

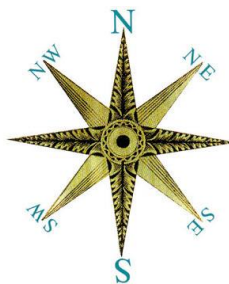
**THE SPRINGFIELD ICE HOUSE, BURNTWOOD SCHOOL,  
BURNTWOOD LANE, EARLSFIELD, LONDON BOROUGH OF  
WANDSWORTH  
SW17 0AQ**

**AN ON-SITE ARCHAEOLOGICAL INVESTIGATION**



**October 2015**

**COMPASS**



**ARCHAEOLOGY**

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Grade II listed building  
Historic England List Entry Number: 1065554

Site code: ICE 15  
NGR: TQ26717 72466

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October 2015

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## *Abstract*

*This document summarizes the results of an on-site archaeological investigation undertaken in September 1015 at the Springfield ice house located within the grounds of Burntwood School, Burntwood Lane, Earlsfield, Wandsworth. The archaeological programme has been recommended by the London Borough of Wandsworth and Historic England due to the fact that the ice house is a Grade II listed building. The investigation was conducted in relation to current plans to restore the ice house by Eger Architects and to support the listed building consent and planning applications.*

*Archaeological investigation took place inside the ice house as well as outside, at the base of the original retaining brick walls of the entrance pathway. The investigation was conducted over the course of two days and included two elements: the archaeological test pits, dug by hand in the internal and external area of the building and a basic level 2 building survey.*

*The investigations revealed the original floor of the domed structure and the foundations of its external walls. The external work revealed thresholds, door jambs and walls, and provided information about the probable original design of the building. The written record was supported by drawn and photographic record.*

*Finds retrieved from the site dated to later 19<sup>th</sup>-early 20<sup>th</sup> century and were mainly waste discarded in the ice house area. No finds classed as Treasure or human remains were found on the site.*

*The information obtained during the investigation is sufficient to answers the main research questions, and should prove useful for reconstruction purposes.*

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## 1 INTRODUCTION

- 1.1 This document summarizes the results of an on-site archaeological investigation undertaken on the 24<sup>th</sup>-25<sup>th</sup> of September 2015 at the Springfield ice house (fig.1) located within the grounds of Burntwood School, Burntwood Lane, Earlsfield, Wandsworth, London SW17 0AQ. The project was commissioned by John Eger of Eger Architects on behalf of Burntwood School



*Fig.1: The Springfield ice house- a present day view*

- 1.2 The archaeological programme has been recommended by the London Borough of Wandsworth and Historic England due to the fact that the ice house is a listed building and that the investigation could provide further architectural details and recover finds of historical significance. The investigation was conducted in relation to current plans to restore the ice house by Eger Architects and to support the listed building consent and planning applications.
- 1.3 The ice house is a Grade II listed building, (date listed 07/04/1983), situated at present within the grounds of Burntwood School. The ice house is a circular domical building in brown and yellow brick covered by an earth mound, with retaining walls to the approach. According to the listed buildings index current understanding is that the structure probably dates from the 18<sup>th</sup> century.

## 2 SITE LOCATION AND GEOLOGY

- 2.1 The ice house is situated within the grounds of the Burntwood School, Earlsfield, London Borough of Wandsworth, South West London (figs.2,3). The mound in which the

building and its approach path are situated measures c 12m in diameter. Burntwood School lies between Burntwood Lane to the north, Springfield University Hospital area to the east, Streatham Cemetery to the south and the residential area to the west.

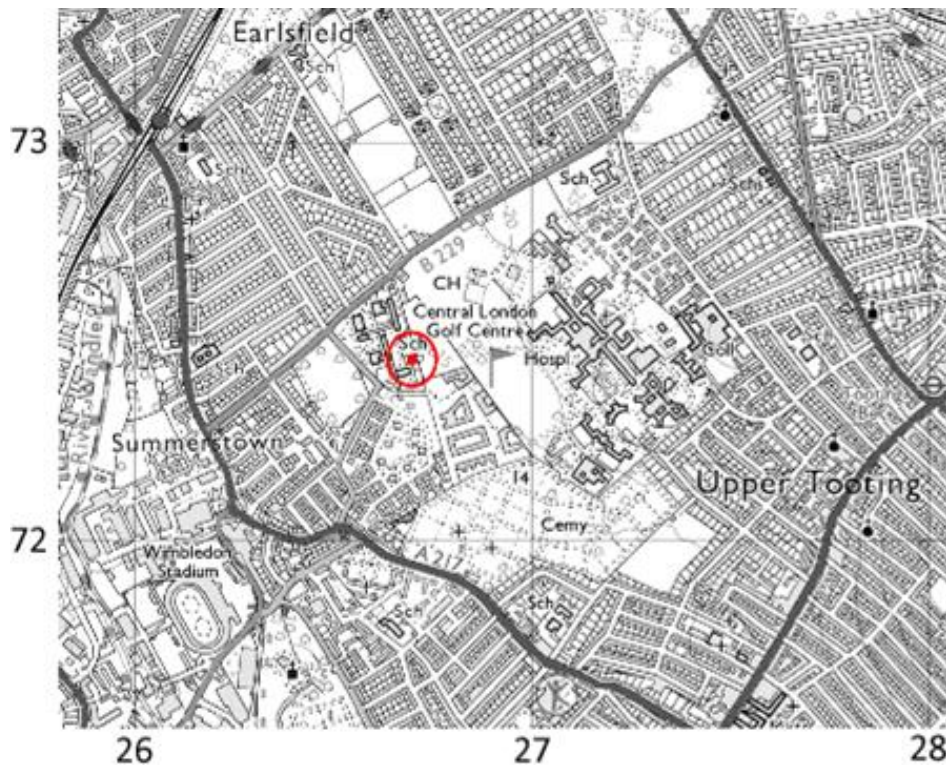


Fig.2: Site location (Reproduced from Ordnance Survey digital data with permission of the HMSO. ©Crown Copyright. All rights reserved. Compass Archaeology Ltd., London SE1 1RQ, licence no. AL 100031317)

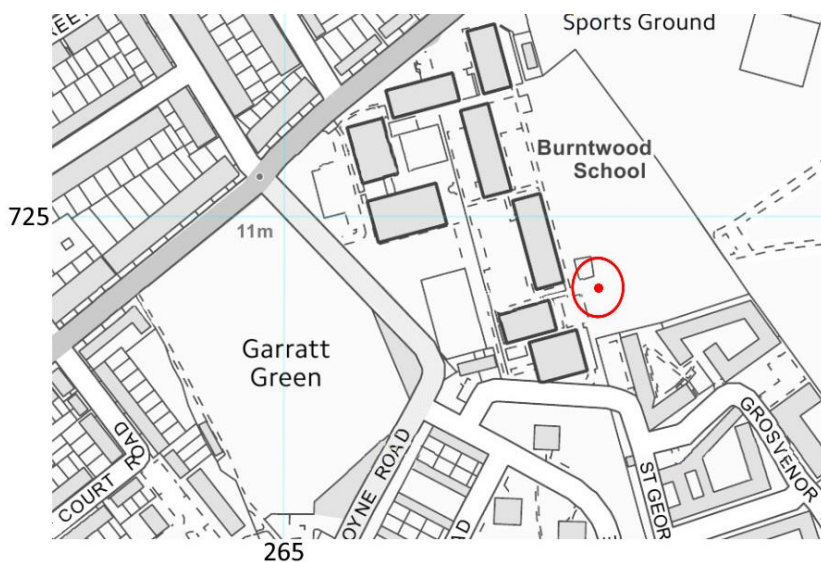


Fig.3: Site location detail (Reproduced from Ordnance Survey digital data with permission of the HMSO. ©Crown Copyright. All rights reserved. Compass Archaeology Ltd., London SE1 1RQ, licence no. AL 100031317)

2.2 The British Geological Survey 1998 indicates that the ice house site overlies Head deposits described as sand, silt and clay with variable gravel (fig.4).

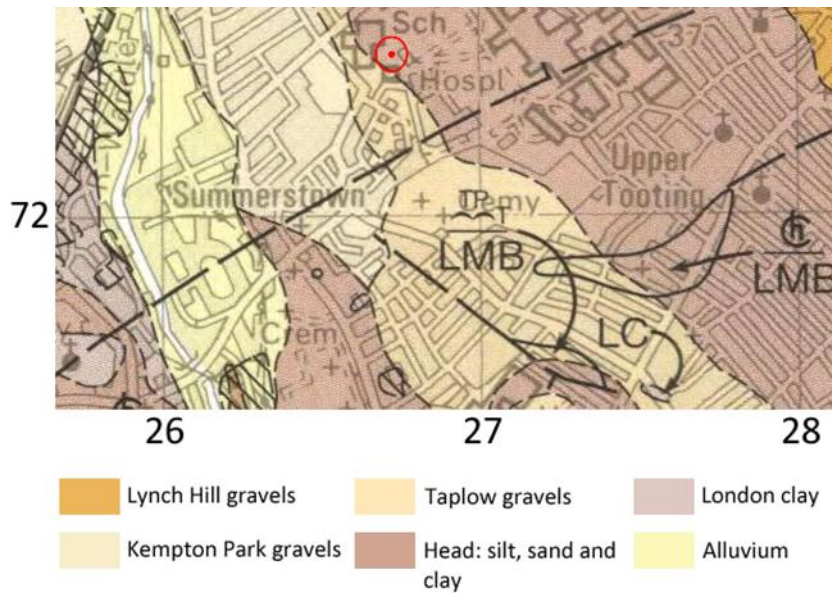


Fig.4: Site in relation to the underlying geology

2.3 The site is not within any locally designated conservation area or any known archaeological priority area.

### 3 BACKGROUND

3.1 The first known building in this area was Springfield Farm, which was present in this area from at least the late-18<sup>th</sup> century. In 1815 the Farm was purchased by Henry Perkins of Southwark, a wealthy brewer, and incorporated into a larger planned estate named Springfield Park.

3.2 Springfield Park was named after a natural spring that ran through the area. The mansion was set in 97 acres of grounds which contained farm buildings, stables, a coachman's house, and what are labelled pleasure grounds on a map of 1839. The mansion and surrounding grounds were auctioned in 1838 and became part of the lands on which the Surrey County Pauper Lunatic Asylum was established. The main building of this institution has survived as the Springfield University Hospital<sup>1</sup>. Map evidence shows that the farm complex was retained throughout the asylum's use. It is not unlikely that the farm may even have been used as a venue for work-based therapy for some of the inmates.

3.3 The probable location of the ice house is visible on the plan of the Springfield Estate from 1839, just north of the main house. The first clear labelling of the ice house within the grounds of the former Springfield Park is on the First Edition OS map, surveyed 1868 and published in 1874 (fig.5).

<sup>1</sup> SullivanThomas Lettings, Burntwood Lane, Gerhold, 1998, 53

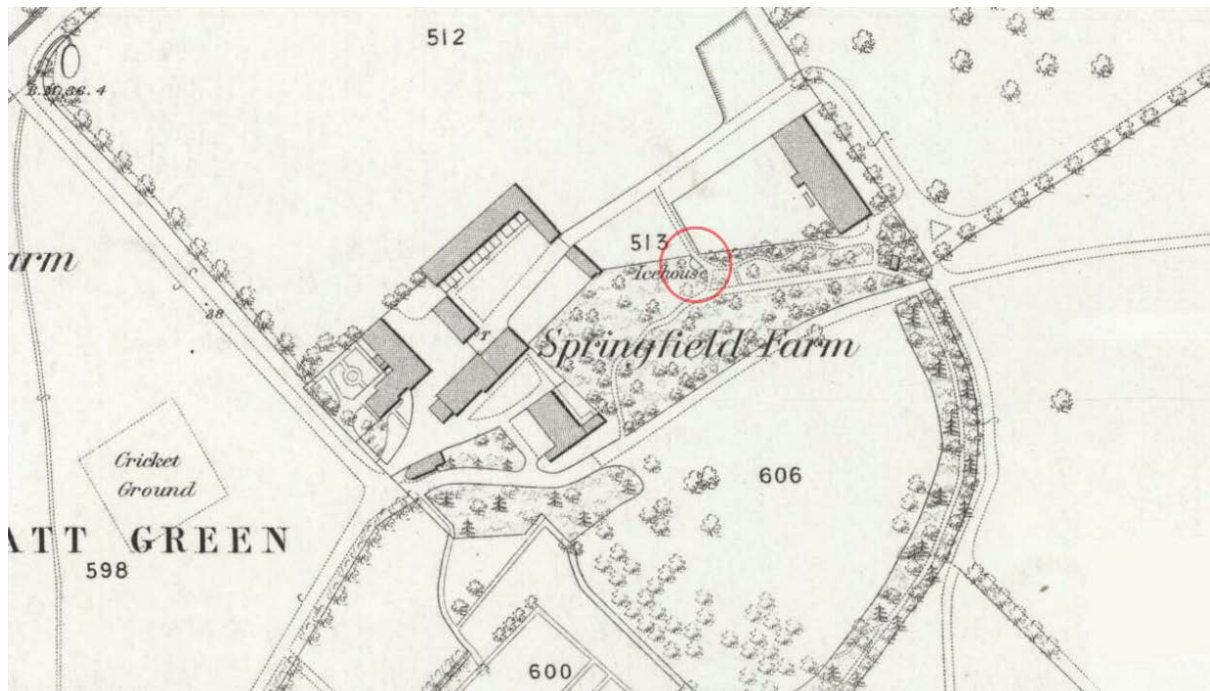


Fig.5: Extract from the First Edition Ordnance Survey map, (surveyed 1868, pub. 1874), with the site ringed

The ice house is depicted as being within an area of trees and winding paths, with one of these paths running past the entrance – the area once forming part of the Pleasure Grounds associated with Springfield House. The ice house is built close up against a boundary dividing the green space from the rest of the farm to the north – and possibly established after the construction of the ice house to provide more shelter. The ice house is visible on all subsequent OS maps.

**3.4** Photographs, dated to 1952 and 1977 respectively, show the ice house within the grounds of the Hospital, set within the grassy mound as today.

The earliest known photograph, (fig.6), however shows the ice house in a more complete (and presumably more or less original) form, with what is clearly an arched outer entrance and adjoining tunnel, in front of which are splayed, sloping walls. The brickwork is nicely finished and the entrance tunnel has a flat, squared-off, roof. Just within the tunnel entrance, where it meets the splayed walls, there is a thin gap in the brickwork suggesting a former setting for a door frame at the entrance to the tunnel. This in effect would have created an entrance tunnel sealed at both ends to better insulate the structure. At this time the ice house appears to still be surrounded by the farm buildings of Springfield Farm.





*Fig.6: View of the ice house, 1952*

The photograph from 1977, (not shown here), shows the structure in a state of disrepair. The tunnel has collapsed and the splayed walls at the entrance been heavily reduced either as a direct result of the tunnel collapse or during subsequent partial demolition / clearance. The mound is also heavily overgrown, with mature trees growing on it, (potentially the cause of the tunnel's collapse). The gap which it is believed once housed the second doorway is more visible due to the damage sustained.

The area of Springfield Farm was subsequently redeveloped as Burntwood School, which was opened in September 1986<sup>2</sup>.

The dating of the ice house is uncertain at present. According to the Historic England Index of Listed Buildings the structure probably dates to the 18<sup>th</sup> century. Other sources<sup>3</sup>, however, suggest that the ice house was built as part of the Springfield Park complex in 1815. It is not known whether it was commissioned by Henry Perkins or Richard Bush, the Wandsworth distiller, who sold the land to Perkins<sup>4</sup>. So far, the earliest map that conclusively records the presence of the ice house within the grounds is the above mentioned First Edition Ordnance Survey surveyed in 1868, so too late to be a useful contribution to the dispute. Earlier maps showing the location of Springfield Estate do not show the ice house. Although it is not entirely impossible that the structure was there as early as 18<sup>th</sup> century, ice houses for domestic use were more usually constructed in relation to large houses; as their function was to provide ice for cooling drinks and making cold confections, and not to serve as food storage<sup>5</sup>. In this case, the early-19<sup>th</sup>

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<sup>2</sup> [fis.wandsworth.gov.uk](http://fis.wandsworth.gov.uk)

<sup>3</sup> SullivanThomas Lettings, Burntwood Lane

<sup>4</sup> Evans, 2001

<sup>5</sup> Martin, 1994

century, (when Springfield Park was built), would be a more probable date for a construction of the ice house.

#### **4 ARCHAEOLOGICAL RESEARCH QUESTIONS**

The main aim of the on-site investigation was to expose and record structural remains and deposits. The works programme allowed to address the following research questions:

- What was the shape and depth of the original base of the ice house and the foundation level of its perimeter wall?
- Was there a central drain in the base of the building to take water away?
- What was the level of original wall foundations forming the entrance pathway?
- Did the pathway walls support a continuous vaulted roof to give a short tunnel approach to the ice house with a door at either end?
- What was the type and nature of brick and mortars used to construct the ice house?
- What type of fastenings were used to support the original door(s) and what hardwares were used?

#### **5 METHODOLOGY**

##### **5.1 Standards**

**5.1.1** The field and post-excavation work was carried out in accordance with Historic England guidelines, (in particular, *Greater London Archaeology Advisory Service: Standards for Archaeological Work, 2014* and *Understanding Historic buildings: A guide to good recording practice 2006*). Works also conformed to the standards of the Chartered Institute for Archaeologists, (*Standard and guidance for the archaeological investigation and recording of standing buildings or structures, 2014*).

**5.1.2** The building is a Grade II listed structure and as such any works were conducted with due care and attention to this fact. No damage or harm were done to the standing structure or its immediate setting, and any discoveries where feasible were left in situ.

**5.1.3** Fieldwork was carried out in accordance with the Construction (Health, Safety & Welfare) Regulations. All members of the fieldwork team had valid CSCS Cards, (Construction Skills Certificate Scheme), and wore hi-visibility jackets and steel-toe-capped boots as required.

##### **5.2 Fieldwork**

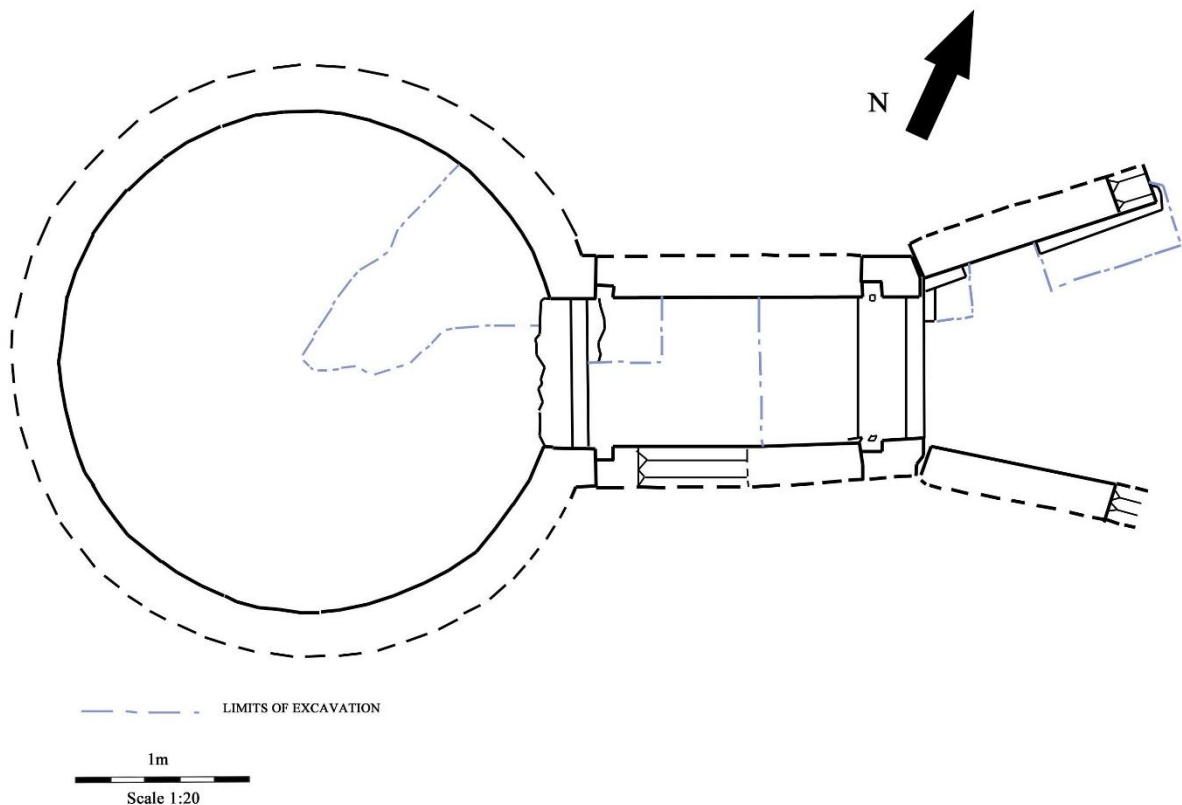
**5.2.1** Archaeological investigation took place inside the ice house as well as outside, at the base of the original retaining brick walls of the entrance pathway. The investigation was conducted over the course of two days and included two elements: the archaeological test

pits and a basic level 2 building survey. The two elements will be dealt with separately below.

### The trial pits

**5.2.2** The fieldwork included the hand excavation of test pits in both internal and external areas of the building (fig.7). Inside the ice house a rectangular trial pit was dug against the inside face of perimeter wall and abutted the existing vaulted-arch entrance to the building. The pit was extended towards the centre of the building and measured 1.43m in length and 1m in width (at the wall's face). Its depth from the original threshold was 2.08m. A part of the trial pit that was closer to the centre was dug 0.62m deeper, to the depth of 2.70m from the original threshold. The diameter of the ice house's domed interior (checked at the level of the widest point just above the entrance threshold) measured 3.01m

**5.2.3** Outside the ice house the existing remains of the walls and parts of the pathway leading to the domed space were cleared of accumulated debris and exposed. The wall on the northern side was investigated in greater detail, with two trial holes dug up to its base. The trial holes measured approximately 0.30m x 0.40m (next to the stone threshold), and 0.90m x 0.45m (at the end of the wall). The depth of the pit next to the stone threshold was approximately 0.50m and the depth of the pit at the end of the wall was approximately 0.35m. At the depth of 0.35m the base of the northern splayed wall was reached.



*Fig. 7: The general plan of the ice house with investigated areas outlined in grey*

5.2.4 The Burntwood School authorities, Eger Architects and Historic England were kept informed on the progress and results of the fieldwork. Following the wishes of the Burntwood School authorities, the trial holes have not been backfilled.

### 5.3 **Building recording**

5.3.1 The Historic England document ‘Understanding Historic buildings; A guide to good recording practice’, (2006) describes a Level 2 building survey thus:

*“This is a descriptive record...It may be made of a building which is judged not to require any fuller record, or it may serve to gather data for a wider project. Both the exterior and interior will be viewed, described and photographed. The record will present conclusions regarding the building’s development and use, but will not discuss in detail the evidence on which these conclusions are based. A plan and sometimes other drawings may be made but the drawn record will normally not be comprehensive and may be tailored to the scope of a wider project.”*

The recommended level of recording includes a series of guidelines under separate headings (Written, Drawing & Photography). Relevant extracts from these are quoted below in italics, and where appropriate are commented on:

#### 5.3.2 ***The Written Account***

1 *The building’s precise location as a National Grid reference and in address form.*

This information has been given on the front pages of this report and also in conjunction with an OS plan.

2 *A note of any statutory designation (listing scheduling or conservation area). Non-statutory designations (historic parks and garden registers, local lists etc) may be added.*

The structure is a Grade II listed building.

3 *The date or the recorder(s) and, if an archive has been created, its location.*

4 *A summary of the building’s form, function, date and sequence of development. The names of architects, patrons and owners should be given if known. The purpose...is to describe the building when no fuller record is necessary, to serve as an introduction to the more detailed body of the record that may follow, and to satisfy those users who may need no more than a summary of the report’s findings.*

A summary of the records taken in the field has been produced in the form of this report. Also, this report presents information obtained from the historic sources consulted in the Wandsworth Local Studies Library.

#### 5.3.3 ***Drawing***

For Level 2 building surveys point 1 is deemed a minimal requirement, articles 2-7 will be included as appropriate.

- 1 *Sketched plan, section, and elevation or detailed drawings (if a more thorough record is not made). Sketches may be roughly dimensioned.*
- 2 *Measured plans (to scale or fully dimensioned) as existing... Plans should show the form and location of any structural features of historic significance, such as blocked doors, windows...masonry joints... and other changes in floor and ceiling levels, and any evidence of fixtures of significance.*

A plan, section and entrance elevation of the structure has been supplied by the project architect. The drawings are primarily limited to internal faces as the structure is largely buried below an existing mound. A detailed plan of the entrance pathway, thresholds, and exterior walls (their extent and thickness), as well as a section drawing of the complex, was produced by the archaeologists after localized excavations at the ice house. Drawings have been drawn at 1:20 scale. Levels taken on the structure, both inside and outside, were derived from the Ordnance Datum Benchmark located on the SE front of the property 177, Burntwood Lane (value 12.38OD).

- 3 *Measured drawings recording the form or location of other significant structural detail, such as timber or metal framing.*

The investigation revealed the location of jambs for a door frame at the stone threshold. The location has been recorded on the plan in a sufficient detail to help inform the restoration works

- 4 *Measured cross sections, long sections or elevational sections illustrating the vertical relationships within a building (floor and ceiling heights or the form of roof trusses, for example).*
- 5 *Measured drawings showing the form of any architectural decoration...or small-scale functional detail not more readily captured by photography. A measured detail drawing is particularly valuable when the feature in question is an aid to dating.*
- 6 *Measured elevations, where these are necessary to an understanding of the building's design, development or function and not more readily obtained by photography.*
- 7 *A site plan, typically at 1:500 or 1:1250, relating the building to other structures and related topographical and landscape features.*

The building has been related to the current Ordnance Survey plan.

#### **5.3.4 Photography**

- 1 *A general view or views of the building, (in its wider setting or landscape, if the views noted in 2 below are also adopted).*

The external photographs of the building were taken. They show the current setting of the ice house, however it should be remembered that the present day setting is far removed from its original context so the photographs do not illustrate the building's wider significance.

- 2 *The building's external appearance. Typically a series of oblique views will show all external elevations of the building, and give an overall impression of its size and shape. Where an individual elevation embodies complex historical information, views at right angles to the plane of the elevation may also be appropriate.*
- 3 *The overall appearance of the principal rooms and circulation areas. The approach will be similar to that outlined in 2 above.*

The exterior as well as interior of the ice house were photographed from several angles. The photographs illustrate in detail points relevant to the research questions.

#### **5.4 *Sampling***

Two loose bricks were taken from northern and southern walls of the entrance pathway and seven fragments plus crumbs of mortar were taken from the outer perimeter wall of the icehouse, from the area above the entrance.

#### **5.5 *Reports and Archive***

- 5.5.1 This report summarizes the results of the investigations at the Springfield ice house. It contains a description of the fieldwork plus details of archaeological remains, and interpretation of the associated deposits. Appropriate illustrations have been included, including a site plan located to OS grid. The details of the report has been appended using the OASIS Data Collection Form, and in paragraph form suitable for publication within the 'excavation round up' of the London Archaeologist
- 5.5.2 Copies of the report will be supplied to the Client, Historic England and the local studies library.

## 6 RESULTS

6.1 The following section is a written description of the results of the archaeological investigation at the Springfield ice house. The description is complimented by a photographic and drawn record highlighting the main points.

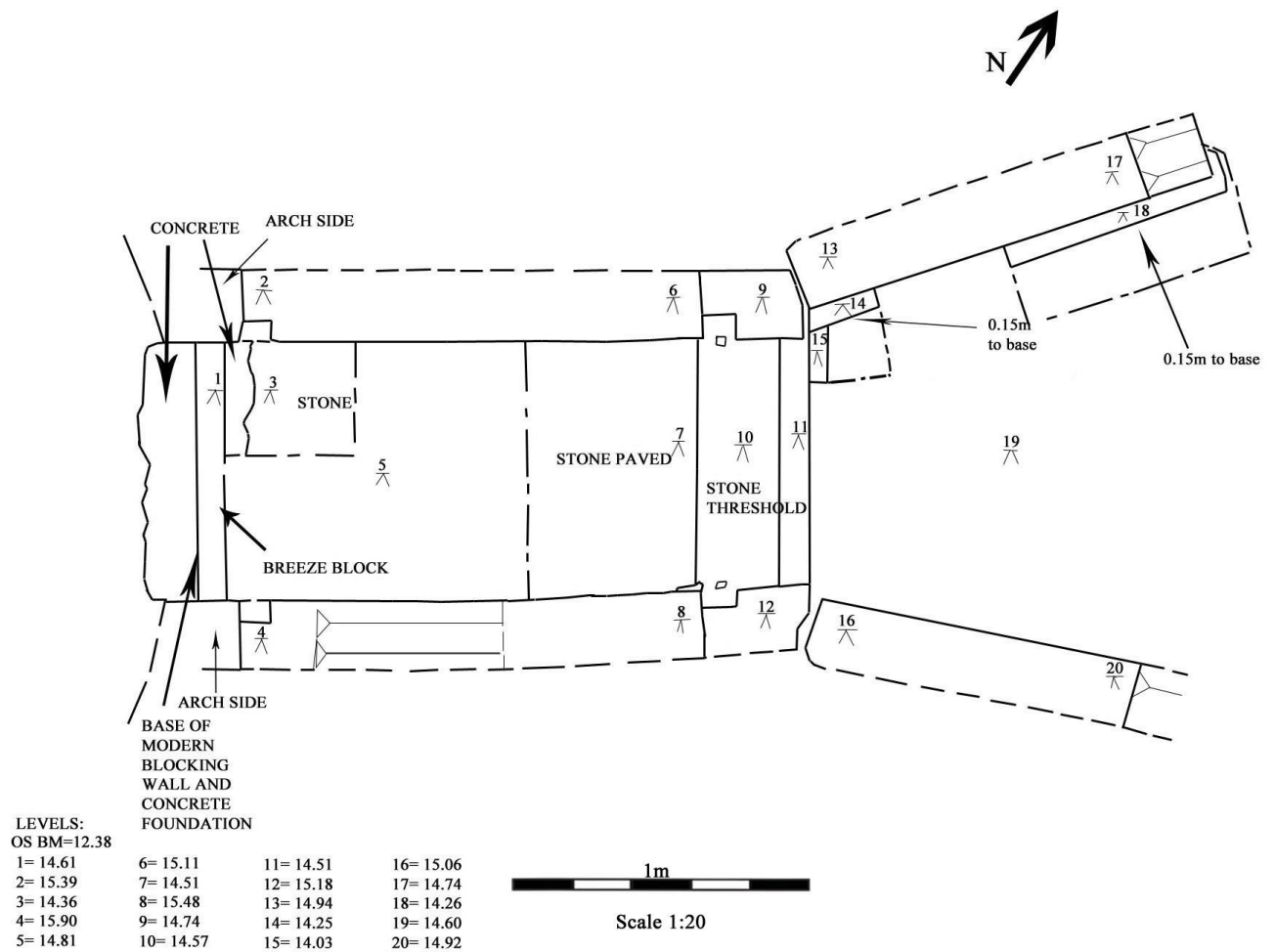


Fig.8: Plan of the entrance area

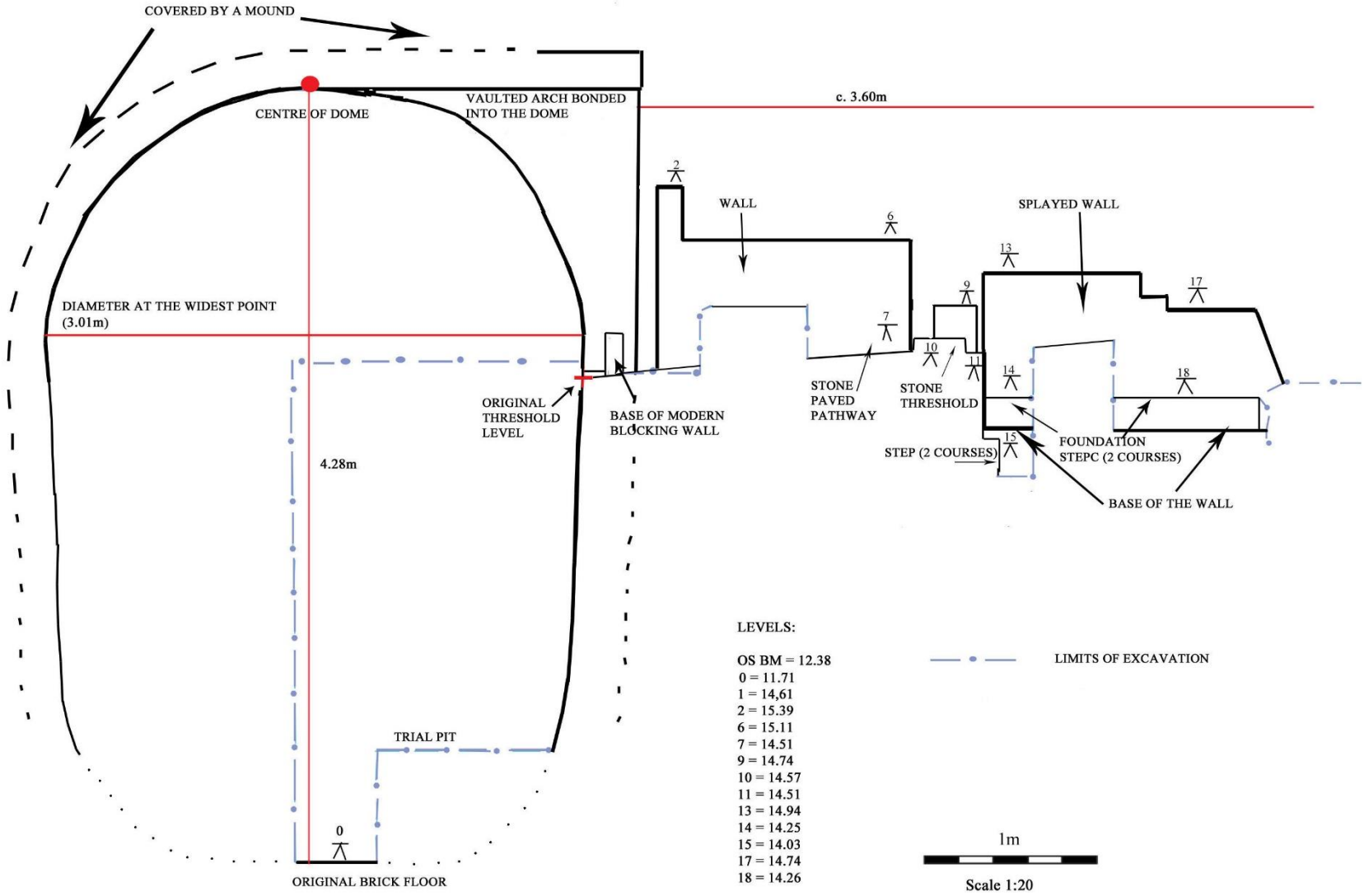


Fig.9: Ice house in section



6.2 The single room constituting the main part of the ice house is domed and brick lined. Inside the ice house domed interior the trial pit was dug against the inside face of perimeter wall and abutted the existing vaulted-arch entrance to the building. The pit was of a roughly rectangular shape and extended towards the centre of the building (figs.9-11). The pit measured 1.43m in length and approximately 1m in width. Its depth from the original threshold was 2.08m. The diameter of the ice house's domed interior measured 3.01m (at the widest level). The interior turned out to be a regular circle.



*Fig.10: Test pit inside the icehouse (1m scale)*



*Fig.11: Test pit inside the ice house- detail (1m scale)*

A part of the trial pit that was closer to the centre was dug 0.62m deeper, to the depth of 2.70m from the original threshold. At this depth the original brick floor of the building was reached (*figs.12-13*). The level of the brick floor was recorded at 11.71mOD, though it may be sloping down slightly towards the centre. The measured distance from the floor to the centre of the dome was 4.28m. The perimeter wall turned out to slope very slightly inwards, a normal feature of ice house construction, and reducing the diameter of the base.

The uppermost fill of the pit was dark grey brown moist silt with inclusions of leaves and other plant remains. Below this there was a lighter grey-brown sandy/stony dump. Among finds retrieved from the pit there were mainly masses of shattered burnt fused pottery and few fragments of broken glass. Finds date to later 19<sup>th</sup>/early 20<sup>th</sup> century. The fill appears to be an accumulation of dump deposit and natural debris that filled the structure's interior over time.

A drain, which is a common feature in ice houses, has not been found at the Springfield ice house. However, it is most likely due to the fact that only a small area of an original brick floor was exposed during investigation. Unfortunately further excavation in the restricted space of the deep ice house was not possible.



*Fig.12: A test pit exposing the brick floor inside the ice house*



*Fig.13: A test pit exposing the brick floor inside the ice house*

**6.3** There is no sign of a ventilation hole in the dome. The feature near the entrance which, based on architect's exterior plans, was initially suspected to be a ventilation hole turned

out to be most likely just a result of a damage to the dome structure. It is indicated by the fact that the hole is of a very irregular shape and by its unusual location through the line of finer red rubbed bricks at the junction between the dome and vaulted entrance (see fig.14).



*Fig.14: The centre of the dome visible from below (a hole in the structure at the top of the frame representing later damage)*

- 6.4** Outside the ice house a small test pit was dug on the northwestern corner of the pathway, just at the entrance to the domed space (fig. 16). It measured approximately 0.50m x 0.40m. The pit exposed stone paving in this area of the pathway.
- 6.5** The existing remains of walls and a pathway were cleared of accumulated debris and exposed (see figs.15-16). The wall on the northern side was investigated in greater detail, with two trial holes dug up to its base (figs.19-21). The trial holes measured approximately 0.30m x 0.40m (next to the stone threshold), and 0.90m x 0.45m (at the end of the wall). The depth of the pit next to the stone threshold was approximately 0.50m and the depth of the pit at the end of the wall was approximately 0.35m. At the depth of 0.35m the base of the northern wall was reached (level 14.11mOD).

The northern splayed wall measures 1.20m in the upper the course length, 1.50m in the base course length and 0.24m in width. The opposite wall is 1.14m long in the upper course and 1.40m long in the base course and is 0.24m wide. The levels for the northern wall are 14.94mOD and 14.74mOD. The levels for the southern wall are 15.06mOD and 14.92mOD. At the northern wall a foundation step was exposed on the level 14.24mOD (fig.21). Currently there are eleven courses of bricks surviving in the wall on the northern side (including two courses in the foundation step) and at least seven courses of bricks remaining on the southern side. The base of the southern wall was not exposed. The brickwork is Flemish bond.

The point where the splayed walls originally ended has been reached which is indicated by the transverse course of bricks (headers) exposed at the end of these walls (figs.19-21). The transverse course of bricks at the end of the walls also confirms that the walls were sloping, and not vertical (see 1952 photograph- fig.6).

- 6.6** At their western end, the splayed walls meet a stone threshold and two 'straight' parallel walls leading to the domed room. The stone threshold measures approximately 0.86m x 0.27m, and its level is 14.57mOD. In front it has an adjust step measuring approximately 0.95m x 0.11m, and is on the level 14.51mOD (figs.15-20 and 23). Below the step are five courses of brickwork at an overall drop of 0.48m where there is another adjust step protruding on the level 14.03mOD. (figs.20-21). The base of this lower step has not been reached but appears to be at least two brick courses (bottom of the test pit).

On either end of the threshold there is a jamb opening in the walls (figs.18-20, 22). At the front of the openings there are small square indentations in the stone threshold (fig.23). The fact that the indentations are of the same size, symmetrically spread and made in the threshold suggests that they are most likely features described as mortises, and constitute remains of mortise tenon joints. The presence of these mortises and rebates for the door jambs indicates that at some point there was a door fixed in this location.

- 6.7** The exposed part of a pathway between the threshold and a base of modern blocking wall at the entrance to the domed room is stone paved and its level is 14.51mOD dropping at its western end to c. 14.36mOD (figs.15-20). The pathway is c.1.65m long and 0.90m wide. At the entrance to the domed room of the ice house there are remains (base) of the modern blocking wall and concrete foundation. A course of breeze blocks is situated over concrete remains (fig.24). The doorway is between 0.88m- 0.90m wide and 1.70m high (on the outside).

- 6.8** At the entrance, in the wall on the northern side there is an iron hinge installed (fig.25). The end of the hinge in the wall is bent. This may be the result of the hinge being hammered back into the wall after it went out of use. The presence of the hinge suggest the existence of a door in this place. This suggestion is also supported by the presence of rebates for door jambs in both walls immediately outside the entrance to the domed room.

- 6.9** There are two more or less parallel walls running along the stone paved pathway (although the southern wall has been slightly displaced by a large tree root towards its eastern end.. They measure approximately 1.60m in length and 0.24m in width. The levels of the present day remains are 15.39mOD and 15.11mOD for the northern wall and 15.48mOD for the southern wall. Currently there are seventeen courses of bricks remaining in the northern wall and nine in the southern wall. The walls are made up of alternating courses of stretchers-headers and stretchers. From the remains of south wall it is visible that the walls just outside the entrance go straight up and do not curve to form an arch (fig.26). Also, the entrance archway appears to flatten very slightly at the top. This allows one to conclude that originally the entrance archway was covered by flat slabs and the outer tunnel leading to it was flat rather than arched. This suggestion is supported by the photo of the ice house taken in 1952 where the roof of the tunnel is clearly flat (fig.6)

- 6.10** All the wall bricks are bounded with mortar. Mortar from the entrance wall is mainly white lime mortar with medium to very coarse quartz, and yellow, translucent white and

grey quartz and flint inclusions. The mortar from the arch over the doorway in the outer perimeter wall of the domed room is grey-brown with fine-grained matrix and the inclusions of yellow and translucent coloured flint and quartz. The inclusions of flint in the doorway mortar are more numerous than in the mortar on the wall bricks, and altogether this mortar appears to be harder than the mortar on the bricks. It is likely that the mortar here and within the roof of the main structure was constituted to be waterproof.



*Fig.15: Exterior walls and pathway (0.5m scale)*



*Fig.16: External walls, pathway, and a part of a breeze block wall and concrete foundations at base of frame (view from a top of the mound)*



*Fig.17: Southern wall (0.5m scale)*



*Fig.18:Southern wall (0.5m scale)*



*Fig.19: Northern wall (0.5m scale)*





*Fig.20: Test holes at the northern wall, outer part (0.3m scale)*



*Fig.21: Test holes at the northern wall- detail (0.3m scale)*



*Fig.22: Rebate for a door jamb in the southern wall- close up (0.5m scale)*



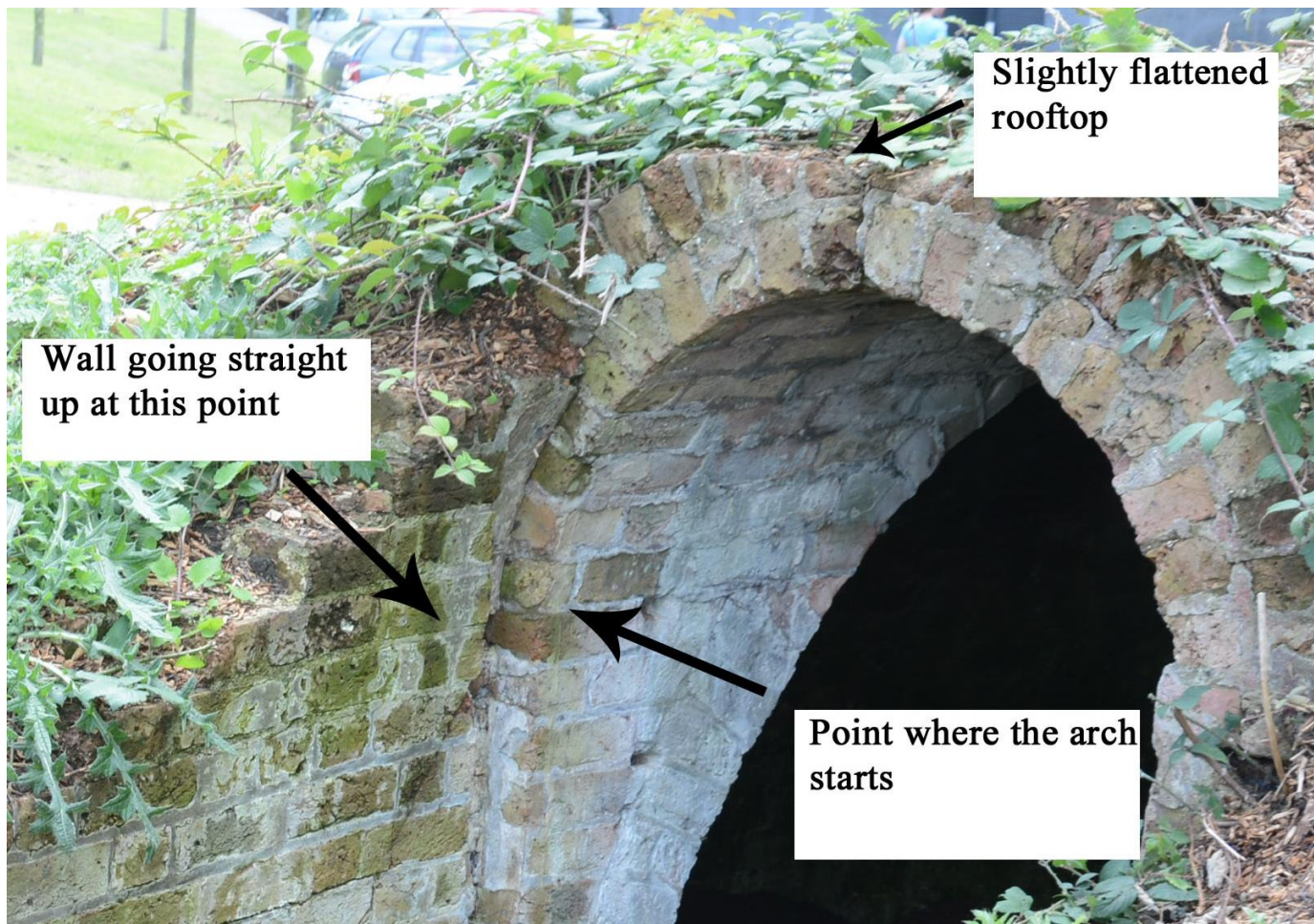
*Fig.23: Stone threshold with mortises on either side, for door jambs (0.5m scale)*



*Fig.24: Base of a modern blocking wall and concrete foundation within the doorway (view from the ice house's interior, 1m scale).*



*Fig.25: An iron hinge on upper right hand side of the entrance (0.2m scale)*



*Fig.26: Curving arch and vertical coursing of outer wall*

## 6.11 Post excavation

Finds retrieved from the site were taken to Compass for further assessment. The specialists were consulted on pottery and on Ceramic Building Material and mortar. The results of the assessment are summarized in the paragraphs below. The detailed reports on selected finds are included in Appendices.

### ***Finds** (selected pottery assessed and commented on by Paul Blinkhorn)*

Finds were retrieved from the fill of the trial pit inside the ice house (context 1). All finds date to early 20<sup>th</sup> century. Find include: two pieces of broken glass, a few pieces of broken pottery of various type (fig.27) including a James Green & Nephew printed piece (fig.28), numerous fused burnt pieces of pottery, and four slag type fragments of burnt pottery fused with burnt brick and wood/coal pieces.

One of the glass pieces is a light green colour, relatively thick and has square angles. There are fragments of writing visible on its sides, that say **(F)AVOURITE** and **SAUCE**. These point at Daddies Favourite Sauce, a brand of brown sauce, which was launched in 1904. The design of the bottle is typical of an early period in the brand history. This glass fragment provides then dating for the assemblage of finds discarded in the ice house pit to the period soon after 1904.

Another glass piece is a light green fragment of a rounded bottle with an inscription **BATEY** on the bottle's side and bottom. Batey was a factory producing bottles of mineral water and ginger beer in the late 19<sup>th</sup> and early 20<sup>th</sup> century, at least to c.1920.

The dump of pottery largely comprises undecorated but glazed refined white earthenware of 19<sup>th</sup> century date (MoLAS fabric code REFW), other than a single "Flow Blue" decorated cup or bowl, dateable to 1830 – 1900 (MoLAS fabric code TPW FLOW). The pottery is all shattered, melted, burnt and fused together, having clearly been exposed to extremely fierce heat. It consists of a mixture of standard domestic forms, such as cups, plates and bowls (see fig.29).

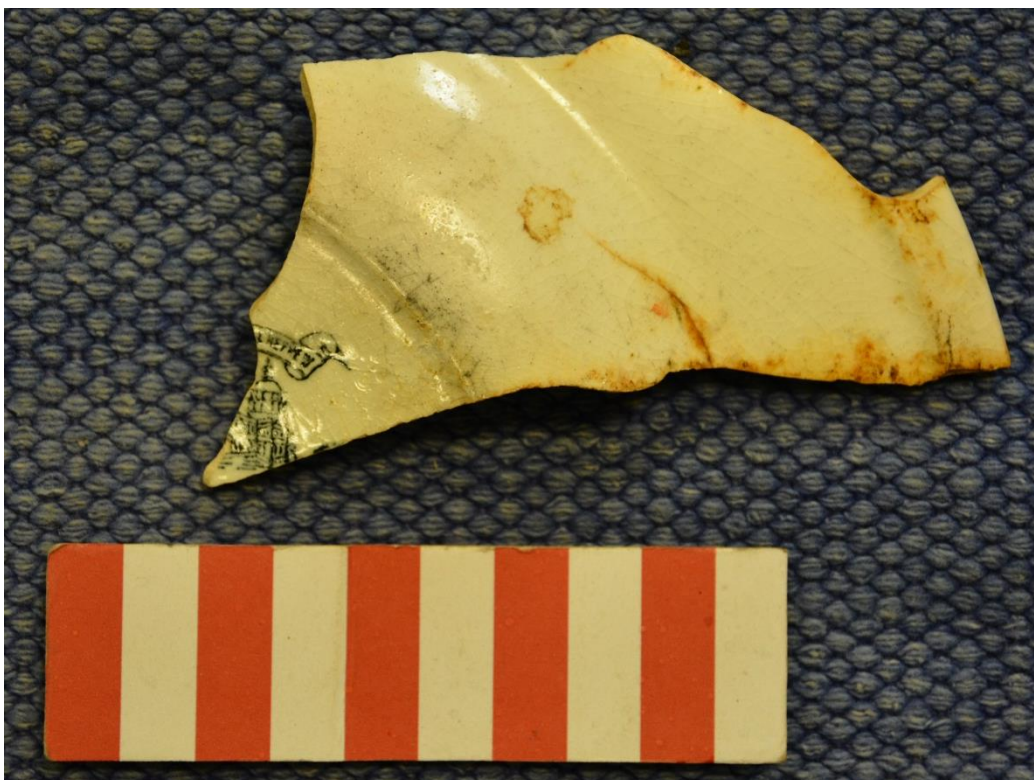
A fragment of a soup-plate has a partial makers mark on the base, of James Green and Nephew, a pottery and glass manufacturer based at the Victoria Pottery Galleries and Thames Cut-Glass Works at 107 Queen Victoria Street, St Pauls. Their main period of activity appears to have been from the mid-19<sup>th</sup> – early 20<sup>th</sup> century.

The initial suggestion for an explanation for burnt fused pieces was a kiln failure. A broken/collapsing kiln would smash the pots, which then would burn and get fused together. The pottery glaze would liquidize, forming the shiny bubble-like structure on a surface of pot fragments, which can be observed on the surface of the pieces retrieved from the pit. However, the lack of kiln furniture (which would be necessary in case of firing glazed pottery) among the masses of fused and shattered pottery seems to contradict the above idea. The lack of kiln furniture rather indicates strongly that this is not kiln waste, but most likely material which was destroyed in a catastrophic fire, probably while stacked in a cupboard or similar.

No human remains or finds classed as a Treasure have been retrieved from the trial pits during the archaeological investigation. The uniform finds assemblage suggests that the interior of the ice house (after the building lost its function) was backfilled in one event rather than over a period of time.



*Fig.27: Various types of late 19<sup>th</sup>-early 20<sup>th</sup> century pottery- fragments (0.1m scale)*



*Fig.28: James Green & Nephew printed pottery piece (0.1m scale)*



*Fig.29: Shattered fused pieces of pottery from the interior trial pit (0.1m scale)*

**Brick and mortar samples** (assessed by Sue Pringle)

Two bricks were taken for sampling from the northern and southern wall along the pathway leading to the ice house. Brick 1 weights 2104g, and measures 230mm x 103-110mm. The brick's fabric is red and somewhat vitrified. There is silt-sized quartz in matrix which is poorly mixed with very coarse inclusions, probably of domestic rubbish. The brick's frog is c. 140mm x 60mm, partially obscured by lime mortar. It has got fairly flat faces, sharp arrises. The brick is overfired and warped with spalling on top. Fine moulding sand. White lime mortar with medium to very coarse quartz particles smaller than 6mm. Coarse to very coarse flint and sparse black grains, all well rounded. Predomination of yellow, translucent white and grey quartz and flint inclusions.

Brick 2 weights 2137 and measures 229mm x 102mm. Its fabric and mortar are similar to those of Brick 1. Brick 2 frog measures c. 155mm x 55mm and is c. 16mm deep in base. The frog has two impressions, one on either side of a low central ridge. These may

represent crude brick stamps but are too mortared to identify them with certainty. The brick is overfired, warped and cracked. Sides are flat with creased stretchers; sharp arrises.

Seven fragments of mortar with several crumbs have been collected from the structure over the door arch. The fabric is grey-brown with very fine-grained matrix. Aggregate is composed of yellow, grey and translucent coloured flint and quartz, medium to coarse, with particles smaller than 4mm. There is more flint in aggregate than in the lime mortar on the bricks, and altogether this mortar appears to be harder than the mortar on the bricks. It is likely that the mortar here and within the roof of the main structure was constituted to be waterproof.

## 7 CONCLUSIONS

- 7.1 The Springfield ice house consists of a short tunnel entrance leading to a single-room circular structure which is 2.70m deep when measured from the original threshold level. The single room is domed and brick lined, with the diameter of 3.01m at its widest point and it forms a regular circle. The widest point of the dome circle is approximately 0.25m above the level of an original threshold. There are no openings in the dome. The height of the room from the floor to the dome is approximately 4.28m. The original floor is made of brick. The perimeter wall slopes slightly inwards, giving the whole structure a funnel-like shape, which is typical of ice houses.

A drain, which is also typical of ice houses, has not been found at this stage. However, this is probably due to the restricted area of the excavation inside the structure.

- 7.2 The arched doorway, at present, includes at its base the remains of a modern blocking wall and concrete foundation. However, the level of original threshold can be still identified. In the northern wall at the entrance there is an iron hinge, which suggests the presence of a door in this place. The hinge was at some point crudely hammered back into the wall after the original door went out of use. Immediately behind the external face of the arched entrance there are rebates for door jambs in both walls, which confirm the presence of a door in this place in the past.

From the remains of south wall it is visible that the tunnel directly leading to the domed room was covered by flat roof rather than vaulted. It is indicated by vertically straight courses of bricks in the wall, and supported by photographic evidence from 1952.

The path leading to the room, including a stone paved pathway and an outer area enclosed by splayed walls, is 3.60m long. The splayed walls abut the parallel walls leading directly to the domed room. The transverse courses of bricks at the end of splayed walls indicates that the structure ended at this point. It also indicates that original walls were sloping, as shown in the 1952 photo.

The pathway between the entrance and a stone threshold was stone paved which is indicated by the presence of stone slabs on both exposed ends of the pathway. At the point where the parallel walls meet the splayed walls there is a stone threshold with mortis tenon indentations. In the walls on both sides on the threshold there are visible



rebates for door jambs. This indicates the presence of some kind of a door in this place in the original construction.

- 7.3 The finds retrieved from the site date to Post Medieval period. They are clearly discarded pieces (broken glass, burnt and fused shattered pottery), which indicate that the ice house area has been used mainly as a waste dumping space after the building lost its original function.
- 7.4 During the course of the investigation at the Springfield ice house the floor of the building and foundations of its outer walls were defined. Also, some data about the design of the structure and measurements were gathered. The obtained information is sufficient to answer the main research questions, and the drawn and photographic record of the site should prove useful for reconstruction purposes.

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[www.sullivanthomas.co.uk/downloads/burntwood-lane](http://www.sullivanthomas.co.uk/downloads/burntwood-lane)

### *Cartographic sources*

First Edition Ordnance Survey map (1874)  
Ordnance Survey maps

## APPENDIX I *Pottery report by Paul Blinkhorn*

### **Pottery from Earlsfield, Wimbledon (Site ICE15)**

*Paul Blinkhorn*

Context 1 produced a dump of pottery weighing 1926g. It largely comprises undecorated but glazed refined white earthenware of 19<sup>th</sup> century date (MoLAS fabric code REFW), other than a single "Flow Blue" decorated cup or bowl, dateable to 1830 – 1900 (MoLAS fabric code

TPW FLOW). The pottery is all shattered, melted, burnt and fused together, having clearly been exposed to extremely fierce heat. It consists of a mixture of standard domestic forms, such as cups, plates and bowls.

A fragment of a soup-plate has a partial makers mark on the base, of James Green and Nephew, a pottery and glass manufacturer based at the Victoria Pottery Galleries and Thames Cut-Glass Works at 107 Queen Victoria Street, St Pauls, which according to the "Pottery Gazette from London" of September 1<sup>st</sup>, 1892, *claims [to] have the largest stock of china, earthenware, and glass in London*. Their main period of activity appears to have been from the mid-19<sup>th</sup> – early 20<sup>th</sup> century, and they appear to have no connection whatsoever to Earlsfield, which itself has no history of pottery manufacture, and was largely rural before the construction of the railway station in the late 19<sup>th</sup> century.

The most striking feature of this group of material is the fact that there is absolutely no kiln furniture present amongst the masses of fused and shattered pottery. If this was a group of manufacturing waste which had suffered catastrophic failure in the kiln, one would expect to see fragments of props, spurs and other standard kiln furniture of the period adhering to the fused masses of shattered pottery, especially as it is all glazed, as it would be impossible to fire such pottery without kiln furniture. The fact that there is none indicates very strongly that this is not kiln waste, but most likely material which was destroyed in a catastrophic domestic fire, probably while stacked in a cupboard or similar. Given that it was used as the back-fill of an ice-house, it would seem most likely that the fire took place at an associated property, apparently at some point in the early 20<sup>th</sup> century.

**APPENDIX II CBM and mortar report by Sue Pringle**

Location of brick/mortar	Date of CBM / Context	Period	Fabric	Form	Count	Weight (g)	L	B	T	Condition	Comments
N wall, tunnel	1750-1850	PM	3032	brick	1	2104	230	103-110	68	M, V	<p>Fabric red, somewhat vitrified. Silt-sized quartz in matrix which is poorly mixed with very coarse inclusions probably of domestic rubbish - 'spanish'.</p> <p>Frog c.140 x 60 mm (obscured by lime mortar). Fairly flat faces, sharp arrises; overfired; warped with spalling on top, stretcher and header. Fine moulding sand. White lime mortar with medium to very coarse quartz &lt; c. 6 mm, coarse to very coarse flint and sparse black grains, all well rounded. Yellow, translucent white and grey quartz and flint inclusions predominate</p>
S wall, tunnel	1750- 1850	PM	3032	brick	1	2137	229	102	69	M, V	<p>Fabric and mortar similar to other brick.</p> <p>Frog c. 155 x 55 x c.16 mm deep in base. Frog has 2 impressions, 1 either side of a low central ridge. These may represent crude brick stamps but too mortared for secure ID. Brick is overfired, warped and cracked. Sides flat with creased stretchers; sharp arrises</p>

Outer perimeter wall, at the entrance, above the arch	1770?- 1825	PM	3100	mortar	7+	22	0	0	0	A	Seven fragments plus crumbs Grey-brown, very fine-grained matrix. Aggregate composed of yellow, grey and translucent coloured flint and quartz, medium to coarse grade, < c. 4 mm. Moderate black and fine to medium white calcareous inclusions. More flint in aggregate than in the lime mortar on the bricks

## APPENDIX III OASIS Data Entry Form

OASIS ID: **compassa1-227563**

### Project details

Project name Springfield ice house, Burntwood Lane

Short description of the project

This document summarizes the results of an on-site archaeological investigation undertaken in September 1015 at the Springfield ice house located within the grounds of Burntwood School, Burntwood Lane, Earlsfield, Wandsworth. The archaeological programme has been recommended by the London Borough of Wandsworth and Historic England due to the fact that the ice house is a Grade II listed building. The investigation was conducted in relation to current plans to restore the ice house by Eger Architects and to support the listed building consent and planning applications.

Archaeological investigation took place inside the ice house as well as outside, at the base of the original retaining brick walls of the entrance pathway. The investigation was conducted over the course of two days and included two elements: the archaeological test pits, dug by hand in the internal and external area of the building and a basic level 2 building survey. The investigations revealed the original floor of the domed structure and the foundations of its external walls. The revealed thresholds, door jambs and walls provided information about the probable original design of the building. The written record was supported by drawn and photographic record.

Finds retrieved from the site dated to later 19th to early 20th century and were mainly waste discarded in the ice house area. No finds classed as Treasure or human remains were found on the site.

The information obtained during the investigation provided answers to main research questions and should prove useful for reconstruction purposes.

Project dates Start: 24-09-1015 End: 25-09-2015

Previous/future work No / Not known

Any associated project reference codes ICE15 - Sitecode

Type of project Building Recording

Site status Listed Building

Current Land use Other 15 - Other

Monument type ICE HOUSE Post Medieval

Significant Finds POTTERY, GLASS Post Medieval, Modern

Methods & techniques ""Annotated Sketch"" ""Photographic Survey"" ""Survey/Recording Of Fabric/Structure""

Prompt Listed Building Consent

### Project location

Country England

Site location GREATER LONDON WANDSWORTH EARLSFIELD Springfield Farm ice house

Postcode SW17 0AQ

Study area 0 Square metres

Site coordinates TQ 526717 172466 50.933857164547 0.172982275332 50 56 01 N 000 10 22 E Point

### Project creators

Name of Organisation Compass Archaeology

Project brief originator Historic England

Project design originator Compass Archaeology

Project director/manager Geoff Potter

Project supervisor Agnieszka Trambowicz

Type of sponsor/funding body Local government, educational

Name of sponsor/funding body Burntwood School

### Project archives

Physical Archive recipient Museum of London Archive

Physical Contents	"Ceramics","Glass"
Digital Archive recipient	Museum of London
Digital Contents	"Ceramics","Glass"
Paper Archive recipient	To be confirmed
Paper Contents	"Glass", "Ceramics"
Paper Media available	"Correspondence", "Drawing", "Photograph", "Plan", "Report", "Section"

Entered by Compass Archaeology (mail@compassarchaeology.co.uk)  
Entered on 28 October 2015