



GARDEN MUSEUM Lambeth Palace Road London SE1

London Borough of Lambeth

Evaluation report

October 2015



**GARDEN MUSEUM
Lambeth Palace Road
London SE1 7LB**

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Report on an archaeological evaluation

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Summary

This report presents the results of an archaeological evaluation carried out by MOLA at the Garden Museum, Lambeth Palace Road. The report was commissioned from MOLA by Gardiner & Theobald LLP on behalf of the client the Garden Museum.

In accordance with the Written Scheme of Investigation (MOLA 2015) Section 3, an archaeological evaluation was carried out on the site between 2nd and 8th October 2015.

Five GTPs (trial pits) were hand excavated by contractors under the supervision of MOLA to c1m below existing ground levels. This work was carried out prior to the proposed construction of an extension to the existing church building at the northern, eastern and southern area and alterations to the rear churchyard including landscaping.

Cemetery soils were uncovered in all five GTPs between 4.32 m OD and 4.84m OD. GTP 1 produced what appeared to be a 19th century cemetery soil profile containing a large amount of disarticulated human bone. Also noted were frequent fragments of coffin lead and ex-situ coffin furniture (handles) suggesting that the ground had been heavily disturbed when still in use as a cemetery, either by stages of cemetery clearance or by dense re-cutting of new graves. GTPs 2 and 3 located in the north yard (north of the Church) produced largely 19th century construction rubble and made ground and also disarticulated human bone. GTP 4, located in the gardens to the east of the Church, produced a soil profile reflecting the re-landscaping of the gardens and cemetery in the 1980s for the construction of the Tradescant Garden. GTP 5, near the south –east corner of the Church uncovered a number of burial ledgers and (presumably in-situ) brick vaults, suggesting that this area remains relatively undisturbed by the 80s landscaping. Excepting the brick vaults recorded within GTP 5, no in-situ graves or skeletons were recorded.

An ongoing programme of archaeological watching brief is proposed during phases of proposed enabling works, oversite ground reduction (c 900mm depth) and other associated groundworks within the site. These works, detailed within the approved Written Scheme of Investigation (MOLA 2015) will be informed by the results of this recent phase of archaeological evaluation.

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1 Introduction

1.1 Site background

- 1.1.1 An archaeological evaluation was carried out by MOLA at the Garden Museum ('the site') between 2nd and 8th October 2015 (see *Fig 1*). This document is the report on that work.
- 1.1.2 A desk top Archaeological Assessment (HEA) was previously prepared which covers the whole area of the site (MOLA 2014). This document should be referred to for information on the natural geology, archaeological and historical background of the site.
- 1.1.3 An archaeological pre-determination watching brief on three site investigation trial pits (Tps 1–3, see *Fig 2*) was undertaken in 2013 as part of the planning application process (MOLA 2013) A Watching Brief Report was written on the results (MOLA 2013).

1.2 Planning background

- 1.2.1 The legislative and planning framework in which the watching brief took place was fully set out in the *Written Scheme of Investigation* (MOLA 2015).
- 1.2.2 The evaluation was carried out to fulfil a condition attached to the Planning Consent given by Lambeth Council (Consent reference 14/01448/FUL; Condition number 32). All archaeological work has been carried out in accordance with that the approved WSI.

1.3 Scope of the evaluation

- 1.3.1 Evaluation is defined by Historic England as intended to provide information about the archaeological resource in order to contribute to the:
- 1.3.2 - formulation of an appropriate response or mitigation strategy to planning applications or other proposals which may adversely affect such archaeological remains, or enhance them; and/or
- 1.3.3 - formulation of a proposal for further archaeological investigations within a programme of research
- 1.3.4 An archaeological evaluation is a limited fieldwork exercise designed to test the conclusions of preliminary desk based work. It is not the same as full excavation.
- 1.3.5 The evaluation was carried out within the terms of the relevant Standard for evaluation specified by the Chartered Institute for Archaeologists (CIFA, 2014).
- 1.3.6 All work has been undertaken within the research priorities established in the Museum of London's A research framework for London Archaeology, 2002.
- 1.3.7 All work was undertaken within research aims and objectives established in the *Written Scheme of Investigation* for the evaluation (Section 2.5)

2 Topographical and historical background

2.1.1 Within the site the general topography slopes gently up from south-west to north-east, although there is a slight rise from the centre of the site to the south-west and south of the site. The former is most likely due to the build-up of cemetery soil away from the main path. The Ordnance Datum (OD) levels within the site lie at c 4.8m OD in the south-west corner; c 4.6m OD at the north-west corner; c 4.6m OD in the central part of the site near the south-east corner of the church; c 5.2m OD in the north-east corner and c 5m OD in the south-east corner of the site.

2.2 Topography

2.2.1 The underlying geology of the site comprises Thames Gravels. The recorded top of gravel lies between 1.4m OD and 2.6m OD (2.1m–2.8mbgl). Due to the natural slope of the gravels from south-west to north-east it is possible that the gravels potentially lie at a higher level at the eastern and north-eastern edge of the site.

2.3 Archaeology

2.3.1 Prehistoric features including pits and gullies, numerous prehistoric flint tools, and worked flint waste and Bronze Age spearhead have been uncovered on nearby sites. In all likelihood any prehistoric features will have been truncated by later activity such as Saxon and late medieval burials.

2.3.2 Archaeological evidence suggests that a small Roman settlement lay in the vicinity of the Roman road c 275m to the north of the site. Excavation in 2011, c 250m to the north of the site, (site code LPL11) in the gardens of Lambeth Palace revealed several late Roman linear ditches, which when combined with previous discoveries suggests that there was a late Roman settlement in this area. Closer to the site however the evidence comprises Roman pottery and isolated findspots. It is likely therefore that the site lay either in agricultural land or woodland which surrounded the small settlement. Similar to the prehistoric period, Roman features are likely to have been truncated by later activity.

2.3.3 Early Saxon activity was also recorded at site LPL11 to the north in Lambeth Palace gardens where an oval-shaped sunken-floored building was recorded, the edge of which was ringed by postholes. Finds from the backfill of this building included 32 circular perforated lead weights that may have served as loom weights. This building is thought to have been of 5th-century date and possibly represents continuity of occupation on a site, which previous fieldwork has established was still occupied during AD 350–400.

2.3.4 The manor of St Mary's Lambeth is mentioned in the Anglo-Saxon Chronicle in 1042 as the place where King Hardecanute died (Roberts and Godfrey 1951, 1–11). At the time of the Conquest (1066) it belonged to the Countess Goda, sister to King Edward the Confessor (VCH *Surrey* iv, 50–64). Goda is said to have given the manor of Lambeth to the church of St. Andrew, Rochester, before the Conquest (Survey of London 1951, 1–11) and in 1062 she built a chapel at Lambeth. It seems likely that the site of the 11th-century hall is under Lambeth Palace, and that the chapel was possibly located on the site of the church on the site. At the time of the Norman conquest, Goda still held the manor of Lambeth; the church is known to have been dedicated to St Mary by 1066. A measure of the growing importance of St Mary's can be determined by the fact that it became the church associated with the lodgings of the archbishop of Canterbury in later centuries. Remains of an early church and burials may possibly be located on the site.

- 2.3.5 In the 13th century a wooden tower was constructed on the church, but this, along with the main body of the church, was replaced by a flint and stone Norman church during the 14th-century. The body was constructed between 1374 and 1377 with the construction of the tower following shortly after (Stowe 1598, 104–117). During the late medieval period the church underwent a series of development phases. Of the medieval church only the tower survives above ground, while it is believed that the post-medieval church re-used some of the late medieval foundations. These foundations are therefore likely to survive below the current church, while in the churchyard a significant number of late medieval burials are thought to be present. In some cases these burials are likely to have been disturbed or truncated by later post-medieval burials.
- 2.3.6 In 1623 a timber charnel house was constructed within the churchyard for the storage of bones disturbed during grave digging (Lambeth English Parish 1940). The form of the charnel house is unknown, although it is likely to have comprised a subterranean structure, a form most common for charnel houses.
- 2.3.7 Due to the overcrowding of burial and their possible health risk, the Burial Act 1857 was passed which stated that burials could no longer take place in built-up areas. As a result the burial ground at St Mary at Lambeth was closed. The burial ground at this date was described as very full.
- 2.3.8 By 1972 the church was noted as being in a poor condition at the time that it was deconsecrated and closed for worship. The Garden Museum was established on the site in 1977. The Museum's garden was created in 1980. A photograph from 1980 during the building of the Tradescant garden suggests that some of the grave stones/ledgers in this part of the site have been moved, indicating that their current location may not be original.

3 Evaluation methodology

3.1 Field methodology

- 3.1.1 The ground surface was broken out and cleared by contractors under MOLA supervision. Five GTPs (trial pits) were excavated by hand by the contractors, and monitored by a member of staff from MOLA.
- 3.1.2 All archaeological work was carried out in accordance with the *Written Scheme of Investigation* (MOLA 2015).
- 3.1.3 Trench locations and archaeological features were plotted on plans provided by the client using an 'offset methodology' and subsequently tied to the OS grid by MOLA Geomatics.

3.2 Recording methodology

- 3.2.1 A written and drawn record of all archaeological deposits encountered was carried out in accordance with the *Written Scheme of Investigation* (MOLA 2015).

3.3 Site archive

Number of trench record sheets	5
Number of overall location plans	1
Number of Context (SU) sheets	25
Number of photographs	26
Number of Plan sheets	6
Number of Sections	7

4 Results of the evaluation

The following is a brief description of the archaeological features recorded from the archaeological trial pits (GTPs). GTP has been used to distinguish the evaluation pits of this phase of the archaeological investigation from the archaeological pre-determination investigation pits (MOLA 2013), and to maintain the consistency with the Geotechnical pit numbering designated by the contractors (Rooff Ltd). For pit locations see *Fig 2*.

4.1 GTP1

Location	North east area of central garden
Dimensions	1.5m by 1.5m by 1m depth
Modern ground level/top of slab	5.14m OD
Base of modern fill/slab/turf	4.84m OD
Depth of archaeological stratigraphy above natural (if any)	N/A
Level of base of lowest features or deposits observed	4.08 m OD (limit of excavation)
Top of surviving natural observed at	N/A
Level of base of trench	4.08m OD

- 4.1.1 Mid greyish brown cemetery soil was uncovered in the base of the GTP at 4.84m OD. The cemetery soil extended throughout the intervention and deeper than the base of the trench. This deposit had been heavily disturbed by root action (*Fig 3*) and was notable as a relatively large assemblage (119 segments) of disarticulated human bone, numerous corroded coffin handles, coffin studs and several fragments of degraded lead, identified as coffin lead (A Miles, pers. comm).
- 4.1.2 A deposit of brick or brick rubble and further coffin lead fragments were also recorded within the north facing section of the GTP (*Fig 4*). The interpretation of this brick feature is not certain, although it is suggested that these may represent the remains of a heavily truncated brick vault.
- 4.1.3 Pottery recovered from the cemetery soil, is dated to c 1770–1830 (appendix 2).
- 4.1.4 A 0.3m thick deposit of dark topsoil sealed the cemetery soil. Disarticulated human bone was also recorded within this deposit.
- 4.1.5 A detailed assessment of the human bone from GTP 1 was undertaken by a MOLA osteologist. The results of this assessment are included within appendix 1 at the rear of this report.

4.2 GTP2

Location	East extent of passageway, North Yard
Dimensions	1.5m by 1.2m by 1m depth
Modern ground level/top of slab	4.77m OD
Base of modern fill/slab/turf	4.44m OD
Depth of archaeological stratigraphy above natural (if any)	N/A
Level of base of lowest features or deposits observed	3.77m OD (limit of excavation)
Top of surviving natural observed at	N/A
Level of base of trench	3.77m OD

- 4.2.1 The greyish brown cemetery soil was uncovered at 4.44m OD in this GTP. This deposit also produced disarticulated human bone although considerably less (41 segments in total) were recorded. This part of the site has been heavily truncated by modern drainage works, some of which were still in use.
- 4.2.2 Re-deposited disarticulated human bone was recorded in the west facing section of the GTP (*Fig 5*). This assemblage appears to have been deposited within a cut at 4.24m OD. Given the limits of the GTP it was not possible to discern if this was a grave cut or a much later trench cut for modern utilities. If the former this observation may indicate the presence of articulated burials to the west of GTP2.

4.3 GTP3

Location	West extent of passageway, North Yard
Dimensions	1.5m by 1.5m by 1m depth
Modern ground level/top of slab	4.61m OD
Base of modern fill/slab/turf	4.35m OD
Depth of archaeological stratigraphy above natural (if any)	N/A
Level of base of lowest features or deposits observed	3.61m OD (limit of excavation)
Top of surviving natural observed at	N/A
Level of base of trench	3.61m OD

- 4.3.1 The cemetery soil was uncovered at 4.35m OD in this location, and was recorded containing c106 segments of disarticulated human bone from both adult and sub-adults. Pathology on the recorded bone included dental disease and ante mortem tooth loss. Evidence for spinal joint disease was also recorded (appendix 1).
- 4.3.2 The latest pottery sherd recovered from the cemetery soil dates the context to c 1805–50. However the dating provided by the pottery assemblage from this context ranges widely from the medieval to the 19th century, suggesting that the finds may be residual in this context (appendix 2).
- 4.3.3 The single clay pipe dates to c 1850–1910, and is simply decorated with raised, ridged seams on the bowl and scrolls underneath, in place of a heel or spur.
- 4.3.4 The area was disturbed by a 19th century brick structure (now disused) of unknown function but possibly for drainage. This feature was constructed over a church wall foundation also recorded within the GTP (*Fig 6*).
- 4.3.5 The cemetery soil and brick structure were overlain with a sandy silt bedding layer for York stone paving slabs and re-laid grave markers (*Fig 7*).

4.4 GTP4

Location	West area of central garden
Dimensions	1.5m by 1.5m by 1m depth
Modern ground level/top of slab	5.02m OD
Base of modern fill/slab/turf	4.32m OD
Depth of archaeological stratigraphy above natural (if any)	N/A
Level of base of lowest features or deposits observed	4.02m OD (limit of excavation)
Top of surviving natural observed at	N/A
Level of base of trench	4.02m OD

- 4.4.1 Mid greyish brown cemetery soil was uncovered at 4.32m OD. This had been disturbed by root action in the north-west corner of the pit. Excavation of the pit produced c 52 segments of disarticulated human bone none of which recorded any discernible pathology.
- 4.4.2 At 4.28m OD a thin layer (60mm) of loose concrete and stone rubble was found (*Fig 8*) which had possibly been used as a sealing layer over the cemetery soil.
- 4.4.3 A thick deposit of dark topsoil was observed within this GTP (*Fig 8*). This deposit directly overlay the rubble layer and in-situ cemetery soils and is notable as it probably represents either heavily disturbed or imported soil derived from the re-landscaping works undertaken for the Tradescant Gardens in the 1980s. The cemetery soils survive at a slightly lower level in this part of the site (4.3m OD on average) and most likely extend north, south and eastwards across the existing garden area. Occasional disarticulated human bone was also found within this deposit, probably upcast by root action and the Tradescant landscaping works.

4.5 GTP5

Location	South east garden
Dimensions	2.6m by 1.7m by 1m depth
Modern ground level/top of slab	4.94m OD
Base of modern fill/slab/turf	4.62m OD
Depth of archaeological stratigraphy above natural (if any)	N/A
Level of base of lowest features or deposits observed	3.94m OD (limit of excavation)
Top of surviving natural observed at	N/A
Level of base of trench	3.94m OD

- 4.5.1 The greyish brown cemetery soil was uncovered at 4.57m OD in this area and excavations produced 53 segments of disarticulated human bone. Notable pathologies on this assemblage were limited to dental disease and caries.
- 4.5.2 Three brick structures [19], [21] and [23] (*Fig 9-11*) were partially uncovered beneath a re-laid ?York stone grave marker (*Fig 9*). Structure [23] is a possible brick vault which abuts [21] to the south. Vault [21] underlies an in situ stone table tomb that was partially defined by excavation of the evaluation pit. Vault wall [21] has undergone repair work which probably took place at the same time [23] was constructed (*Fig 10*). The construction cut for [21] truncated (removed) the eastern extent of [19], which may be the northern wall of an earlier brick vault (*Fig 11*). All of the vault structures recorded appear to date to the 19th century. None of the features were excavated and it was not possible to ascertain if they contained in-situ burials
- 4.5.3 A ?granite ledger for Mary and Martin Jones (see cover) was uncovered in the south of the evaluation pit, and although it overlies vault [19] it appears to be too small to be directly associated with it and was most likely re-located from another part of the cemetery garden.
- 4.5.4 The ?York stone grave marker (engraved MM 1830), to the north of the Jones ledger, overlies vault structures [19] and [23]. This was also probably moved and re-laid, possibly to create a pathway, before being covered with topsoil.

4.6 The finds

A note on the finds recovered can be found at the rear of this report (appendix 2).

4.7 The site as a whole

- 4.7.1 The cemetery soil level, although uncovered in all five GTPs, differs between 4.32m OD and 4.84m OD indicating that a varying degree of disturbance has occurred across the site. This is also shown by the varying quantity of disarticulated human bone recovered from the five pits.
- 4.7.2 GTPs 2 and 3 located in the north yard (north of the church) were both heavily truncated by 19th century and more modern building works. The location of the GTPs was limited by the existing buildings currently in the area.
- 4.7.3 By contrast GTPs 1 and 5 (at the north east of the central garden and to the south east of the church respectively) suggest much more intact cemetery soils, and though these have been heavily disturbed it was most likely by cemetery clearance and/or dense re-cutting for later burials during the time of their use.
- 4.7.4 The uncovered ledger in GTP5, although overlying a potential burial vault, has been re-laid along with another grave marker and paving slab most likely to create a pathway similar to that seen in the north yard. This was later covered with topsoil to create a planting area.
- 4.7.5 GTP 4, in the west of the central garden, has a much greater depth of topsoil. This indicates that the central section of the garden was much more heavily disturbed by the 1980s landscaping, but this disturbance doesn't appear to extend as far north as GTP1. Although this landscaping works could have been the cause of the brick and rubble deposit recorded in its north facing section.

5 Archaeological potential

5.1 Answering original research aims

- 5.1.1 *What is the level of natural terrace gravel if encountered?*
Natural gravel was not reached due to the limited depth of the excavations.
- 5.1.2 *Is there any evidence for prehistoric activity on the site?*
No evidence for prehistoric activity was recorded during the evaluation.
- 5.1.3 *Is there any evidence for Roman activity on the site, and if present how does this relate to activity recorded to the north of the site?*
No evidence for Roman activity was recorded within the limits of the excavation.
- 5.1.4 *Is there any evidence for the early phases of early medieval activity on the site, ie 5th century, and if present how does this relate to activity recorded to the north of the site?*
No evidence for early medieval activity was recorded during the evaluation exercise.
- 5.1.5 *Is there any evidence for activity on the site prior to the foundation of the 11th-century church?*
No evidence for activity prior to the foundation of the church was seen within the limits of the excavation.
- 5.1.6 *Are there any deposits or features associated with the early phases of the church of St Marys present on the site?*
No deposits or features from early phases of the church were seen within the limits of the excavation.
- 5.1.7 *Are in situ burials present within the upper levels of the burial ground and if present can their date be established?*
No in situ burials were recorded within the GTPs. The redeposited human bone observed within the section of GTP2 however, may indicate the disturbed remains of a burial. Given the limits of the GTP and extent of modern drainage this was impossible to confirm.
- 5.1.8 *Are remains of charnel pits associated with the disused burial ground present on the site?*
No charnel pits were uncovered within the limits of the excavation
- 5.1.9 *Do any evidence of structural features associated with the rebuilding of the phases of the church such as lead smelting areas etc. present within the burial ground?*
No evidence of structures associated with the rebuilding of the church were uncovered during this phase on investigation
- 5.1.10 *Are identifiable graves/burials located under the ledger stones?*
Ledger stones, when encountered, were not moved during the evaluation exercise. This aim will be addressed during the ongoing proposed archaeological work at the site
- 5.1.11 *Are human remains present within the table tombs above or just below ground levels.*
This research aim will be investigated during the ongoing archaeological work on the site.
- 5.1.12 *Can earlier features, including possible grave cuts, be identified directly below the floor surfaces within the church?*

This research aim will be investigated during the ongoing archaeological works on the site.

5.1.13 *Are disarticulated human remains present within the upper 900mm of deposits in the area of the proposed extension?*

Disarticulated human remains were found in all of the evaluation GTPs, larger assemblages were noted within GTPs 1 and 3 in the north section of the Tradescant Garden and North Yard areas respectively.

5.1.14 *What is the character and date of the structural features subject to Level 3 recording being removed from the existing fabric of the building.*

This research aim will be investigated during ongoing archaeological works on the site.

5.1.15 *What is the extent of modern disturbance across the site?*

Modern disturbance, in the form of Victorian and modern drainage, was seen most noticeably in GTP2 at the western extent of the passageway in the North Yard.

Although not seen within the GTP the north facing section of GTP1, in the north east of the garden, showed an area of disturbance. As the area contained coffin lead this is possibly from a brick vault, disturbed during the 1980's landscaping works.

The large amount of topsoil in GTP4 also represents a large amount of disturbance in this area, probably from the 1980s landscaping works.

As potential in situ brick vaults were seen in GTP5, in the south east garden, there is possibly minimal disturbance of the archaeology in this area.

5.2 General discussion of potential

5.2.1 The evaluation has shown that the potential for survival of ancient ground surfaces (horizontal archaeological stratification above natural ground) on the site is limited to the upper levels of the cemetery soils, generally above the level of in-situ burials although brick vaults have been recorded within GTP5.

5.2.2 There is also potential for survival of cut features such as grave cuts and charnel pits although no direct evidence for this was recorded.

5.2.3 Deposit survival is likely to be limited in localised areas because of modern drainage works, and the 1980s landscaping for the Tradescant Garden.

5.2.4 The average height of archaeological deposit survival across the site is likely to be c 4.60m OD.

5.3 Significance

5.3.1 Whilst the archaeological remains are of local significance there is nothing to suggest that they are of regional or national importance.

5.4 Assessment of the evaluation

5.4.1 In the case of this site a high degree of confidence can be placed on the evaluation results. Overall the number and distribution of GTPs has refined the understanding of the archaeological deposit survival profile across the application area. Excepting the brick vaults and stone ledgers uncovered within GTP 5, the excavation depth within the GTPs (1m below current ground levels) exceeds that of the currently proposed oversite ground reduction works (0.9m).

5.4.2 GTP3 has been heavily disturbed by the 19th century re-building works.

6 Proposed development impact and conclusions

- 6.1.1 Taking into account the results in all the GTPs it appears that archaeological soils survive on average c 4.60m OD although these are mostly low-grade cemetery soils.
- 6.1.2 The proposed redevelopment at the site involves enabling works, oversite ground reduction and other associated groundworks. This is unlikely to impact on any surviving in-situ burials generally, although brick vaults and buried stone ledgers were recorded in the localised area around GTP5 (see para 6.1.3). The ongoing proposed groundworks will produce spoil containing assemblages of disarticulated human bone. This spoil, if removed from site, will require screening in order to identify and collect human bone and this material will require appropriate re-burial along with the bone assemblage recovered during the evaluation exercise.
- 6.1.3 As grave markers and vaults survive around the area of GTP 5, appropriate measures should be implemented by the main contractors proposed works to mitigate any impact to the in-situ burial features and structures.
- 6.1.4 In the light of the results of the evaluation MOLA considers that the ongoing programme of archaeological watching brief and monitoring detailed within the approved Written Scheme of Investigation is an appropriate response to the proposed redevelopment scheme.
- 6.1.5 A suitable method statement for the scanning, collection and temporary storage of any disarticulated human bone should be devised and agreed, prior to the enabling works commencing.
- 6.1.6 The decision on the appropriate archaeological mitigation to the deposits revealed rests with the Local Planning Authority.

7 Acknowledgements

- 7.1.1 The author would like to thank Gardiner & Theobald LLP for commissioning the work on behalf of the Garden Museum and Roof Ltd for carrying out the excavation works.
- 7.1.2 Additional thanks go to Sadie Watson, Adrian Miles, Jacqui Pearce and Mike Henderson for their contributions and help in producing this report.

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9 Appendix 1: A note on the disarticulated human bone

Michael Henderson

9.1 Human Bone

- 9.1.1 A quantity of disarticulated human bone was recovered from cemetery soil layers. No evidence of in-situ, articulated burials was identified. The bone may potentially date from the early medieval period through the closure of the burial ground in 1857.
- 9.1.2 All human bone was examined following Museum of London Archaeology standards (Powers unpublished). The bone data was recorded onto an excel spreadsheet by body area (cranium, thorax, vertebrae, upper limbs, lower limbs) with each row representing a separate, non-articulated element. This provided a catalogue of the bones present grouped by element or association. Loose teeth were not recorded. Long bones were recorded by shaft segment (proximal, medial and distal). Elements or segments were counted where at least 50% was present. This allowed for the calculation of a minimum number of individuals (MNI) based on the presence of repeated elements with consideration of age, sex and morphology. A note was made of any intrusive animal bone, staining or pathological bone changes. Any demographic data (age or sex) was recorded where possible.
- 9.1.3 Osteological assessment involved the examination of 371 bones or bone segments. This established an overall minimum number of 22 individuals present: 15 adult, and 7 subadults. Observation of cranial and pelvic bone morphology identified the presence of two adult males and two females. While the overall level of bone preservation ranged from good to moderate, the majority of elements displayed some evidence of post-mortem damage including breakage and erosion to the outer cortical and joint surfaces (Table 1).
- 9.1.4 Observations of pathological bone changes included the presence of dental disease (caries, ante-mortem tooth loss) and degenerative joint disease of the spine (osteophytes, Schmorl's nodes). A fifth lumbar vertebrae displayed bilateral separation of the pars interarticularis (spondylolysis). This may relate to congenital weakness, developmental abnormality or trauma (Roberts and Manchester 2005, 57, 106). The joint surface of the right great toe (first metatarsal) had evidence of degenerative osteoarthritis.
- 9.1.5 Only limited further demographic, metric and pathological information could be obtained through further analysis of these remains. It was not possible to determine the original stratigraphy of the bone elements or how far they may have travelled from the original burial location. The overall potential for further study of the disarticulated bone is therefore low.

Area	Context	Bone segments	MNI adult	MNI male	MNI female	MNI subadult	Total MNI	Pathology
GTP1	2	119	4	0	0	1	5	Dental disease: ante mortem tooth loss
GTP2	5	41	2	1	1	1	3	Dental disease: ante mortem tooth loss
GTP3	11	106	4	0	1	2	6	Dental disease: ante mortem tooth loss Spinal joint disease: osteophytes, Schmorl's nodes, spondylolysis
GTP4	16	52	2	1	0	2	4	None
GTP5	25	53	3	0	0	1	4	Dental disease: Caries
Total		371	15	2	2	7	22	

Table 1 Summary of disarticulated bone

10 Appendix 2: A note on pottery, glass and clay pipe

Jacqui Pearce

10.1 Pottery

- 10.1.1 The pottery was spot-dated and recorded in accordance with current MOLA practice, using standard codes for fabric, form and decoration, with quantification by sherd count, estimated number of vessels (ENV) and weight in grams. The data were entered onto the Oracle database. A total of 16 sherds from a minimum of 16 vessels, weight 236g, were recovered from two contexts. The small size of the contexts makes close dating difficult, especially with long-lived fabrics in which forms changed little over many decades.
- 10.1.2 One sherd of medieval pottery was recorded, residual in context [11]. It comes from a jug in Kingston-type ware (KING), current in London c 1240–1400. The remaining sherds from this context date to the 17th to 19th century and include two unidentified forms in biscuit tin-glazed ware (TGW BISC); a handle from a chamber pot in tin-glazed ware with plain white glaze (TGW C); and, the latest pottery in the context, part of an unidentified form in refined white earthenware with slip decoration (REFW SLIP), which dates the context to c 1805–50. The dating ranges widely from the medieval to the 19th century, suggesting disturbance of some kind.
- 10.1.3 The other context in which pottery was found is [2], which is dated to c 1770–1830. This includes two sherds from bowls in Surrey-Hampshire border ware with clear glaze (BORDY), in use c 1550–1700; sherds from bottles and jars in English brown salt-glazed stoneware (ENGS), the rim of a flowerpot in London-area post-medieval redware (PMR); a sherd from a dish in Staffordshire-type slipware (STSL) and the base of a teapot (?), possibly in caneware (CANE). One sherd of ENGS appears to be a waster as it comes from the base of a vessel that has sheared off in the kiln, with glaze covering the sherd break. This sherd and the TGW BISC in context [11] are all related to ceramic production waste, although the remaining pottery recovered is entirely domestic in character. The presence of ceramic waste is unsurprising in this area, as several important manufacturers were located in Lambeth.

10.2 Clay tobacco pipes

- 10.2.1 A single clay pipe bowl was recorded from context [11]. This was identified according to Atkinson and Oswald's 1969 typology for London clay pipes (given the prefix AO). It is of type AO3o, dating to c 1850–1910, and is simply decorated with raised, ridged seams on the bowl and scrolls underneath, in place of a heel or spur. There is no maker's mark, and the pipe has been smoked.

10.3 Glass

- 10.3.1 Two fragments of colourless window glass were found in context [11], and can be dated only very broadly to c 1650–2000.

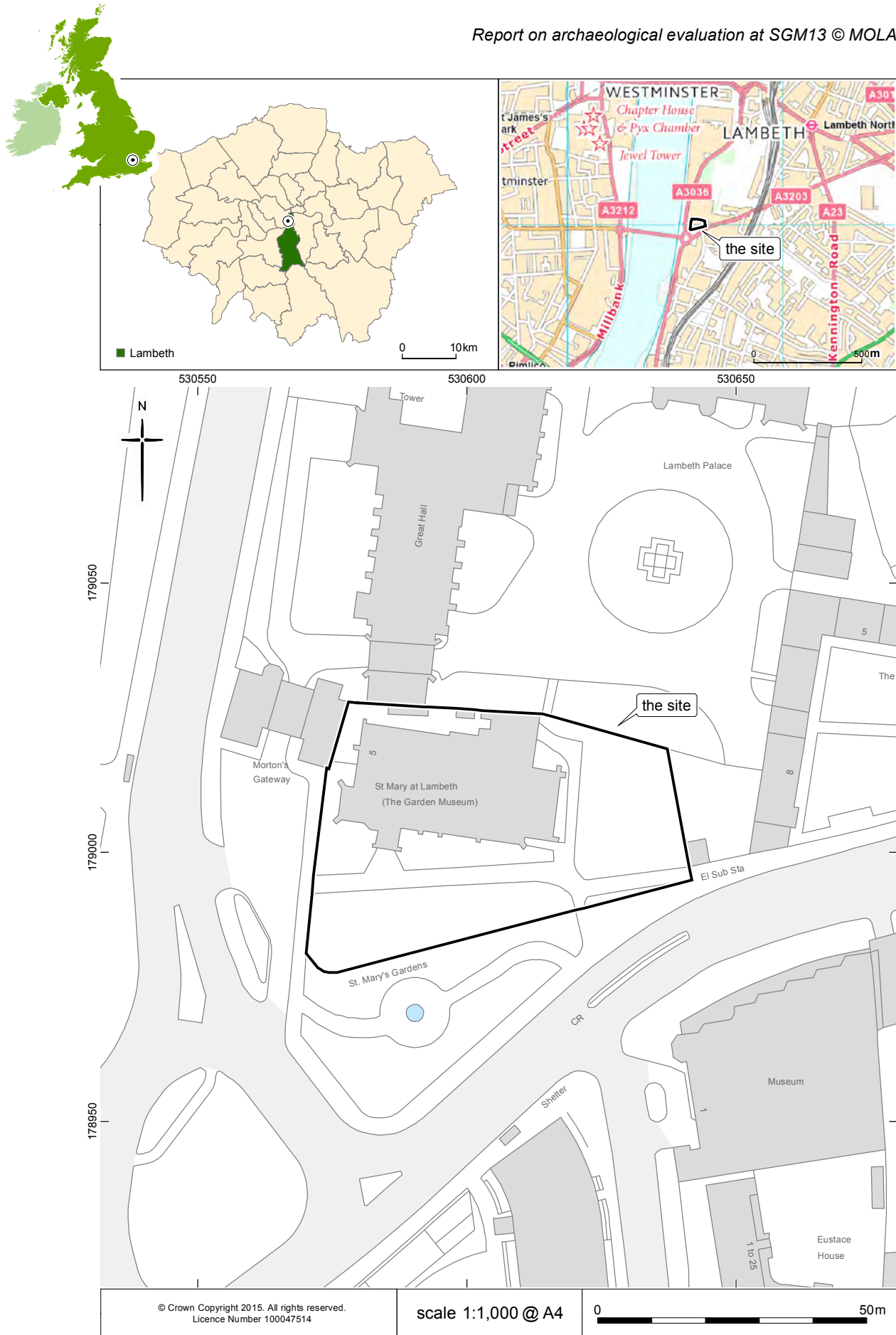


Fig 1 Site location

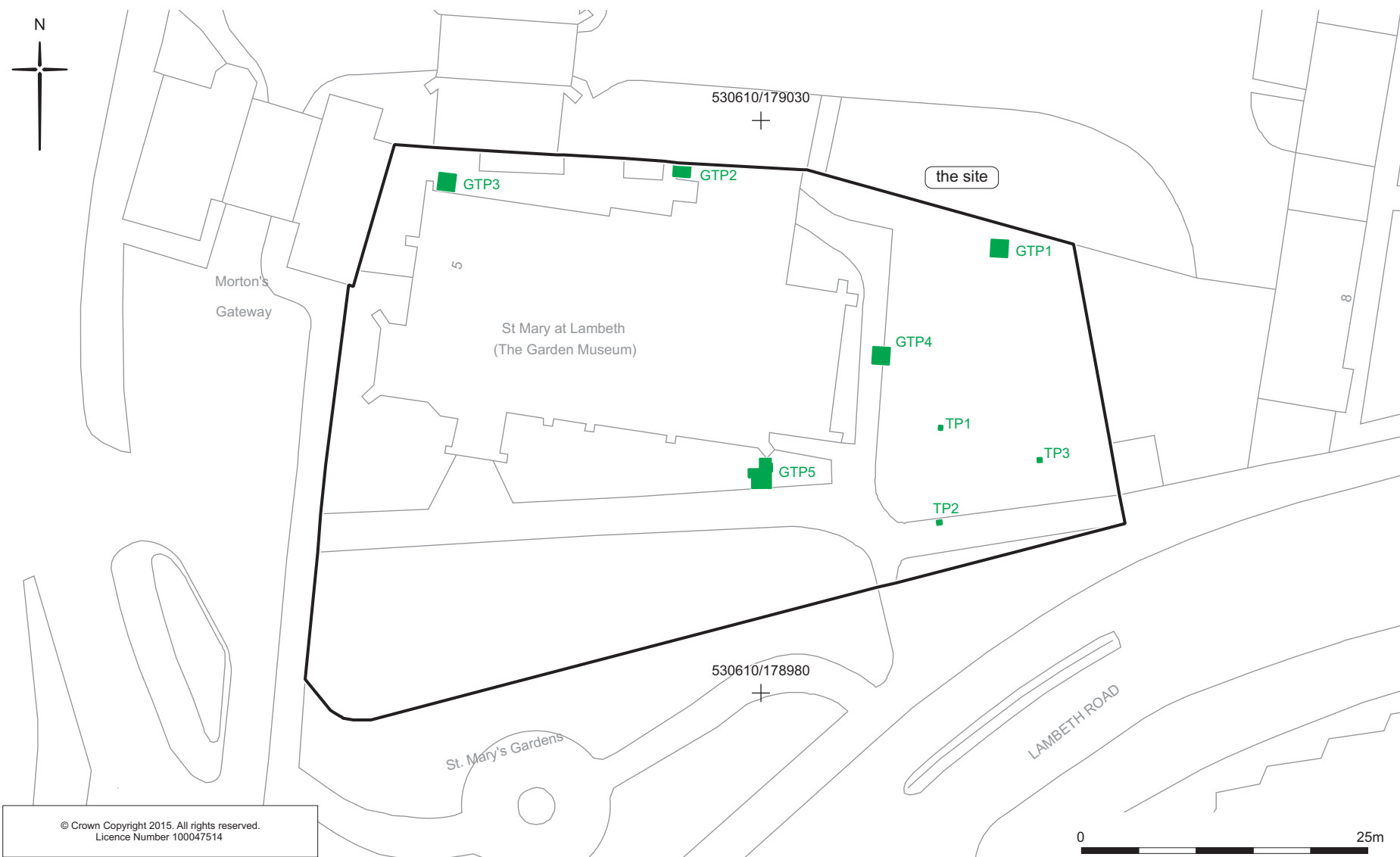


Fig 2 Location of the evaluation trial pits GTP1–5



Fig 3 South facing section of GTP 1



Fig 4 North facing section of GTP 1



Fig 5 East facing section of GTP 2



Fig 6 Brick structure within GTP 3



Fig 7 East facing section of GTP 3



Fig 8 West facing section of GTP 4



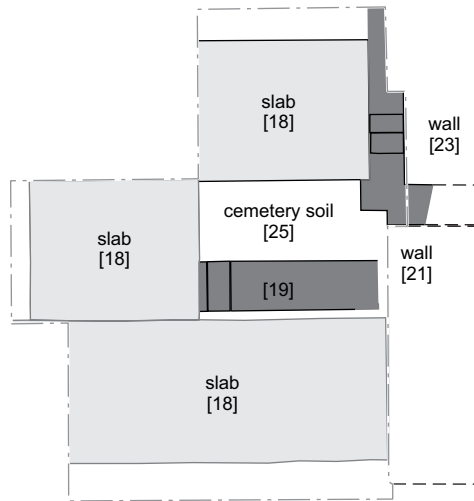
Fig 9 General shot of GTP 5



Fig 10 West facing elevation of walls within GTP 5



530610/179002



530610/178997



Fig 11 Plan of walls within GTP 5

11 OASIS archaeological report form

11.1 OASIS ID: molas1-226285

Project details

Project name	Garden Museum
Short description of the project	Five trial pits were hand excavated by contractors under the supervision of MOLA to c1m below existing ground levels. This work was carried out prior to the proposed construction of an extension to the existing church building at the northern, eastern and southern area and alterations to the rear churchyard including landscaping. Cemetery soils were uncovered in all five trial pits between 4.32 m OD and 4.84m OD. Trial pit 1 produced what appeared to be a 19th century cemetery soil profile containing a large amount of disarticulated human bone. Also noted were frequent fragments of coffin lead and ex-situ coffin furniture (handles) suggesting that the ground had been heavily disturbed when still in use as a cemetery, either by stages of cemetery clearance or by dense re-cutting of new graves. Trial pits 2 and 3 located in the north yard (north of the Church) produced largely 19th century construction rubble and made ground and also disarticulated human bone. Trial pit 4, located in the gardens to the east of the Church, produced a soil profile reflecting the re-landscaping of the gardens and cemetery in the 1980s for the construction of the Tradescant Garden. Trial pit 5, near the south -east corner of the Church uncovered a number of burial ledgers and (presumably in-situ) brick vaults, suggesting that this area remains relatively undisturbed by the 80s landscaping.. Excepting the brick vaults recorded within Trial pit 5, no in-situ graves or skeletons were recorded
Project dates	Start: 02-10-2015 End: 08-10-2015
Previous/future work	Yes / Yes
Any associated project reference codes	SGM13 - Sitecode
Type of project	Field evaluation
Site status	Area of Archaeological Importance (AAI)
Site status	English Heritage List of Parks and Gardens of Special Historic Interest
Current Land use	Other 4 - Churchyard
Current Land use	Other 5 - Garden
Monument type	BURIAL VAULT Post Medieval
Monument type	BRICK DRAIN Post Medieval
Monument type	BURIAL PIT Post Medieval
Monument type	GRAVE SLAB Post Medieval
Monument type	HUMAN REMAINS Post Medieval
Significant Finds	HUMAN BONE Post Medieval
Significant Finds	LEAD COFFIN Post Medieval
Methods & techniques	"Test Pits"

Development type	Large/ medium scale extensions to existing structures (e.g. church, school, hospitals, law courts, etc.)
Prompt	National Planning Policy Framework - NPPF
Position in the planning process	Not known / Not recorded

Project location

Country	England
Site location	GREATER LONDON LAMBETH LAMBETH Garden Museum
Postcode	SE1 7LB
Study area	2800 Square metres
Site coordinates	TQ 30600 79000 51.494339085316 -0.118476605614 51 29 39 N 000 07 06 W Point

Project creators

Name of Organisation	MOLA
Project brief originator	MOLA project manager
Project design originator	MOLA
Project director/manager	Simon Davis
Project supervisor	Catherine Gibbs

Project bibliography 1

Publication type	Grey literature (unpublished document/manuscript)
Title	Garden Museum, Lambeth Palace Road Report on archaeological evaluation
Author(s)/Editor(s)	Gibbs, C
Date	2015
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