

Archaeological Assessment of Bessborough Burial Ground, Co. Cork

January

2022

Report by John Tierney and Martha Hannon, Eachtra Heritage.

Email – john@eachtra.ie

Historicgraves 

Content

1.	Executive Summary.....	2
2.	Introduction	3
3.	Description of Site.....	6
4.	Methodology	6
5.	Mapping Change.....	8
6.	Non-Invasive Surveys	9
7.	Discussion	15
8.	Conclusions	21
9.	Recommendations	22
10.	References	23

1. Executive Summary

1. Eachtra was engaged by the Congregation of the Sisters of the Sacred Hearts of Jesus and Mary to provide an independent archaeological assessment of Mother and Baby Home related burial practices in Bessborough, Co. Cork.
2. This is the first archaeological assessment of the burial ground at Bessborough which is not related to a planning hearing. The archaeological assessment methodology used is based on Sturdy Colls (2015) which is designed to address 20th century conflict and contested burial practices.
3. The Mother and Baby Home Commission of Investigation did an archaeological review of Bessborough burial practices but a report was not published.
4. Independent researchers and the Cork Survivors and Supporters Alliance's research into whether the children's burial ground was in the field north of a folly in Bessborough demesne was important to this assessment. Assessment of that hypothesis pushed us to be more open in our thinking.
5. We combine Dr Aoife Bhreatnach's historical research with that of the Mother and Baby Homes Commission of Investigation to propose that some children were buried here, probably over a relatively short period, when the city-wide burial system for the unclaimed Bessborough dead was potentially overwhelmed.
6. Outside of this period of system overwhelm, which perhaps took place in the 1940s, unclaimed burials relating to Bessborough women and children took place elsewhere in the city at cemeteries such as St. Joseph's, St. Finbarr's, St. Michael's, and the Cork District Cemetery (Carrs Hill).
7. In our analysis of Ordnance Survey maps from 1840 onwards we note that the map label 'Childrens' Burial Ground' appears at the same time as a new sub-rectangular enclosure attached to the folly. We also note the map label pivots on that enclosure in two different map editions (1969 and 1979). We conclude that the label indicates that the children's burial ground is that sub-rectangular enclosure.
8. Analysis of grave markers in the enclosed burial ground indicates a tight sequence of nuns' burials which avoids two areas within the fenced enclosure. We believe these two areas have potential to be the areas where children were buried; that is, if care was taken to identify the original children's burials and therefore avoid disturbing them from 1956 onwards.

9. Non-invasive geophysical survey of the burial ground and UAV¹/Drone mounted LiDAR survey of the Bessborough estate grounds are recommended.
10. We conclude by favouring the hypothesis that was only ever one burial ground in Bessborough and that it contains both children and nuns.
11. The topic of late 19th and 20th century institutional burial practices are poorly studied and understood. A systematic approach of survey and analysis is needed to deal with the issue.

2. Introduction

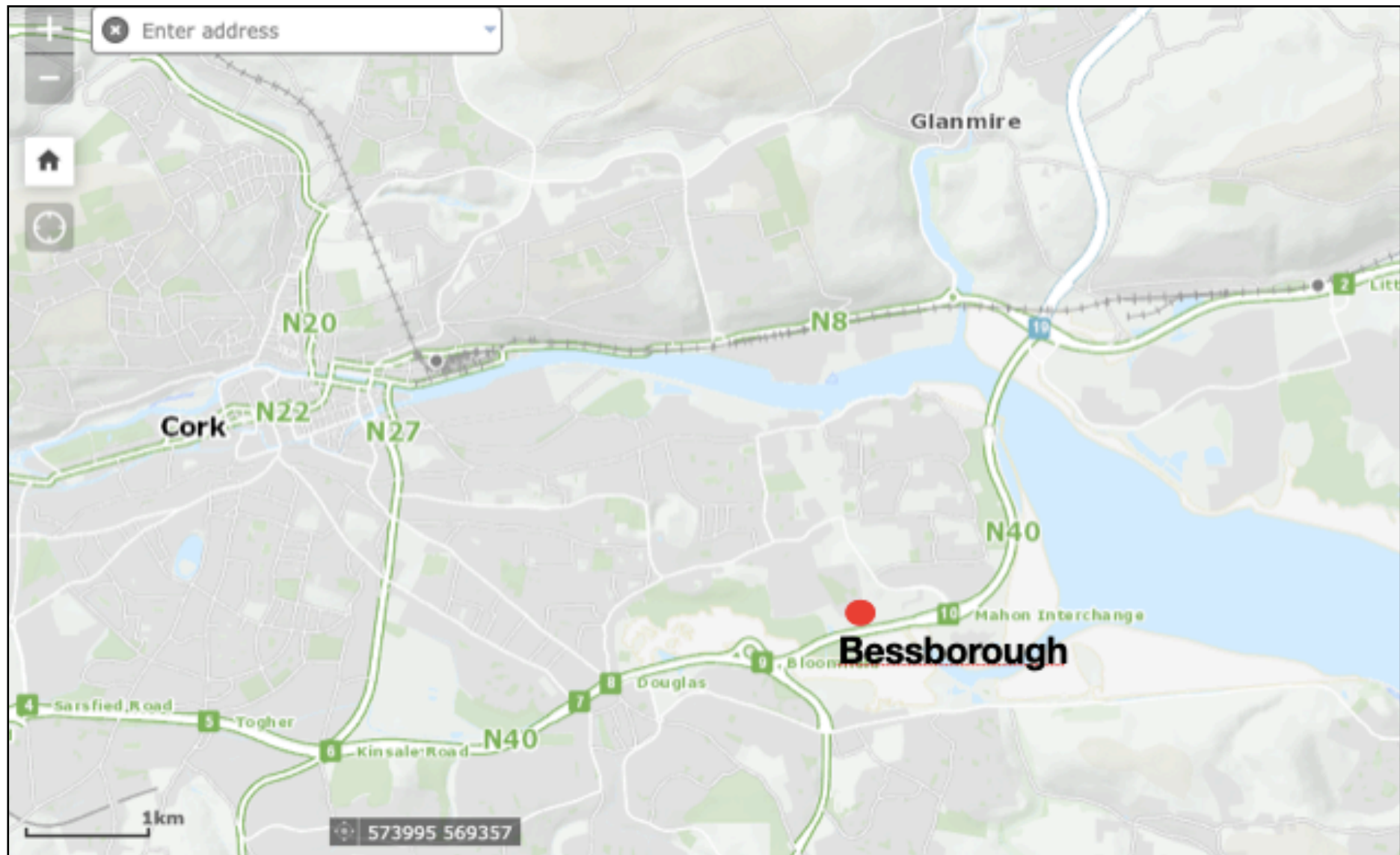
Eachtra was engaged by the Congregation of the Sisters of the Sacred Hearts of Jesus and Mary to provide an independent archaeological perspective on ongoing historical research (Bhreatnach, 2021) into Mother and Baby Home related burial practices in Bessborough.

Following a review of the available historical analysis Eachtra suggested that an Archaeological Assessment would be appropriate using the methodology outlined in Sturdy Coll (2015). The assessment approach is intended to develop a spatial & temporal understanding of the use of the site in the 20th century in the light of the large numbers of children who died within the hospital and home system in Bessborough and who were buried unrecorded and without mortuary monuments.

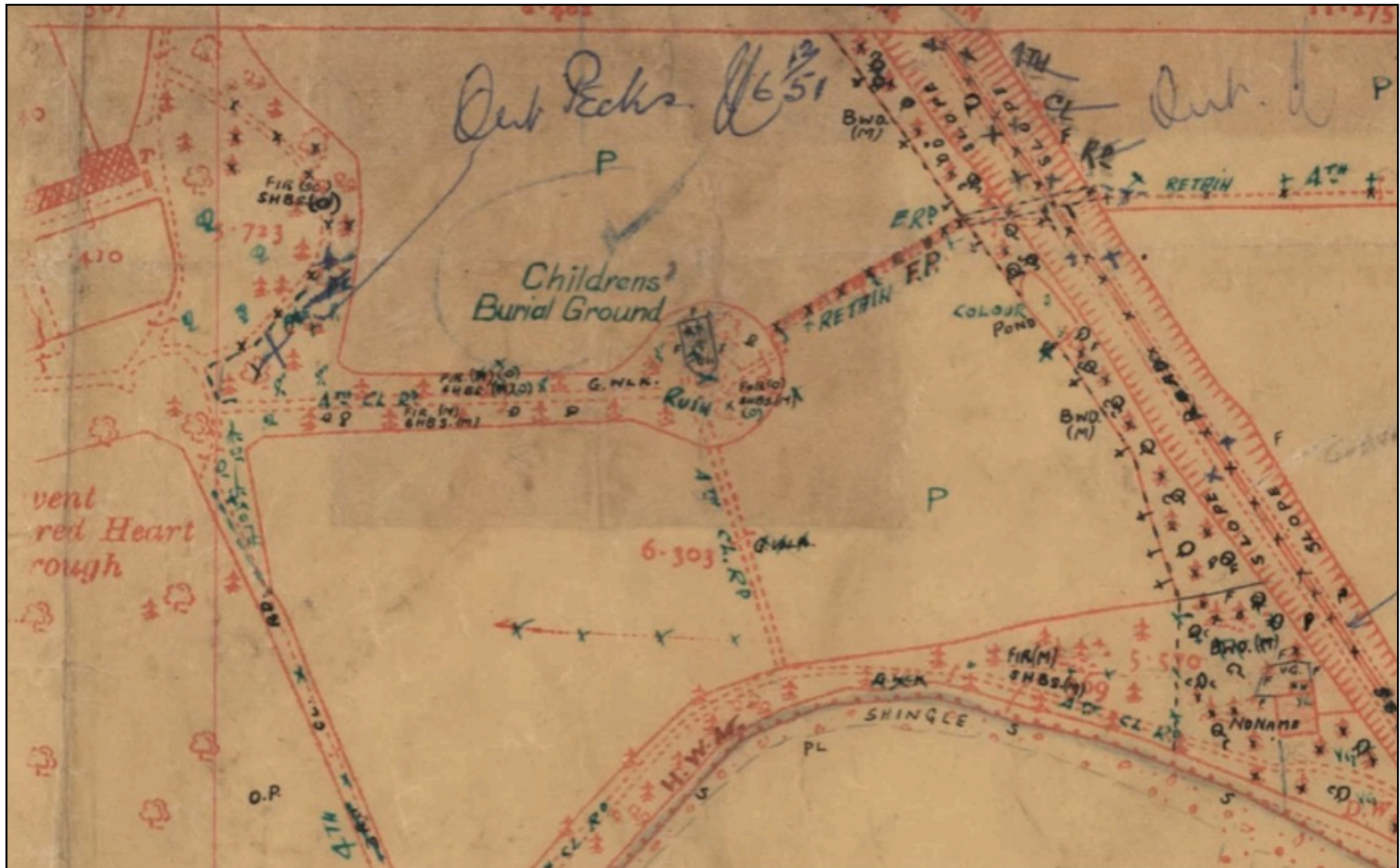
This report is based on the results of a series of non-invasive surveys of the burial ground in Bessborough and its environs. This report is written in the context of a number of controversies relating to the nature and location of human burials in Bessborough.

The authors of this report are field archaeologists who have worked in Irish archaeology since 1985. John Tierney is a Member of the Institute of Archaeologists of Ireland and since 2010 John has been director of the Historic Graves Project which is a community archaeology survey project. In this project the authors have worked with communities all over Ireland, surveying the equivalent of one graveyard per week since 2010 and publishing over 500 surveys to www.historicgraves.com, thus developing a familiarity with the archaeology of burial grounds and graveyards as well as with 19th and 20th century mortuary practices. The Historic Graves Project has evolved in recent years to focus on institutional burial practices in Ireland working on burial grounds associated with *An Gorta Mór* and District Mental Hospitals as well as congregational and institutional burial practices.

¹ Unmanned Aerial Vehicle



LOCATION OF BESSBOROUGH



ORDNANCE SURVEY TRACE MAP FROM 1940-50

3. Description of Site

Bessborough House is situated in the suburbs of Cork city, six km southeast of the city centre and adjacent to the South Ring road in Ballinure townland, overlooking Douglas estuary. Bessborough Estate and the nearby Lakeland's Estate were high status properties occupying the southern corners of Ballinure townland apparently originating in the late 1700s. Bessborough House was predominantly associated with the Pike family until they sold the house and estate to the religious congregation in 1922. Bessborough demesne measures approx 0.4 km² ie. 1 km long x 0.4 km wide.

Bessborough House and gardens are clearly shown on the mid-19th century Ordnance Survey maps and by 1901–02 the three main elements of Bessborough estate are visible ie. Bessborough House, Bessborough Farm and the avenue leading towards, and including the folly (Plate 1) where the burial ground is now located. A 1926–7 revision of the Ordnance Survey maps shows the avenue and folly just as they were in 1902 but a 1949–50 version of the Ordnance Survey maps shows an adjacent children's burial ground.

The bedrock geology of the site is comprised of Waulsortian limestone and is covered by a glacial till derived from Devonian sandstones.

4. Methodology

Fieldwork was done by John Tierney and Martha Hannon of Eachtra. Historian Dr Aoife Bhreatnach attended a number of the site visits with us also. Dr Paul Naessens and John Meneely attended for the duration of their field surveys.

- Historical Review – Dr Aoife Bhreatnach (Independent Researcher)
- Tracking changes in historic maps (Map Regression Analysis) – John Tierney (Eachtra)
- Drone Survey (Measured Survey of Site) – Dr Paul Naessens (Western Aerial Surveys)
 - Area 1 - the burial ground
 - Area 2 - lawn near convent

- 3D Scanning (Faro Scanner) of four areas – John Meneely, QUB
 - Area 1 - the burial ground
 - Area 2 – south of avenue
 - Area 3 – north of avenue
 - Area 4 – lawn near convent
- Grave memorial survey – John Tierney.
- LiDAR Assessment Dr Steve Davis – UCD.
- Report writing – Martha Hannon and John Tierney.

Jacinta Kiely (Eachtra) commented on a first draft of the report as did Dr Bhreatnach. An external editor was also involved in a document review. Errors, omissions, emphases are the authors.

5. Mapping Change

5.1. Published Ordnance Survey Maps

Ordnance Survey maps are key historical documents used in archaeological assessments. The maps in Figure 2 represent the sequence of published Ordnance Survey maps for the folly area in Bessborough.

The avenue, folly and adjacent burial ground are later, built elements of Bessborough estate ie. the avenue and folly were built between 1870–1900 while the original house and demesne date to c.1760². The 1870s Griffiths Valuation maps do not include the avenue and folly³. The statutory National Inventory of Architectural Heritage (NIAH) suggests the two-storey stone folly was built c.1880.

5.2. Ordnance Survey Trace Map and Published Maps

A section of a 1949–50 trace map of Bessborough is shown in Figure 5. The Ordnance Survey Ireland revisers who annotated the trace map were a Mr Horgan, who spent four days on site-work at Bessborough in October 1949, and a Mr O'Rourke⁴ who spent a day-and-a-half on the site in January 1950. The use of the trace map by independent researchers as part of a number of planning submissions and hearings was very interesting and useful in establishing where and how burials took place in Bessborough. We had not used trace maps on previous projects but recognised their value immediately when this trace map was first used in a Bessborough planning related submission.

Some details of the trace map are especially interesting in trying to reconstruct the development of the site. The map is marked with the label 'Childrens' Burial Ground' which appears at the same time as the new sub-rectangular enclosure attached to the folly. We also note the map label pivots around that enclosure in two different map editions (1969 and 1979). It is also worth noting that the map label 'Children's Burial Ground' touches the circular enclosure (Figure 5)

² <https://www.buildingsofireland.ie/buildings-search/building/20872005/bessborough-bessboro-road-ballinure-cork-cork>

³ https://griffiths.askaboutireland.ie/gv4/single_layer/i8.php?lat=andlongt=anddum=0andsheet=74,75andmysession=2794816207956andinfo=andplace=andcounty=Corkandplacename=%3Cb%3EBallinure%3C/b%3Eandparish=St%20finbarandcountry=Irelandandunion=andbarony=Cork

⁴ <https://www.irishtimes.com/news/ireland/irish-news/cork-apartments-would-be-over-burial-ground-survivors-say-1.4545157>

around the folly in both positions, even in the trace map. This, we suggest, indicates that the trace map, blue pencil circle and tick were intended to question whether the label should be moved away from touching the boundary and not, as has been hypothesised elsewhere, that the circle indicated the presence of an unenclosed children's burial ground. Because of these factors we conclude that the label indicates that the sub-rectangular enclosure is the children's burial ground (Fig. 5).

The 1949–50 trace map shows a rectangular enclosure marked on three sides with an F which we interpret as fence. We believe an original piece of this fence survives in the burial ground as the south gate bar of the graveyard entrance, indicating the original fence may have been iron railed (Plate 2). The enclosure is shown attached to the folly structure.

There are two asterices drawn on this map (Fig. 6), inside the enclosure, which may be two crossed-out symbols. There are two dashed lines north of where the entrance gate is now situated which appear to indicate an entrance path. A number of letters and numbers appear to have been written on the map, possibly the number 5 or 15 and perhaps the letters CH.

We believe there is a possibility that one handwritten note could be CH and may, potentially, refer to children being buried within the enclosure although other letter combinations we can postulate are GH or OH. An alternative hypothesis is that the annotation could refer to a ground surface, path surface, or a measurement. OS map symbols and characteristics were standardised⁵ but we cannot find a copy of the trace map symbols.

The poor quality of the image is not good enough to have high confidence in reading the text inside the enclosure. We have attempted a number of digital techniques to clarify the annotations (Fig. 6) but they did not significantly succeed in improving legibility.

6. Non-Invasive Surveys

The key question affecting our analysis of burial practices at Bessborough is where are the children buried? Bhreatnach (2021) and the Mother and Baby Home Commission (Anon 2019) both clearly demonstrate that the burial of children associated with Bessborough Mother and Baby Home and Bessborough Hospital happened to a large extent in cemeteries within the city system. Unfortunately the Cork city system appears not to have been fit for purpose and

⁵ https://libguides.ucd.ie/ld.php?content_id=32236535

resulted in unrecorded and unmarked burials. The only historical documents which indicate children are buried in Bessborough demesne are the Ordnance Survey maps mentioned above.

Assessing the evidence of those OS maps focusses our search for children's burials in the area of the avenue, folly and the field to the north of the avenue. Combining this evidence with an examination of the burial practices of the Congregation in two other Mother and Baby Homes in Ireland supports, we believe, the hypothesis that burial in this area is most likely.

The Congregation's burial practices at Sean Ross, Co. Tipperary, and Castlepollard, Co. Westmeath, indicate they have concentrated their burial grounds in adjacent or contiguous sites. In Sean Ross the nuns burial ground is 115 m NW of the separate children's burial ground but still in the same sector of the estate grounds and along the same stretch of pathway. The children's burial ground in Sean Ross appears to have been enclosed throughout its period of use.

In Castlepollard the nuns burial ground and the children's burial ground were contiguous, enclosed outside a garden wall, and separated by a path which was subsequently removed, perhaps in the 1990s. Essentially burials of children, mothers and nuns in Castlepollard took place in a single sub-divided walled plot, contrary to what has been said at previous planning hearings.

Therefore we believe the evidence indicates that the Congregation of the Sacred Hearts enclosed the children's burial grounds under their stewardship. This supports the hypothesis that the enclosure attached to the folly in Bessborough in the trace map and subsequent mapping was the children's burial ground. As a test to this hypothesis we have recommended a more detailed LiDAR survey of Bessborough demesne.

Controversial cases of 20th century burials involving unrecorded and unmarked graves can only be properly studied using a systematic method. So far systematic recording and analysis of comparanda is lacking in this area and this has been detrimental to the discussion. We believe a larger database of institutional burial grounds is required to better understand this fraught topic.

6.1.FARO Laser Scans

Based on the thinking outlined above and following a systematic field inspection of high potential parts of the site four areas in Bessborough, which could potentially contain ground features related to burials, were identified. Each of the four areas were scanned with a Faro Focus S scanner and 3D models of the sites were produced and assessed. Essentially this process creates a model of the shape of the surface of the ground which can be of use to assess the presence/absence of grave-like features. An assessment of evident features of the point cloud models was done in the software packages Meshlab and Cloud Compare. Measurements were taken from the models and micro-topography was assessed by using

the equivalent of hillside modelling with Meshlab. This technique casts light from multiple angles around the models in the expectation that shadows will emerge and potentially identify features and clarify their morphology.

Areas 2, 3 and 4 had shallow ground features which had potential to be traces of burial features. Following on-site assessment and examination of the ground features identified we hypothesise that Areas 2-4 represent gardening-related features rather than burial.

Within the burial ground the iron grave markers are not just symbolic⁶. Analysis of the point cloud for Area 1, the burial ground, clearly presents the evidence that grave markers are associated with individual graves and both grave humps and hollows are identifiable.

Area 1

This area measures 14 m N—S x 11 m and is situated on the N side of the folly structure. This is the Bessborough burial ground. Up to 10 of the graves are also discernible by grave hollows or humps. It contains 31 grave memorials of which 27 are for nuns and appear to mark primary grave spaces.

The identification of unmarked graves can be difficult even in an enclosed burial ground. We have worked on over 500 graveyard surveys in the last decade and encounter grave features with and without gravestones on a weekly basis. In this time we have worked on the skill of identifying grave features in a graveyard/cemetery and we have brought that experience to the examination of the ground surface in this assessment. Generally, we view these identifications as hypotheses to be tested using excavation or non-invasive methods. We believe test excavations would not be appropriate for this burial ground and suggest instead that non-invasive geophysical survey techniques should be considered as further works in Area 1.

Area 1 is traditionally associated with the burial of children (Anon ???) and is where commemorations are focused, as represented by a number of memorial stones. If this is the children's burial ground then the nature of the graves used to bury the children is unclear. Single-use shallow graves have been encountered elsewhere but various types of common graves, narrow, long, walled and unwallled could potentially be present in the burial ground. This is a key issue which can be addressed by the use of non-invasive geophysical survey.

⁶ When we record institutional burial grounds we are often faced with evidence for the movement of mortuary monuments so we can never take it for granted that the mortuary monument is in its original location.

Area 2

This area measures 21 m E—W x 12 m and is situated on the south side of the central path leading to the folly and burial ground. Sitting beneath mature trees the ground surface was covered with leaves for each of our visits and so we raked the leaves aside during site inspection (Plate 4).

Area 2 is situated between two large trees. A number of shallow depressions are visible to the naked eye and the FARO 3D scan was used to assess the shape and dimensions of the depressions. We believe the evidence on the ground points to these being ground disturbance features related to gardening rather than for burial as the features are irregular in size, orientation and extent. It would be worthwhile to do a non-invasive geophysical survey of this area as a control survey for comparison with Area 1.

Area 3

This was the largest area scanned measuring 52 m E—W x 20 m. It is situated adjacent to Area 2 but on the north side of the avenue path (Plate 4). There is more grass cover in this area than in Area 2.

This area has ground features which appear to be the result of either garden hedging or raised beds. This part of the garden was included in a number⁷ of Al Jazeera news reports with aerial images annotated to indicate the possibility that there are over 20 graves in this area⁸. We can see why some researchers may think the aerial images examined at the time could indicate the presence of graves here. However, a detailed site inspection indicates all of the potential features indicated are most likely to be planting beds or hedged plots (Plate 5).

Area 4

Measuring 33 m E—W x 25 m, this area is closest to the convent and is a lawn with regularly mown grass (Plate 6).

⁷ https://youtu.be/dkzBsO9m_hk?t=119

⁸ <https://youtu.be/F65Mc3oBylk?t=1489>

On our first site visit we identified this area as having a series of surface features which were similar to grave features in size and depth. We recorded the lawn area by Faro 3D scanner and also with a separate drone survey to create digital terrain models (DTM).

Combining cartographic analysis with these surveys we now believe the surface features we found are too irregular in shape and layout to be graves and we believe they represent marks from the removal of trees and bushes which once covered this ground, and are visible in the OS maps, and were removed in the process of forming this lawn.

6.2. Grave Memorial Survey

The enclosed burial ground described above as Area 1 is divided into three different sections by a pathway. A pathway is shown on the 1926 and 1950 Revision OS maps completely encircling the Folly structure. This encircling pathway has been partly retained in the current arrangement (Plate 3) but the present-day central path is not visible on any printed OS maps. The central path divides the burial ground equally and leads to a small Grotto with a statue of Christ which represents the resurrected Christ emerging from his tomb⁹.

We recorded the names and dates on each grave memorial in the burial ground and plotted the sequence of burials. There are primary grave memorials for nuns (memorials 1–24, 26, and 27) and for one infant child (memorial 29). Children's graves were not given contemporary grave markers in Castlepollard mother and baby home either. More information is needed on this topic. In our work in rural historic graveyards we have come across graves where babies were buried with inscribed gravestones, others where uninscribed grave markers were used and then many where reportedly stillborn babies were buried in **unmarked** graves, both within and outwith the consecrated burial ground.

Combining the grave memorial information with the micro-topographic analysis we propose four sections (Fig. 14, Plate 3) in the burial ground.

- **Section 1** 9 m E—W x 3.5 m. Southern end of site. No nuns burials marked here and site of commemorative memorials for buried children. Pathway preceding the burial ground partly fossilised in this area.
- **Section 2** 10 m N—S x 1.9 m. Middle ground E of central pathway. Micro-topographic inspection indicates either no graves dug here or else the ground was artificially levelled after burial episodes. It looks undisturbed.

⁹ Pers comm Bessborough gardener who made the grotto.

- **Section 3** 10 m N—S x 3.8 m Western half of burial ground, contains two burial rows both of which are 1.9m wide. This Section has 18 grave markers in two rows of nine graves each, in an area measuring 44m² which rounds up to 2.5m² per grave per adult burial.
- **Section 4** 10 m N—S x 2.3 m Eastern row of mostly later nuns burials. A mixture of grave humps or mounds and hollows are present in Section 4. Nine nuns are buried in a 10m long space and the graves vary in width from 0.84m to 1.2m. An average grave area of 2.5m² prevails in this row of graves also.

The earliest burial date on a grave memorial in Bessborough is 1942 which is for a 3 month old baby and the touching memorial was erected in recent times ie. not definitely marking the grave space for that child¹⁰. The next date is for a nun who died in 1956.

The first group of nuns ie. from 1956– 1995 were buried on the west side of the burial ground except for two interments on the E side in 1966 and 1987. The west side of the burial ground was completely filled with graves by 1995.

After 1995 burials were on the east side of the burial ground along the fence line. All of the nuns grave markers are facing the central path.

6.3. Drone Survey

We combined three different drone flights of the avenue, folly and burial ground to assist in our assessment. A wider area flight was made to record the whole area and then two further flights were made focussing on the folly/burial ground (Area 1) and the lawn area closest to the convent (Area 4). Conditions were not suitable to do separate drone flights over Areas 2 and 3 so we can only examine the Faro scan data for those two areas.

The drone surveys with surveyed ground control points build an accurate measured survey of the site. The resulting RGB aerial map was used during fieldwork onsite and also in QGIS (a geographical information system) to assist in site analysis. Processed by Western Aerial Surveys in Pix4D the drone surveys also produced digital terrain models which allowed us to use QGIS to assist in the identification and recording of ground features in the areas of interest. The digital terrain models were analysed using the Relief Visualisation Toolkit with hillshade analysis proving the most useful technique used.

¹⁰ While we recorded all names and dates on the grave memorials we are not including the details in this report.

6.4. LiDAR Assessment

During 2021 the authors received a grant from the Royal Irish Academy to test the use of multispectral and LiDAR survey and imaging technologies for the identification of famine-related grave features at one site in Gort, Co. Galway and another in Pulla, Co. Waterford. As this work was showing positive results we proposed assessing the available datasets for Bessborough in November 2021.

Transport Infrastructure Ireland (TII) have conducted LiDAR surveys of our national routeways including adjoining lands and the TII kindly provided a copy of their LiDAR survey for the Bessborough area. This report section is not a complete LiDAR survey of the estate. We believe a full survey should be done at a higher resolution than the available dataset.

Dr Steve Davis of the Archaeology Department, UCD assessed the potential of the Transport Infrastructure Ireland (TII) LiDAR dataset for identifying possible grave-related features in Bessborough. A number of different types of analysis were done by Dr Davis and the hillshade analysis presented in Fig. 17 demonstrates that LiDAR has shown up considerable surface detail of the ground in Bessborough and has got the potential to identify grave-related features elsewhere on the site.

It is worth comparing this LiDAR assessment of Bessborough with Fig. 18 and 18a which shows a similar assessment, with the same level of detail, albeit for a smaller area, for a Famine and County Home cemetery in West Waterford, and also for the Cork District Cemetery, Carrs Hill, Cork. Grave features are visible as patterned darker areas in both the Pulla and Carrs Hill LiDAR survey images. Note no such features or patterns of features are indicated in the Bessborough assessment. We believe a new LiDAR survey of the Bessborough estate should be commissioned as this will provide a higher resolution dataset for examination. This survey will serve as a further test of the hypothesis that there is only one burial ground in Bessborough.

7. Discussion

Reference made earlier to the NIAH¹¹ ALLUDIG to pre-Congregational burial at Bessborough requires comment. Unfortunately, that online resource did not provide sources for their research and the site appraisal makes two unusual statements which potentially push the congregational burial practices back to the 1920s and also suggest the Pike family, presumably, may have had a private burial ground here.

¹¹ <https://www.buildingsofireland.ie/buildings-search/building/20872007/bessborough-ballinure-blackrock-cork>

The small graveyard in use since the 1920s for the convent is of social significance and may be located on the site of an earlier burial ground associated with the former country house.

An archaeological view of this statement is that there are no surviving grave markers in the burial ground from the 1920–40s and also that the Pikes buried their family members elsewhere in Cork city.

The discovery of the 1949–50 OS trace map and its annotations allowed the development of an alternative hypothesis that the children's burial ground was under the map label in the field north of the avenue and folly and not in the fenced burial ground as had previously been thought. This hypothesis is worth exploring and we have assessed it in a number of ways.

First, we examined the use of map labels on various OS maps and find there is a general practice of putting labels along side features rather than on top of them. Second, we examined the use of labels to indicate the location of children's burial grounds elsewhere in Co. Cork and two main points are observed. If the children's burial ground was situated inside an enclosure the label was placed alongside that enclosure (Fig. 3), which can be delineated with a solid line or with slope hachures. If the children's burial ground was not within a recognisable enclosure then a dashed line was used on the OS maps to show the extent of the site. No dashed line is used on the trace map or subsequent map editions and we believe this indicates the label refers to the new enclosure and not an unenclosed burial ground.

Having scrutinised the maps we believe that the 1949–50 survey and subsequent revision maps are key to understanding burial practices in Bessborough. It shows that the Bessborough burial ground started as a children's burial ground and developed thereafter, into the burial ground for the nuns.

To clarify, we make two assertions here. 1. There is only one burial ground in Bessborough demesne. 2. It contains burials of both children and nuns. Based on our field walking we have found no evidence that there is more than one burial ground or that there are casual or informal burials in locations outside the known, enclosed burial ground. We recommend the use of a higher resolution LiDAR survey and analysis to further address this issue in the broader demesne. For the second point the only evidence we have for children's burials is from the OS maps. As pointed out by the CSSA (2021) this process would have involved consulting the Congregation in 1949–50 to confirm the location of the children's burial ground. This same burial ground was subsequently used for Congregational burials from 1956 onwards. To further test this hypothesis we propose that consideration be given to non-invasive geophysical survey within the burial ground enclosure to test whether children's graves can be identified.

The suspicion that there is a ‘vast burial ground’¹² somewhere within the estate is an artefact of the poor historical records for burial practices in both Bessborough and Cork City. Reading news reports of the various planning submissions and hearings relating to the adjacent grounds we can see why that suspicion has arisen but the hypothesis of large numbers of unidentified 20th century burials within the estate (and not in the burial ground) does not bear up under scrutiny. Nor does the Commission’s (Anon, 2020, pg 30) contention that “it would be unlikely that children be buried in the same burial ground as members of the congregation”. No evidence was provided by the Commission to support this statement and nor does it account for the simple change of burial practice over time.

The burial ground is first seen in this 1949–50 trace map and thereafter is shown on related OS map revisions (Fig. 2). The burial ground was not shown on the 1934 OS revision so we can say it was established between 1934 and 1949–50. Contrary to this 1949–50 cartographic evidence, the Mother and Baby Home Commission of Investigation state in their main assessment of burial practices at Bessborough (Anon 2019, pg 8-9),

5. There is a small burial ground in the grounds of Bessborough. This was opened in 1956 for members of the congregation. It seems to have been assumed by former residents and advocacy groups that this is also where the children who died in Bessborough are buried as there are occasional meetings and commemoration ceremonies held there. The vast majority of children who died in Bessborough are not buried there; it seems that only one child is buried there...

6. The Commission tried to establish where the Bessborough children were buried. Cartographic and landscape assessment was undertaken of possible unrecorded burial arrangements in the Bessborough grounds. A site survey was also conducted. It is clear that there are a number of locations within the grounds where burials could have taken place. However, there is no significant surface evidence of systematic burial anywhere except for the congregation burial ground.

7. The Commission considers that it is likely that some of the children are buried in the grounds but has been unable to find any physical or documentary evidence of this. In particular, during the 1940s (when many of the deaths occurred) and when petrol was scarce, it would have been very expensive to arrange off-site burials. However, as no

¹² Taken from a planning briefing note published by the CSSA in 2019.

physical evidence of possible locations was found, the Commission did not consider it feasible to excavate 60 acres not to mention the rest of the former 200 acre estate.

We concur with the Commission of Investigations statement that historical research shows that the ‘vast majority of children who died in Bessborough are not buried there’ but we believe the Commission got it wrong when it came to identifying where the remaining, minority of children may be buried. The above statements have been much quoted (Wills 2021) since publication but they ignore the cartographic evidence that there was a children's burial ground located adjacent to the folly six years before the congregation began burying there¹³.

As the Commission has not published a report of their archaeological review of burial practices at Bessborough we cannot assess their reasoning. The Commission of Investigation did publish a good archaeological report on burial practices at Sean Ross Mother and Baby Home (McCullagh et al, 2019), in Tipperary, but for some reason chose not to do so for Bessborough.

We agree with point no. 6 by the Commission but suggest that points no. 5 and 7 show a flawed understanding of the issue. The 1949–50 trace map and subsequent printed revision maps with the children's burial ground label is documentary evidence of where the children are buried. The Sean Ross archaeological report clearly lays out the cartographic evidence for that site and we presume the absence of a formal archaeological report for Bessborough led to this error.

Burial of nuns commenced in 1956 (Fig. 15) but the 1949-50 maps prove that the enclosure was present at least six years before that. From 1956 onwards the burial of the nuns was concentrated on the west side of the burial ground (Section 3) with three burials in 1956, 1957 and 1964. The next burial then switched to the east side of the burial ground but then switched back to the west again from 1967–1995 (with one exception) at which stage the west side was filled with single use graves.

After 1995 burial of nuns took place inside the east fence in a single row. Thus we can say the nun's burials were organised and concentrated in three rows of graves. While we cannot say for certain, without geophysical survey, we hypothesise that the micro-topography of the ground indicates Section 2 is still undisturbed.

If nuns and children are buried in this enclosure there are two main burial patterns possible.

¹³ For an example of the significance of this statement see <https://www.lrb.co.uk/the-paper/v43/n10/clair-wills/architectures-of-containment>. The cartographic evidence of a children's burial ground at Bessborough was ignored by the Commission in their concluding statements and this results in subsequent researchers continuing the error.

1. Babies, infants and nuns were buried in different sections of the site.
2. Nuns' and childrens' graves were dug in the same sections: if the earlier infant graves were not given grave markers then the grave spaces may have been reused.

Section 1 is the main contender for being used solely for burial of babies/infants. This is an area inside the entrance gate measuring 9 m E—W x 3.5 m N—S and is currently the focus of memorials for children's burials. Non-invasive geophysical survey can assist in determining the presence/absence of children's graves in this area.

Comparanda

If children were buried in Bessborough burial ground we cannot tell if they were buried in single shallow graves or if they were buried in common graves similar to those used for children's burials in Glasnevin cemetery, Dublin. In Glasnevin children's common graves can contain up to 22 different coffined burials per earth-cut grave shaft.

Walled graves are more flexible in terms of burial access and permitted intervals of use and are often favoured for family burials over several generations for this legal flexibility. For similar reasons, walled graves can also be used in institutional and communal/congregational burial contexts. The presence of walled grave shafts is possible in Bessborough but unlikely.

Archaeological assessment involving geophysical survey and intrusive archaeological excavations at the children's burial ground, in Sean Ross, Roscrea, Co. Tipperary, uncovered evidence that babies were buried coffined and uncoffined, that care was taken in the layout of burials and that burials may have been concentrated in particular areas (McCullagh, N et al. 2019 in MBHCOI Final Report 2020, Chapter 38 Addendum page 2).

If such burial arrangements were the result of decisions made solely by lay staff/gardeners/handyman then common elements may not be discernible between Bessborough, Castlepollard and Sean Ross. But if the Congregation was responsible for such decisions then we would expect there to be some common elements.

While we do not have detailed records of grave markers in the children's burial ground in Sean Ross we do have photographs we took as part of an unrelated site visit in April 2019. There appears to be only one contemporary grave memorial there and that relates to an adult female who died in 1937¹⁴¹⁵. This grave is marked with an iron cross on a

¹⁴ To be certain on this we'd need to do a memorial survey of Sean Ross and Castlepollard.

¹⁵ The archaeological survey of Sean Ross says there are two grave markers present.

concrete base the design of which is similar to that used in the nearby burial ground for members of the Congregation. If we combine the detail from the archaeological test trenches in Sean Ross with the apparent absence of grave markers there we can suggest that graves were identifiable to grave diggers by the present of surface humps and hollows. Alternatively they may have been marked by wooden memorials which have not survived. Similar circumstances prevailed in Castlepollard burial ground where children's graves were reportedly identified by humps and hollows only, before being covered and levelled off in the mid to late 1990s.

The mortuary practices relating to infant graves in unregistered burial grounds have not been adequately studied in Ireland. However, if we compare the three Mother and Baby Homes run by the Sacred Heart congregation there are common patterns (Fig. 19). In Sean Ross burials of Congregation members were separated from burials of children-mothers. Two substantial burial grounds are visible on the 1954 OS six-inch map 130 m apart but in the same section of the estate grounds. In Castlepollard the nuns and children were buried within one section of an older walled garden but separated by a path and perhaps also a low wall (Plate 7). The Commission's contention (Anon, 2020, pg 30) that members of the Congregation would not be buried along with children/women from the Home is not supported in Castlepollard but further comparanda are required to fully assess this point.

When considering the possibility of a burial ground being located anywhere in the Bessborough estate a relevant issue is the extent to which religious orders would conduct institutional burials outside of consecrated or dedicated/enclosed grounds. The Christian faith requires burial of baptised individuals to take place in consecrated ground. Adherence to Christian practices would indicate a bias towards burial inside designated, enclosed spaces which can be consecrated. The matter is complicated by the poor records kept for unregistered institutional burial grounds but more research is required. Another relevant issue here is that the field north of the avenue/folly was one of the main fields in Bessborough farm. As the farm pre-dated the burial ground we would consider it highly unlikely that commercially valuable land would have been given over to unenclosed burial.

Unenclosed historic burial grounds are rare in Ireland as 19th century legislation required enclosure. Workhouse and asylum estates are often found to have human burials within their walled grounds in designated and enclosed burial grounds. However, irregular burials are also found presumably coinciding with periods of famine and fever. The broader topic of unenclosed/undesigned burial occurring in 20th century institutional settings is too little studied at present to allow general statements to be made.

8. Conclusions

1. This is the first archaeological assessment of the burial ground at Bessborough not related to a planning application or hearing.
2. The Mother and Baby Homes Commission of Investigation did an archaeological review of Bessborough burial practices but no report was published so we cannot assess their work. We can say that the Commission discount the cartographic evidence that the children's burial ground was mapped and labelled in 1949–50.
3. The proposal that the children's burial ground was in the field north of the avenue was of value. We have assessed this hypothesis but believe all of the evidence points to the children's burial ground being in the enclosure attached to the folly.
4. We conclude that the enclosure attached to the folly is the feature around which the map label 'Children's Burial Ground' pivots. We note the map label is in two different locations on two different editions of the 1949–50 Revision map.
5. Annotations on the 1950 OS trace map are difficult to read but one potential reading includes the letters Ch which could refer to children. However, we do not have high confidence in our reading.
6. We favour the hypothesis that there was only ever one burial ground in Bessborough and that it contains both children and nuns.
7. We combine Dr Aoife Bhreatnach's work with that of the Commission of Investigation to suggest that children were buried here for a short period when the city-wide 'unclaimed dead' 'burial system was overwhelmed. The duration of the period of overwhelm is not known.
8. Analysis of nun's grave markers in Bessborough burial ground shows a tight sequence of burials which avoid two areas in the burial ground. We believe these two areas have potential to be where the children were buried. Alternatively, the children and the nuns may be buried in the same areas of the burial ground.

9. Recommendations

1. Non-invasive geophysical survey of the burial ground (Area 1) , and Area 2 are recommended. Consultation with specialist surveyors will be required to test and select the best method.
2. A UAV/Drone mounted LiDAR survey of the broader Bessborough estate is recommended. This should be accompanied by detailed analysis of the survey data.

10. References

- Anon. 2019 *Fifth Interim Report*. Mother and Baby Homes Commission of Investigation. March 2019.
- Anon. 2020 *Final Report*. Mother and Baby Homes Commission of Investigation. March 2019.
- Anon . 2021 Cork Survivors And Supporters Alliance (Cssa) Opening Statement Scheme Of A Certain Institutional Burials (Authorised Interventions) Bill
- Bhreatnach, A. 2021 *The burial history of Bessborough Mother and Baby Home, 1922-98*
- Colls, C.S., 2015. *Holocaust archaeologies: Approaches and future directions*. Springer.
- McCullagh, N., Lynch, L.G. and Harte, A. 2019 *Report of Forensic Archaeological Investigations at Sean Ross Abbey Mother and Baby Home Children's Burial Ground, Roscrea, Co. Tipperary*. On Behalf of:
The Mother and Baby Homes Commission of Investigation
- Wills, C. 2021 *Architectures of Containment* LRB Vol 43, No. 10. <https://www.lrb.co.uk/the-paper/v43/n10/clair-wills/architectures-of-containment>.