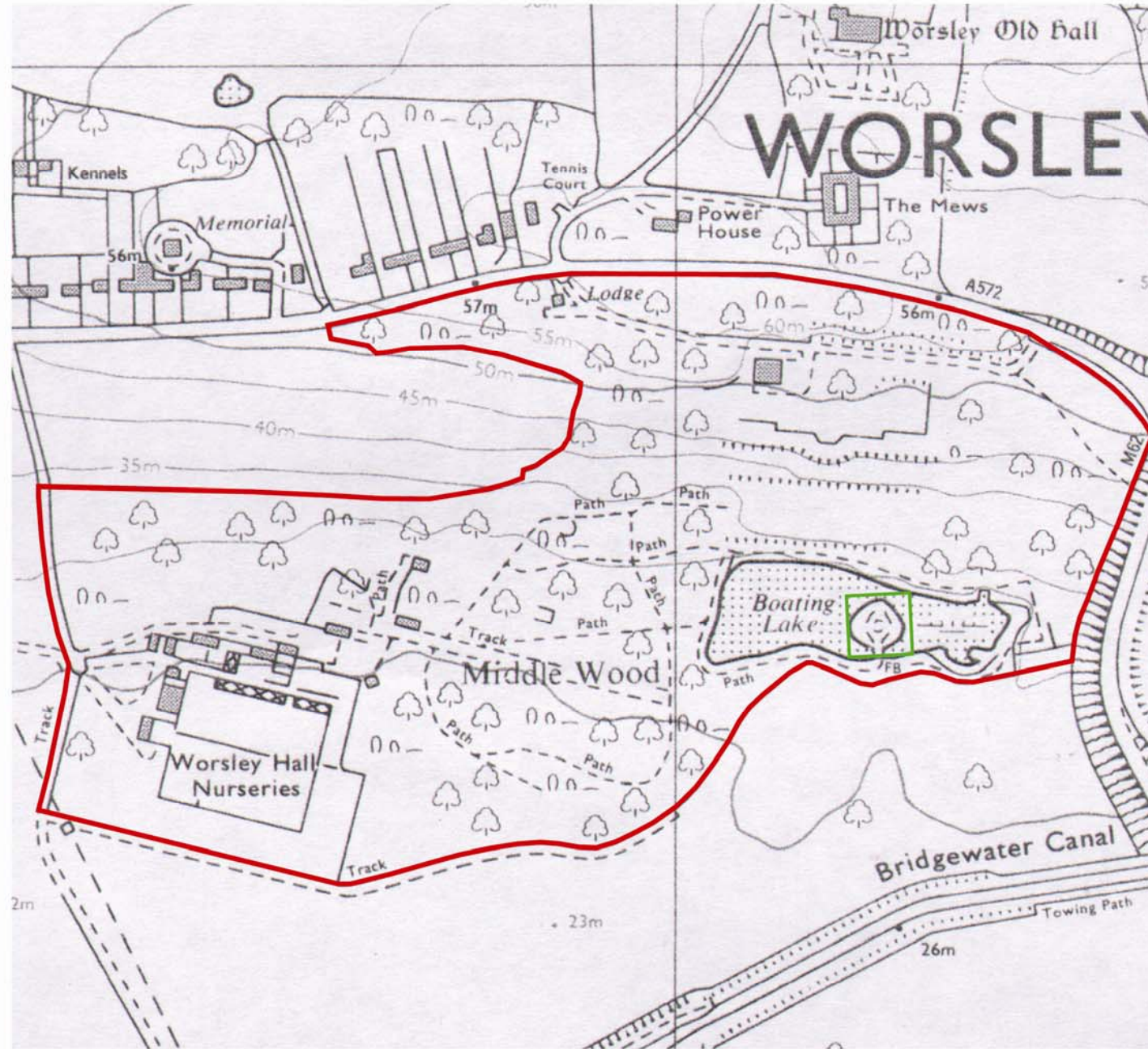





Appendix 1: Figures

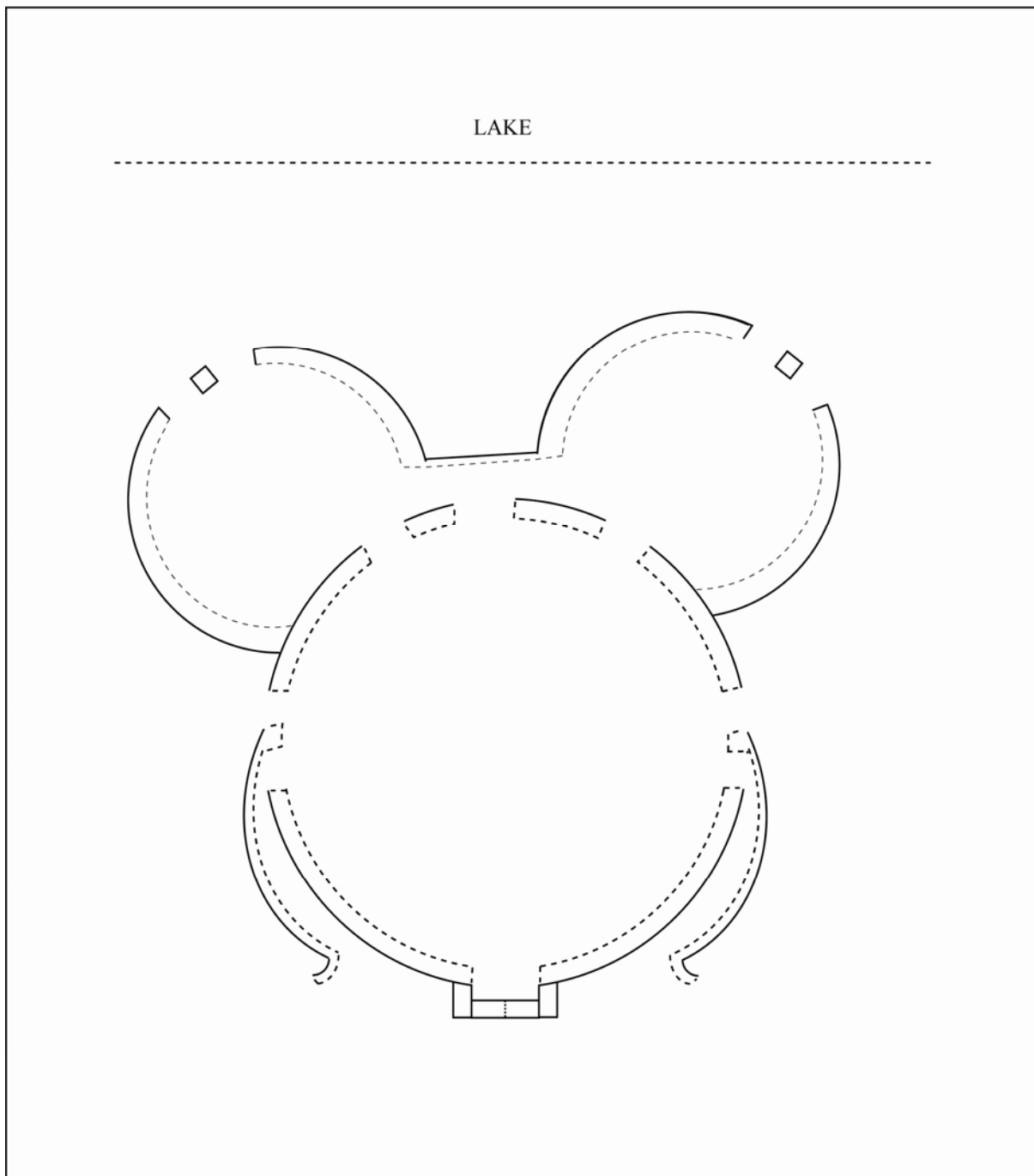





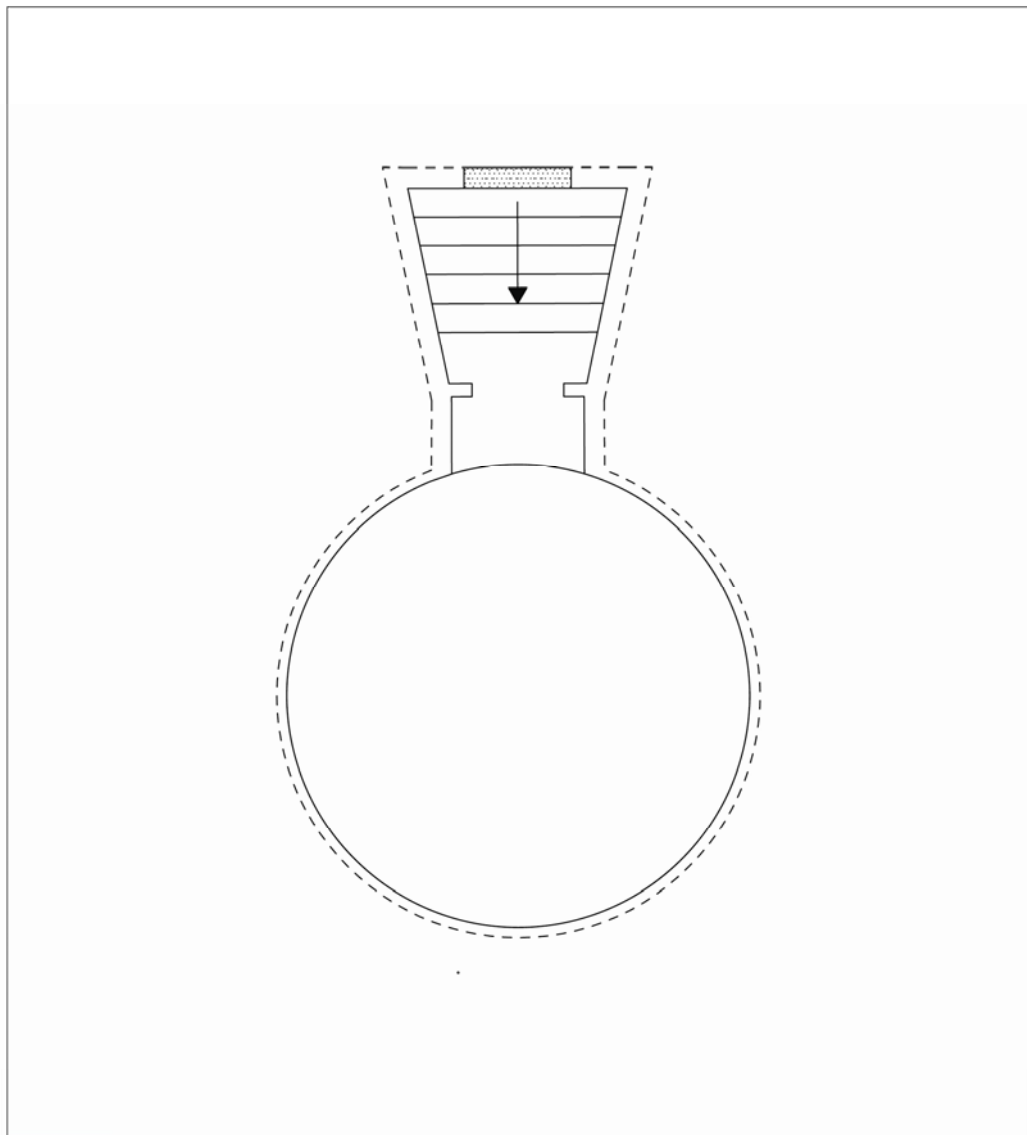
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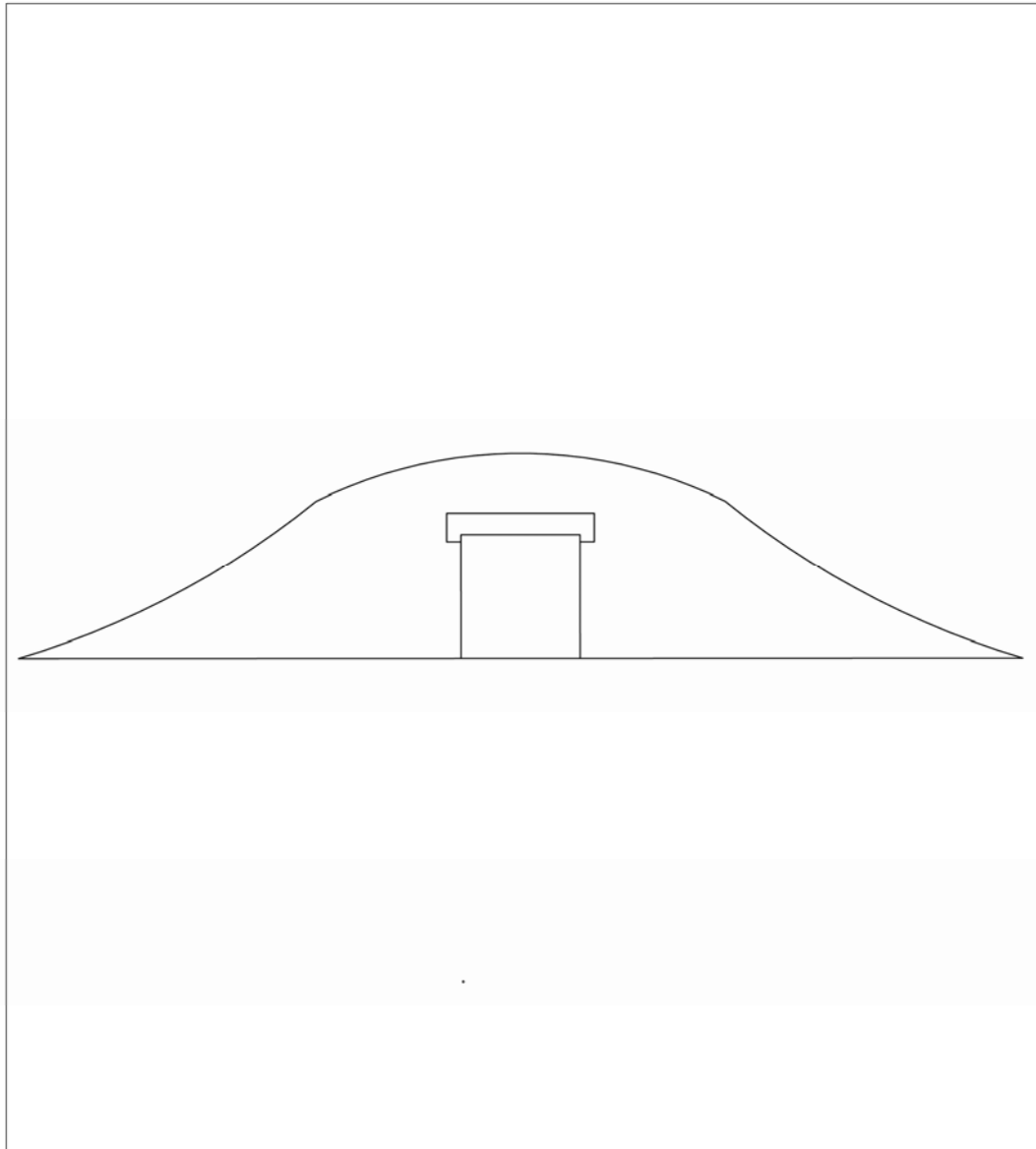
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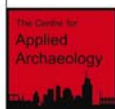




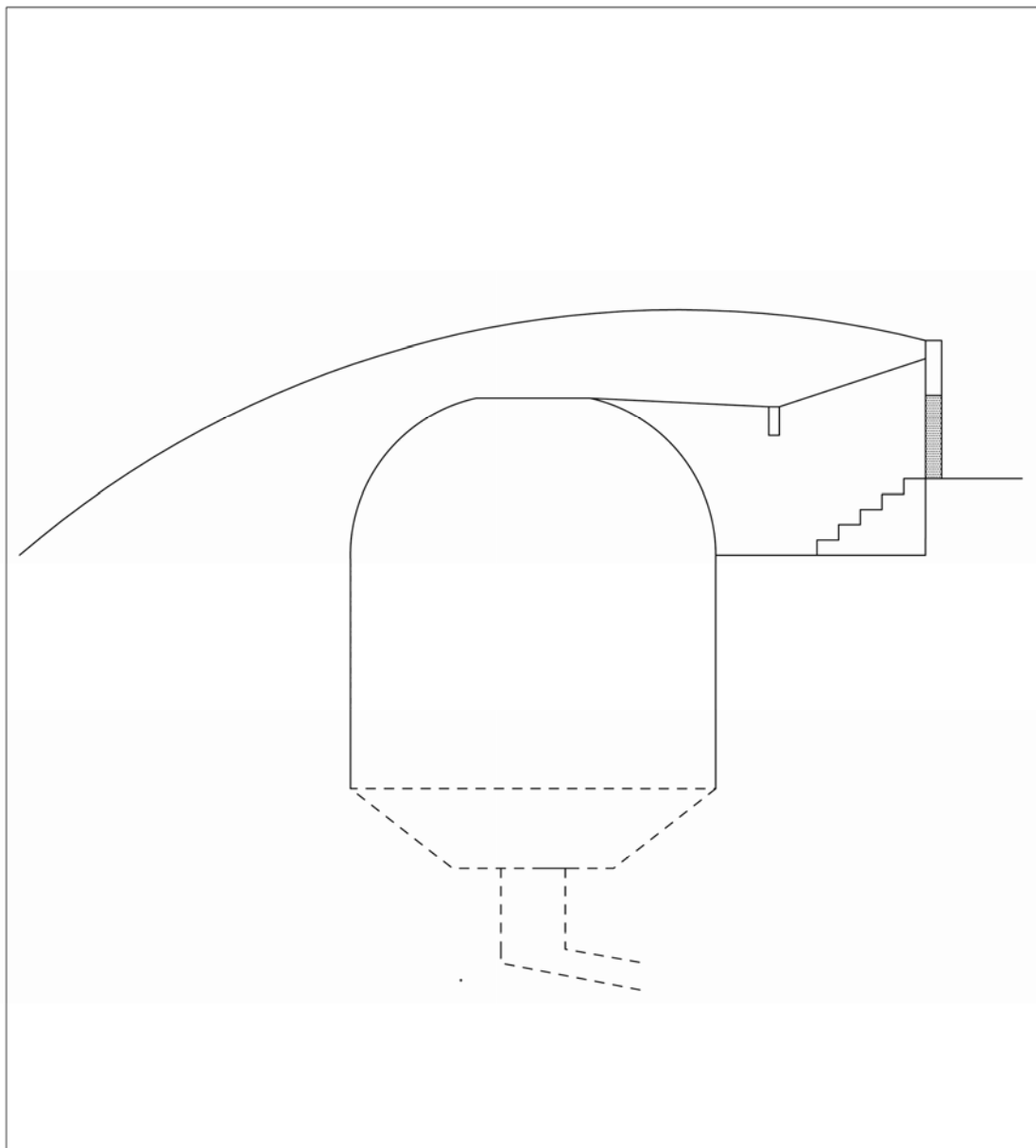
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<p>The Centre for Applied Archaeology</p>	<p>Centre for Applied Archaeology Joule House The Crescent Salford M5 4NW</p>	<p>Title: Ice House plan</p>	<p>Key:</p> <p> Blocked entrance</p> <p> Wall of unknown thickness</p>	<p style="text-align: center;">↑ N</p>
<p>Site Name: Worsley New Hall Site Code: WNH-11 Drawing Ref: BS-WNH-11-5 Date Drawn: 30.11.11 Drawn By: MB</p>	<p>Scale:</p> <p style="text-align: center;">0 ——— 1m</p>			



	Centre for Applied Archaeology Joule House The Crescent Salford M5 4NW	Title: Ice house northern elevation	Key:	
Site Name: Worsley New Hall Site Code: WNH-11 Drawing Ref: BS-WNH-11-6 Date Drawn: 30.11.11 Drawn By: MB	Scale: 			



<p>The Centre for Applied Archaeology</p>	<p>Centre for Applied Archaeology Joule House The Crescent Salford M5 4NW</p>	<p>Title: Ice House section</p>	<p>Key: - - - - - Suggested area</p>	
<p>Site Name: Worsley New Hall Site Code: WNH-11 Drawing Ref: BS-WNH-11-7 Date Drawn: 30.11.11 Drawn By: MB</p>	<p>Scale: </p>			



Fig. 8 – Wide shot of gates. Looking South-west.



Fig. 9 – Detail of scrollwork above carriage gates. Looking south.



Fig. 10 – Shot of western pedestrian gate and stone pillar. Looking south.



Fig. 11 – Shot of carriage and pedestrian gates. Looking south.



Fig. 12 - View of western half of Grotto and its location adjacent to lake. Looking east.



Fig. 13 - General view of the Grotto's south-east elevation. Looking north-west.



Fig. 14 – Shot of western small chamber entrance. Looking east.



Fig. 15 – Shot of Grotto's brick roof. Looking south-east.



Fig. 16 – Shot of recesses and stone support inside Grotto. Looking east.



Fig. 17 – Shot of approach chamber barrel vaulted roof and iron bar fixture. Looking south.



Fig. 18 – Shot of doorway into ice chamber. Looking south.



Fig. 19 – Shot of stone lined approach chamber and partially blocked entrance. Looking North-east.



Fig. 20 – Shot of northern elevation of ice house. Looking south-east.



Fig. 21 – Detail of blocked doorway in northern elevation of ice house. Looking south.

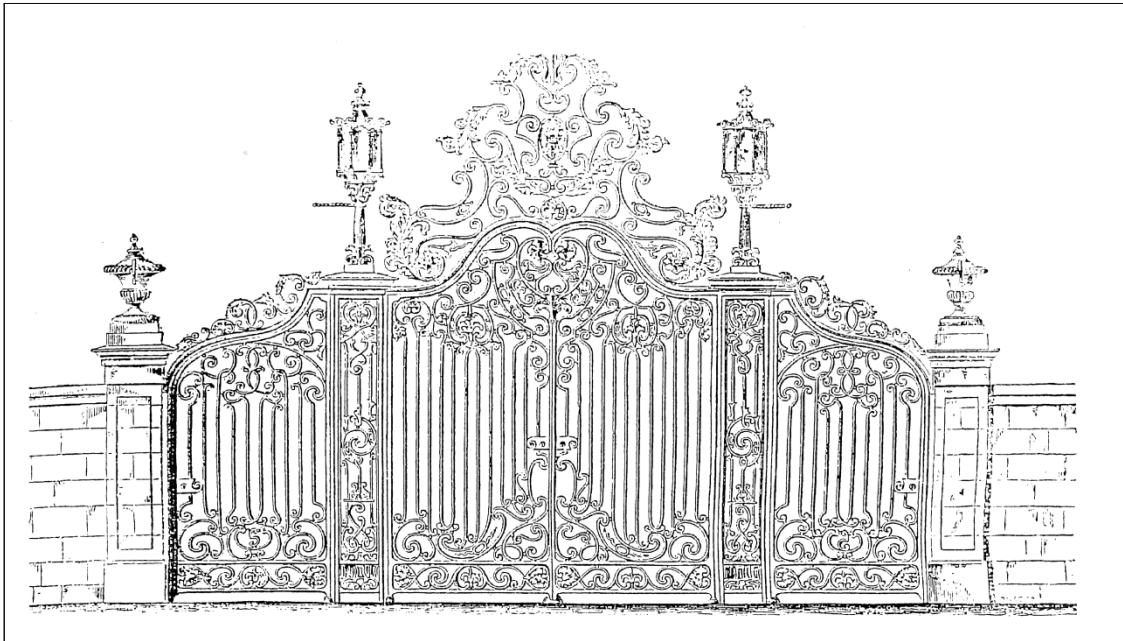


Fig 22: A copy of the illustration of the Worsley New Hall gates published in 'The Builder' 10 December 1853.



Fig 23: A view looking north across the boating lake towards Worsley New Hall. The Grotto can be seen on the island to the right. Country Life 20 July 1901.

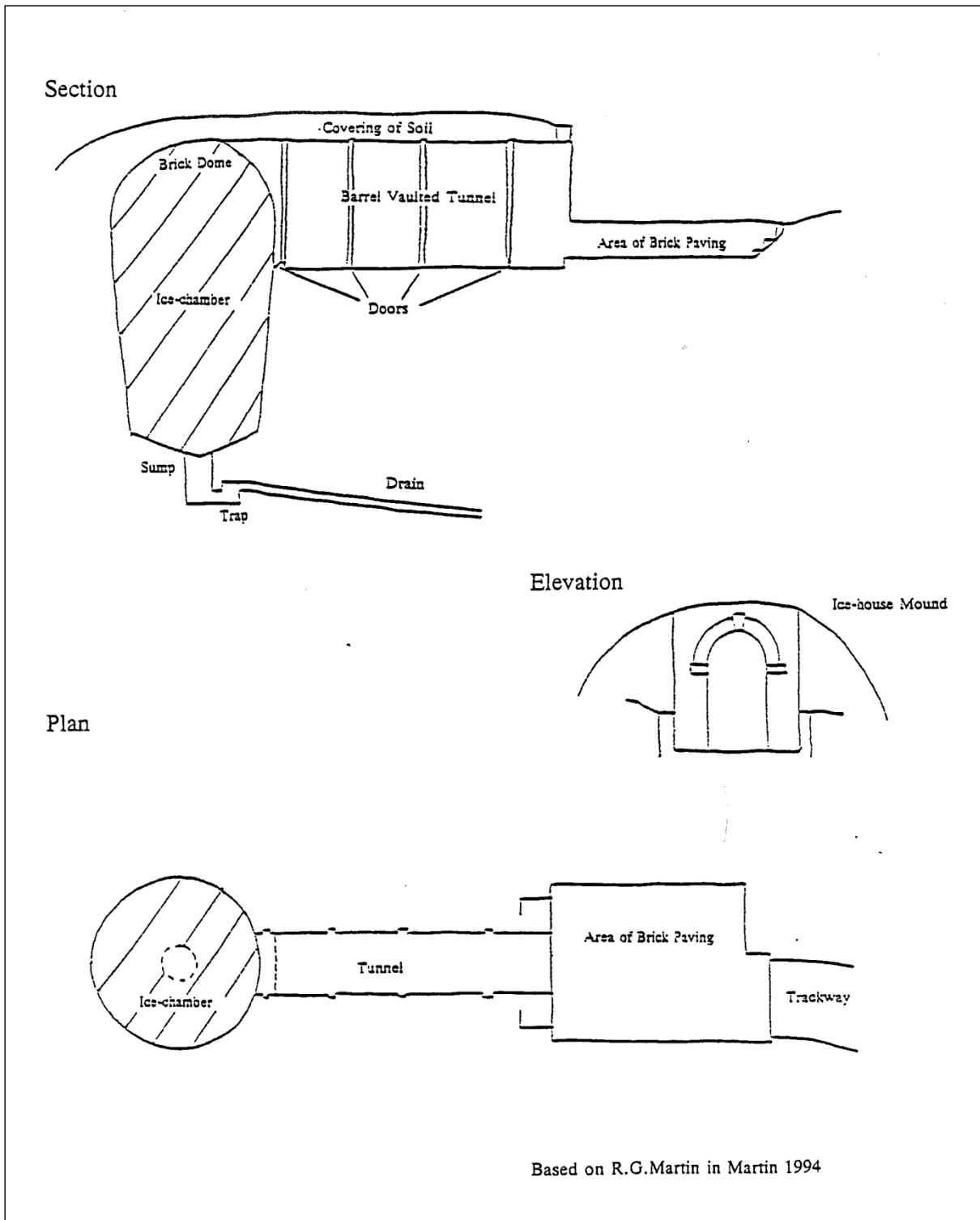


Fig 24: A sketch diagram of the main features associated with a 'cup and dome' ice house. OAU 1995, 40.



Appendix 2: Photograph Catalogues

Gates

<i>Photo Number</i>	<i>Figure Number</i>	<i>Description</i>	<i>Looking</i>
1	8	Wide shot of gates	SW
2		Central shot of gates	S
3		Western pedestrian gate and stone pillar	SW
4	10	Shot of western pedestrian gate, stone pillar and iron support	S
5		Western part of quadrant wall	W
6		Shot of carriage and pedestrian gates	SW
7	11	Shot of gates	S
8	9	Detail of scroll work above carriage gates	S
9		Detail of stonework on eastern quadrant wall	E

Grotto

<i>Photo Number</i>	<i>Figure Number</i>	<i>Description</i>	<i>Looking</i>
1	12	View of the western half of the Grotto.	E
2		View of entrance into southern Grotto's southern chamber.	NE
3		Detail of entrance into Grotto's southern chamber.	NE
4		View of the southern wall of the Grotto's southern chamber and southern entrance way into Grotto's central chamber.	N
5		View of the southern entrance way into the Grotto's central chamber.	N
6		View of the Grotto's south-east, passage way entrance.	NW
7	13	General view of the Grotto's south-east elevation.	NW
8		General view of the Grotto's south-east elevation.	NW
9		Detail of the entrance way on the eastern face of the Grotto's central chamber.	W
10		View of the Grotto's north-east face and passage way entrance.	SW
11		Detail of the Grotto's north-east passage way entrance.	SW
12		View of the northern face of the Grotto, showing exterior wall of the Grotto's north-east passage way entrance.	S
13		Detail of north-west entrance into Grotto's central chamber.	SE
14		View of entrance into the Grotto's western chamber.	SE
15	14	Detail of entrance into the Grotto's western chamber.	E
16		View of the interior of the Grotto's central chamber	SE



		showing eastern and south-eastern entrance ways.	
17		Detail of the Grottos brick ceiling.	NE
18		View of the interior of the Grottos central chamber, showing southern entrance and tunnel entrance.	SW
19		Detail of tunnels interior.	SW
20	15	Detail of the brick roof of the Grottos central chamber.	SE
21		Detail of air vent in roof of Grottos central chamber.	NE
22		Detail of the Grottos central chamber roof and tunnel roof.	SE
23		Detail of the interior of the Grottos western chamber, showing entrance to tunnel.	SE
24	16	Detail of the interior of the Grottos western chamber.	E
25		Detail of tunnel entrance in Grottos western chamber.	SE

Ice House

<i>Photo Number</i>	<i>Figure Number</i>	<i>Description</i>	<i>Looking</i>
1	17	Shot of shaft ceiling with iron fixture and main chamber ceiling	S
2		View down into ice chamber	Down
3		Detail of shaft ceiling with iron fixture and main chamber ceiling	Up
4		Shot of doorway from shaft into chamber with top iron hinge fixture top-right	SE
5		Shot of doorway from shaft into chamber with top iron hinge fixture top-right	SW
6	18	Shot of doorway into ice chamber	S
7		Shot of north-west corner of shaft at top of stairs and ceiling detail	NW
8	19	Shot of north-east corner of shaft at top of stairs and ceiling detail	NE
9		Shot of centre of entrance and blocked up doorway	N
10		Shot down onto stairs	E
11		Detail of shaft wall stones	W
12		Detail of shaft ceiling stone blocks	S
13		Shot through doorway and into ice chamber	S
14		Detail of top hinge on doorway into ice chamber	SW
15	20	Shot of front elevation of ice house	SE
16		Shot of front elevation of ice house	S
17	21	Detail of blocked entrance doorway	SW
18		Detail of iron door fixture on entrance doorway	SW