

ST PAUL'S CATHEDRAL EDUCATION FACILITY London EC4

City of London

An archaeological excavation and watching brief report

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MUSEUM OF LONDON

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Site Code: PUN05

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Summary (non-technical)

This report has been commissioned from MoLAS by the Cathedral Archaeologist on behalf of the client, the Dean and Chapter of St Paul's Cathedral, in order to set out the results of the excavation and watching brief carried out at St Paul's Cathedral north transept crypt, London, EC4.

A single evaluation pit, TP1, was excavated in the north room in November 2005, the results of which helped to refine the initial assessment of the archaeological potential of the site (reported in Wroe-Brown 2005). A second trench, TP2, was excavated in the north-east room of the transept during January and February 2006, in the location of a sump and manhole relating to the drainage system for the proposed toilets. A watching brief was carried out on the remainder of the excavation works between May and August 2006.

Floor level in the crypt was generally at 13.59m OD and at c. 13.74m OD in the NE room. In TP2, archaeological material was recorded from 13.63m OD down to a maximum depth of 11.50m OD. The majority of the deposits were contemporary with the construction of the present cathedral and part of a stone foundation was recorded. A grave cut containing at least two burials in wooden coffins was also found. At the top of the sequence lay a considerably later flagstone floor which extended across most of the room.

A watching brief was conducted on the rest of the site which involved monitoring the floor reduction and the excavation of service trenches by the contractors. In a number of locations the Wren foundations were observed and a stone rectangular feature was recorded in the south corridor. Other finds included a large granite slab in the N room, a brick drainage feature in the NE room and a casket containing the ashes of George Mountford Scott, a 20th-century Vicar Choral.

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1 Introduction

1.1 Site background

The excavation and watching brief took place in the north transept crypt of St Paul's Cathedral, hereafter called 'the site'. The OS National Grid Reference for centre of site is 532050 181160. The level of the crypt floor was at 13.74m OD in the north-eastern room and 13.59m OD elsewhere. Modern ground level outside the cathedral to the north is approximately 17.00m OD. The site code for this work is PUN05.

A desk-top *archaeological assessment* was previously prepared by the Cathedral Archaeologist which covers the whole area of the proposed education facility (Schofield, April 2005). The *assessment* document should be referred to for detailed information on the natural geology, archaeological and historical background of the site, and the initial interpretation of its archaeological potential.

An archaeological field evaluation was subsequently carried out by MoLAS in November 2005 on a single test-pit, TP1, within the central room of the north transept crypt (see Fig 2). The specification and methodology for this work was prepared by the Cathedral Archaeologist (Schofield, Oct. 2005) and the results were reported in November 2005 (Wroe-Brown 2005).

A second trench, TP2, was excavated between January 16th-20th 2006 on the site of the proposed sump and manhole for the education facility toilets (see Fig 2). A stone foundation was discovered at the south end, effectively preventing the construction of the sump. On the advice of the architects the proposals were revised and the trench was extended northwards between February 20th-22nd. Further minor excavation work to adjust the size of this trench was undertaken during the watching brief stage.

The remainder of the watching brief work consisted of monitoring areas in the rooms and corridors where the floor surfaces were reduced. This included the east corridor, the south corridor and the three rooms within the redevelopment.

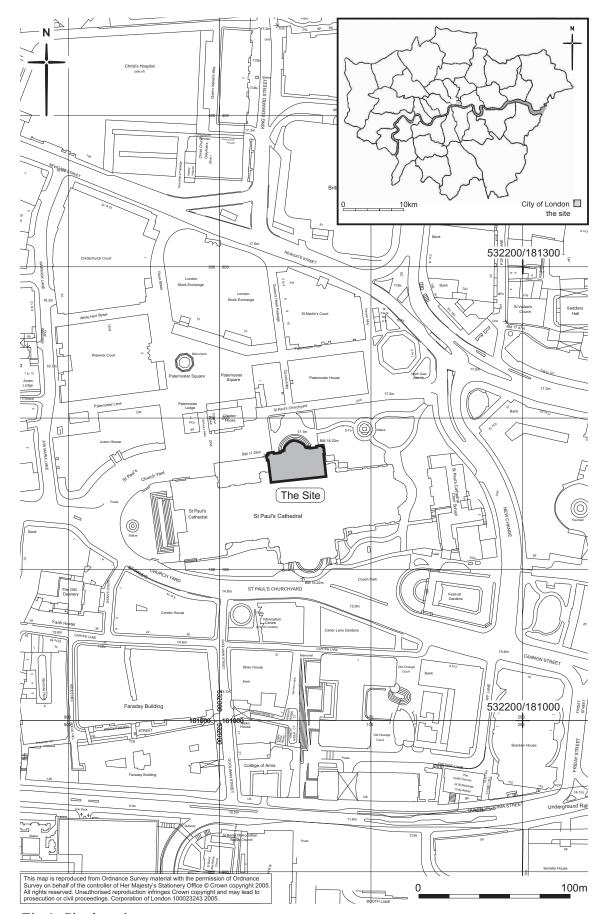


Fig 1 Site location

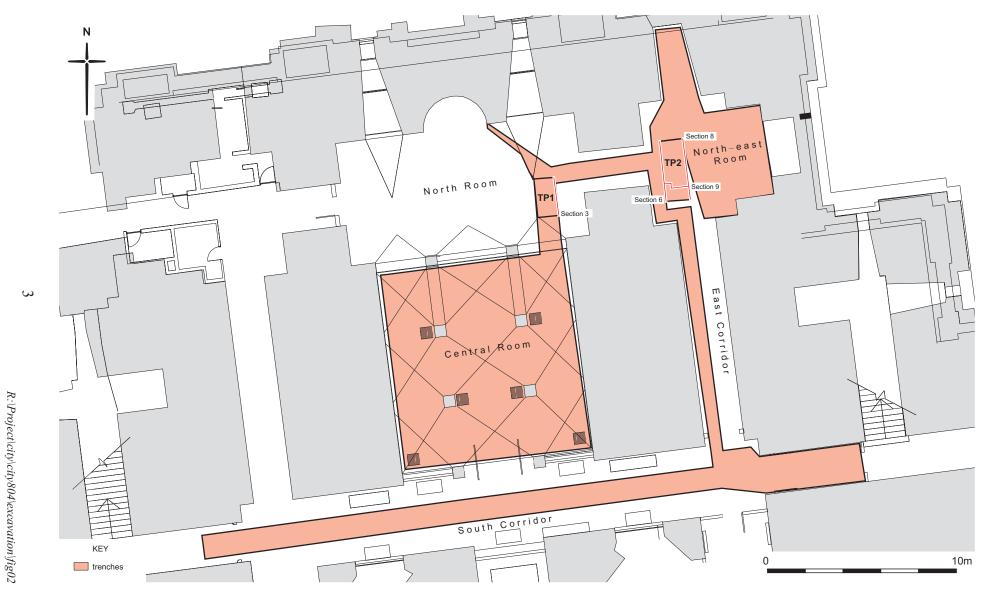


Fig 2 Trench location plan

1.2 Planning and legislative framework

The legislative and planning framework in which this archaeological exercise took place was summarised in the *Archaeological assessment* which formed the project design (see Section 2 in Schofield, April 2005). The evaluation and subsequent excavation and watching brief required consideration by the Cathedrals Fabric Commission for England (CFCE) and the Dean and Chapter of St Paul's Cathedral.

The approaches, documentation and standards followed during the evaluation are those of the Institute of Field Archaeologists (IFA, 2001) and the Association of Diocesan and Cathedral Archaeologists (ADCA, 2004).

1.3 Origin and scope of the report

This report was commissioned by the Cathedral Archaeologist on behalf of the Dean and Chapter of St Paul's Cathedral and produced by the Museum of London Archaeology Service (MoLAS). The report has been prepared within the terms of the relevant Standard specified by the Institute of Field Archaeologists (IFA, 2001).

The report analyses the results of the excavation and watching brief carried out on the site intermittently between January and July 2006. In the interests of completeness, it also includes the work on the evaluation trench excavated in November 2005 already reported (Wroe-Brown 2005).

1.4 Research aims and objectives of excavation

All research is undertaken within the priorities established in the Museum of London's *A research framework for London Archaeology*, 2002

The following research aims were established in the *Specification* for the excavation (Schofield, Nov. 2005, 4):

"The objectives are therefore

- (a) to record the sequence in the required deeper excavation for the sump in the north-east chamber of the crypt (at the north end of the east aisle), (b) especially to look for evidence of the Roman kiln [found by Conyers in 1677], which has probably been destroyed, but wasters from it may have been spread over a much larger area; and
- (c) to inspect the Wren walls and foundations in this area, as the building work allows.

The west aisle of the transept crypt will not be affected by these works."

In addition the following research aims guided the archaeological investigation:

- What is the level of truncation caused by the crypt construction and any other structures in this area?
- What are the levels of natural deposits?
- Is there any evidence of surviving Roman activity at this depth, (with particular reference, as stated in (b) above, to the Roman pottery kiln recorded in the 17th century by Conyers)?
- Is there any evidence for foundations of the pre-Fire cathedral and can the location and alignment of the medieval north transept be established?
- Are there any in-situ pre-Fire burials?
- Are any moulded stones from the pre-Fire cathedral to be recorded in situ in walls, or to be found reused in rubble beneath the present floor?
- To what extent can the archaeology throw light on the construction of the present cathedral?
- Are there any post-Fire burials beneath the crypt?
- Are there any other structures or deposits of significance beneath the present floor?

2 Topographical and historical background

2.1 Topography

The topographical and historical background was discussed in detail in the *Archaeological assessment* (Schofield, April 2005, section 3). The following extracts are quoted as being directly relevant to this project:

2.2 Prehistoric and natural levels; depth of strata

Archaeological strata in the churchyard are built on top of natural brickearth, a layer which has been seen in various observations since the 1670s. Along the north side of the cathedral, it lies at between 12.4m OD and 13.0m OD (the Wren crypt floor is generally at 13.45m OD). Present ground level on the north side is at about 17.0m OD in the region of the development site, giving an overall depth of man-made strata hereabouts of about 4.6m.

2.3 Roman

In the 1st and 2nd century the churchyard area was used in part as a cremation cemetery north of a road which probably passed through the site of the south transept. This area had one, or perhaps two, complexes of pottery kilns in it. One kiln group was apparently seen during excavation for the west end, and the other was recorded by John Conyers somewhere on the site of the north transept in 1677.

A group of four pottery kilns were seen by Conyers. The kilns were said to be at a depth of 26ft (7.9m), which from a general churchyard level of 17m OD would place them at about 9.1m OD, fully 3m lower than the lowest Roman strata excavated in recent times in the area. Presumably the figure of 26ft includes their excavation into the underlying brickearth. The four kilns were part of a single structure, arranged cross-wise. The kilns were overlain by many layers of coffins, the lowest of which were of chalk. Although the actual findspot is not accurately known, it has been plotted for the present purpose as coinciding with the NE corner of the present north transept.

2.4 Medieval and post-medieval to 1666

Within the footprint of the Wren transept, all previous deposits have been dug out to at least the level of the Wren crypt floor, 13.45m OD. Dr John Schofield, the Cathedral Archaeologist, has calculated the internal floor level of the medieval transept to be at about 15m OD, 1.5m above the Wren crypt floor. Although the building accounts give the impression that Wren's workmen dug out all the pre-Fire foundations, there are also references to ramming them down, presumably into their foundation trenches. It is possible that the lower parts of medieval foundations, probably in a damaged form, might survive below the present crypt floor.

2.5 Wren foundations and walls

The foundations for the north wall of the new transept were constructed in the summer of 1677, under the direction of mason Thomas Strong. The accounts mention that these foundations are particularly brought up 'from the first bed of loam', and that Strong was paid for filling with rubble several 'holes of the foundation below the bed of loam'. This implies that much had been dug out, in an irregular fashion. Some of the rubble work for these foundations came expressly from the west end of the former church.

The Wren crypt and passage walls themselves are of archaeological interest. The archaeological coverage should scrutinise all the wall surfaces in this largely unused part of the crypt. Though most wall surfaces have been painted, some parts have not. It is possible that aspects of craftsmanship and building technology will be apparent from the stones.

3 The excavation and watching brief

3.1 Methodology

All archaeological excavation and recording during the excavation was done in accordance with the preceding *Specification for an archaeological excavation and watching brief* (Schofield, Nov 2005) and the MoLAS *Archaeological Site Manual* (MoLAS, 1994).

An evaluation trench, TP1, was excavated in the south-east corner of the treasury room, but set away from the walls to avoid the foundations (Fig 2, Fig 4). The floor and slab were broken out and cleared by cathedral works department staff under the direction of Martin Fletcher, the Clerk of Works. The trench was excavated by hand by the author and the material was bagged in builders bags in preparation for its removal from the site.

The excavated trench TP2 in the north-east room was initially broken out and cleared by the cathedral works department, and subsequently excavated by MoLAS staff (Fig 2). The extension to the trench was also facilitated by the works department, including the installation of shoring in the deepest part of the excavation. Daylight and general neon lighting in the room was enhanced with a single tripod light.

The locations of TP1 and TP2 were recorded by MoLAS surveying team and plotted onto the OS grid in relation to the digital survey of the crypt provided by Martin Stancliffe architects. The heights of observations and archaeological remains were recorded relative to Ordnance Datum via a traverse related to known points outside the cathedral.

The watching brief was conducted intermittently during the works carried out by the contractors, Killby and Gayford. The floors were removed throughout the central room, partially in the N room and in the NE room. Duct runs were dug along the length of the south corridor and the east corridor, through the west side of the NE room, across the short passage connecting the N and NE rooms and on the east side of the N room.

Where relevant, sections were drawn at a scale of 1:10 and numbered contexts were allocated where appropriate. The site has produced: 37 context records; 20 context plans at 1:20, 9 section drawings at 1:10; 16 film photographs.

The analysis phase of post-excavation was based around the creation of a phased matrix of the contexts, bringing together all strands of the evaluation, excavation and watching brief phases.

The site records can be found under the site code PUN05 in the MoL archive.

3.2 Results of the excavation

Two trenches, TP1 and TP2, were excavated archaeologically and a watching brief was conducted on the duct runs and floor reduction over the remainder of the area. Trench TP1 was excavated as an evaluation exercise to determine the nature of the deposits beneath the crypt floor in this area. It has been reported in a separate document (Wroe-Brown 2005) but, for the sake of completeness, the results are also presented here. In the event no datable finds were recovered from any of the phases. Clay tobacco pipe stems were noted in the contexts in which they were found, but not kept, and a coffin grip was recorded for identification but not retained in the archive.

A brief description of the archaeological deposits follows below. For all areas of excavation see Fig 2.

3.2.1 Evaluation trench TP1

Location	South-west corner of the north room
Dimensions	2m x 1m, 0.9m deep
Modern ground level/top of slab	Parquet floor of the crypt at 13.59m OD
Base of modern fill/slab	13.44m OD
Depth of archaeological deposits seen	0.75m
Level of base of deposits observed	12.60 m OD
Natural observed	N/A

See Fig 3 and Fig 4.

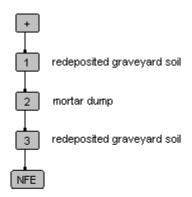
Description

The deepest context, [3] was a compact dark grey/brown silt (80%) and sand (20%) with frequent inclusions of large and small fragments of stone and chalk and human bone, with moderate mortar fragments and flecks and occasional brick/tile fragments and flecks. It was greater than 0.4m thick (not fully excavated) and extended beyond all trench edges. It contained four sherds of Roman pottery, the latest being dated AD 250-400, but also clay pipe fragments giving a post-medieval date for the layer.

Context [3] was overlain by context [2], a compact to hard mainly pale tan/yellow mix of mortar (70%), limestone and chalk fragments (20%) and silt (10%). It contained occasional inclusions of brick/tile fragments and flecks and small flint fragments. It was thicker to the north at 0.25m than to the south at 0.10m, and extended beyond all trench edges. There were lenses of darker mortars within the layer.

Above this was context [1], a moderately loose mid grey/green sandy silt (20%-80%) with moderate inclusions of stone fragments and occasional brick/tile fragments and flecks, mortar fragments and flecks and human bone. It was 0.20m thick and extended beyond all trench edges.

TP1 Context matrix



Discussion

All three of these layers contained clay pipe stem fragments and are therefore of post-medieval date. Contexts [1] and [3] both contained human bone and they probably derived from medieval graveyard material. Along with mortar layer [2] they were redeposited in the cut excavated for the new cathedral in the late 17th century. The Roman pottery recovered from context [3] has little significance, particularly as none of the fabrics represented were local wares and therefore were not associated with the kiln site recorded by Conyers.

It seems from other observations and records (see section 2.4) that a large cut was excavated to remove the medieval foundations prior to construction of Wren's cathedral. These layers therefore represent the make-up deposits for the crypt floor within this cut. The builders presumably used material close to hand for this purpose and there must have been large quantities of graveyard soil removed from the footprint of the new church available. There must also have been abundant surplus mortar from the construction of the new foundations as well as old mortar from the medieval cathedral, the stone having been removed and presumably cleaned for reuse elsewhere.

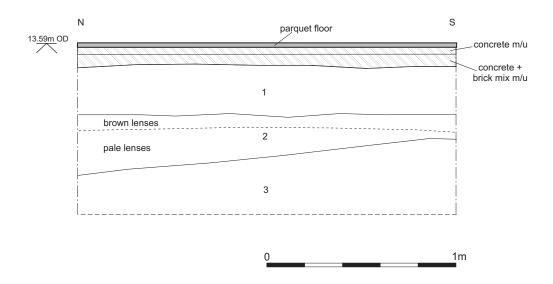


Fig 3 Section drawing of the west-facing section in TP1



Fig 4 Photograph of the trench being recorded, looking east

3.2.2 Full excavation area TP2

Location	South-west corner of the north-eastern
	room
Dimensions	3.9m n-s x 1.3m e-w x max 1.90m deep
Modern ground level/top of slab	Parquet floor of the crypt at 13.74m OD
Base of modern fill/slab	13.60m OD
Depth of archaeological deposits seen	Max 1.75m
Level of base of deposits observed	11.84m OD
Natural observed	N/A

See Figs 5 - 11.

Due to the constraints of the sump and manhole design the northern 1.1m of the trench was only excavated down to 0.80m below floor level (12.94m OD). The southern 1m was occupied by a foundation which could not be removed. The remainder of the trench was excavated to 1.90m below floor level (11.84m OD). During the works to insert the sump a thin sondage 300mm wide and 300mm deep was excavated by the contractors in the base of the trench on the south side against the foundation to accommodate a concrete support beam.

Description

The earliest recorded deposits were a sequence of make-up dumps observed only in the deepest part of the trench, contexts [28] – [31] inclusive. The deepest layer, [31], was not bottomed in excavation but the thin sondage excavated by the contractors revealed hard brickearth [34] at 11.55m OD. Due to the depth and inaccessibility of this layer it was not clear whether it was natural or redeposited but the apparent presence of brick fragments (if these were within the layer and not pressed into the surface) indicated the latter. It was composed of loose mid brown/grey sandy silt with 20% stone rubble and occasional brick fragments. Above this was [30], a 0.20m-thick deposit of loose mortar and stone rubble lensed with silt towards the base. Context [29] consisted of dark grey/black sandy silt with 10% charcoal and occasional stone fragments and was 0.30m thick on the east side, thinning to 0.10m to the west. At the top of this group was [28], a very loose pale cream mortar and stone rubble deposit 0.45m thick, bringing the surface up to 12.80m OD. All four of these layers contained clay tobacco pipe fragments.

A stone foundation [22] was discovered running east-west across the south end of the trench, divorced from the group of contexts described above by a later grave cut [26] (see figs 5–8). It was constructed from large stone blocks, dressed on at least one face, with a maximum dimension of 350mm. The blocks were set in a hard pale yellow/cream sandy mortar and only roughly coursed. The only exposed face, the northern edge, was vertical and faced with the dressed sides of the blocks. In total a length of 1.30m e-w x 0.75m n-s x 0.60m depth was observed (but it extended beyond the W, S and E limits of excavation) and the top was at 12.99m OD. The top was covered in a layer of the hard mortar obscuring the presumed rubble core which

protruded through the mortar in places. No part of the foundation was damaged or removed.

No cut was observed for foundation [22]. However, to the north was [21], a thick deposit of mid brown sandy silt with 20% stone fragments and frequent mortar and chalk flecks. This deposit was >0.85m deep from 12.75m OD, dumped against the foundation and truncated to the north by grave cut [26]. Since it was markedly different from the sequence further to the north it is possible that it was the fill of a deep and wide construction cut for the foundation. Stem fragments from clay tobacco pipes were also retrieved from this layer.

The next event was the deposition of [16], a mixed make-up dump of dark grey/brown sandy silt with 10% crushed and fragmented mortar and chalk. It raised the ground surface to 13.00m OD, level with the top of foundation [22] and originally covered the entire area of the trench north of the foundation. It was overlain by [15], a dump of mortar 0.15m thick with a very hard surface extending across the trench except where truncated by later cuts.

An extension to the foundation was constructed through the surface of [15]. Cut [19] on the west side of the trench was deeper than the base of the excavation (11.84m OD) and was <0.40m wide. It was dug down the side of foundation [22] and presumably was linear, extending westwards from the trench. Within the cut foundation [18] was built, lapping over and mortared onto foundation [22], although clearly not bonded or keyed into it. It was one course higher than foundation [22] at 13.13m OD, with the top stone block extending across the top of the earlier stonework It consisted of dressed stone blocks up to 0.5m maximum dimension in a hard coarse pale yellow mortar. Both of the exposed faces (ie east- and north-facing) were angled so that the bases splayed outwards by 0.2m to the observed depth. The cut was backfilled around the foundation with [17], a loose mid-dark grey sandy silt with 20% stone rubble.

Layer [14], a light-mid brown sandy, mortary silt with frequent inclusions of pebbles, brick, shell, chalk and charcoal, overlay the mortar dump [15] and clearly extended over cut [19]. It was very thin, mostly less than 50mm, and consistently covered the hard mortar surface of [15]. Above this was a thick mortar layer, [11], which raised the level in the trench to 13.45m OD, covering both of the foundations.

Cut [26] truncated layer [11], effectively divided the trench in two (see figs 5 and 7). It was up to 0.80m wide and >1.30m long east-west, and it was unbottomed at 11.84m OD, the base of the trench, making its depth >1.75m. It was filled with [25], extremely loose mid grey/brown sandy silt, with stone rubble and mortar mixed in, and a quantity of disarticulated human bone. It was so unstable that shoring was required during the excavation to prevent collapse. Near the base of the excavated part of the cut, at 11.88m OD, coffin [27] was revealed (Fig 9). It consisted of a kite-shaped dark brown wood stain, with decayed iron fittings including brackets and grips. It was 0.30m wide at the head and 0.45m wide at the shoulders. Only 1.00m of the head end was present in the trench, the remainder being beyond the east limit of excavation. A small sondage excavated 0.25m deep into the coffin failed to reveal any evidence of a body.

At some stage the top of the cut was re-excavated as cut [13] for the insertion of a further coffin [24] (see Fig 7). The base of the cut was only 0.80m below current floor level, 0.50m below the top of layer [11]. The coffin lay on the bottom of the cut but was only fully observed in the eastern section where a cervical vertebra was observed. This implies that the skull had become disarticulated from the body, probably due to subsidence and movement in the loose fill, and was previously removed as disarticulated human remains during the first phase of work. The fill, context [12], was similar to the lower fill [25] but lighter in colour and with a lower stone content, also containing disarticulated human bone. The cut [13] exactly mirrored in plan cut [26] beneath.

Above the grave was a thin deposit of make-up [7], composed of dark grey/black sandy silt. It was very similar to [10] further to the north and separated by cut [6]. Both layers yielded 19th-century pottery.

Two modern cuts were numbered, cut [6] to the north of the trench and cut [9] to the south. Both were filled with lean-mix concrete and brick, [5] and [8] respectively, which spread beyond the confines of the cuts. Feature [9] had an additional fill of sandy silt and packed disarticulated human bone under the concrete.

The top contexted feature was a flagstone floor [4] which overlay all contexts in the western and southern part of the trench and was further recorded in the watching brief (figs 14 and 15). Above this was 100mm of concrete make-up for the existing parquet floor.

Discussion

WREN CONSTRUCTION PERIOD

It was plain from the dumped nature of the earliest deposits and the presence of clay tobacco pipe that no material earlier than the construction of the present cathedral survived in situ in the trench.

The sequence of events began with a series of dumps in the massive construction cut which is known to have been excavated in order to remove the medieval cathedral foundations. The brickearth observed at the base of the contractor's sondage, recorded as context [34], probably indicates the base of this Wren construction cut at 11.55m OD. When the dumping had reached the top of layer [28], at approximately 12.83m OD, a cut for foundation [22] was excavated and the foundation constructed within it. The cut was backfilled with [21] to the same level as the surrounding material. Then further dumping took place, raising the ground surface to 13.10m OD, where a hard mortar surface, the top of [15], was created.

It is possible that this surface was in use for some time as a construction base in this part of the cathedral. Certainly the second stage of foundation, [18], was built from this level with a narrow construction cut [19], which was again backfilled to the level of the contemporary surface. The thin deposit [14] was presumably an occupation layer accumulated over the surface during use.

The second foundation [18] appears to have been a necessity because the primary foundation [22] was not broad enough to match up with the northern face of the crypt wall to the west above ground. Masonry [18] extended the line of the foundation 0.25m northwards and was built at an angle (ie with a wider base than the top) for extra support. Its top stone was a course higher than [22] and extended across the top of the earlier masonry, a measure designed to tie the two foundations together more effectively. Both foundations were constructed with dressed stone blocks, at least some of which may have been reused from the medieval cathedral, in a similar style with rough coursing. None of the stones exhibited moulded decoration, however. The mortar employed in the construction of each foundation was similar, but that in the later foundation was creamier in colour and coarser in texture.

Whether the second foundation [18] was part of the original plans or whether it was designed to rectify a mistake or a late change in the plans is not clear. However, the second foundation has a 'tacked on' appearance which suggests the latter. If so, it shows that the design of St Paul's was to a certain extent evolving during construction rather than rigidly fixed.

USE OF THE CATHEDRAL

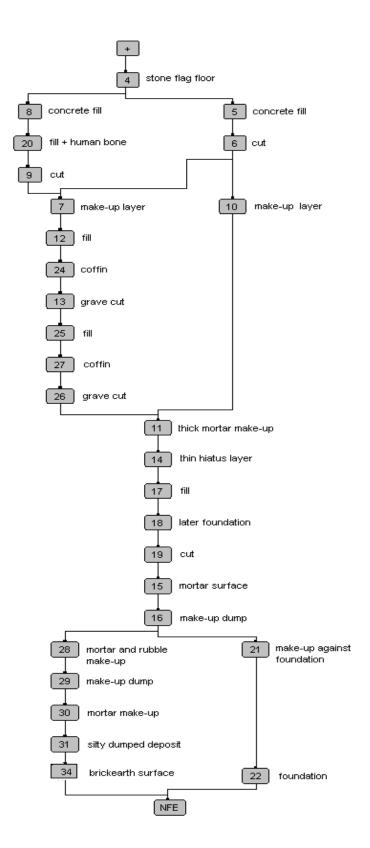
Further dumping raised the ground surface to about 13.43m OD and from this level the grave cut [26] containing coffin [27] was inserted. As it was at the maximum depth of the trench (11.84m OD) the coffin was not excavated but a sondage dug at the head end failed to reveal any signs of a body. The fill material within the coffin was very loose and it is possible that there was another coffin beneath it into which

the contents of [27] had collapsed when the base decomposed and gave way. The coffin furniture observed was all iron and consisted of two grips (coffin handles) several iron brackets and fixing nails. The two recovered grips from the coffin were relatively long and narrow with squared angles, a type commonly employed in the late 17th/early 18th century (Adrian Miles pers comm). This implies that the burial occurred either during or shortly after construction of the cathedral.

In a recut of the same grave, but much higher up at 13.13m OD, was coffin [24]. This was discovered during the second phase of excavation and only observed in section. A neck vertebra was present on the base, implying that the skull had been removed as disarticulated bone in the previous phase of excavation. The extremely loose nature of the fills had led to slumping and movement of material within the fill so it is possible that the association between the skull and the coffin had been lost. A number of disarticulated skulls and skull fragments were present in the fill along with other human bones of all types. The date of this burial was not possible to ascertain but it was probably not much later than the primary burial. There was no indication of who was buried in the grave but the probability that the two (possibly three) individuals buried here in a prestigious location were related, and therefore that it was a family grave, is high.

19TH CENTURY AND MODERN

A thin layer [7] and [10] covered the grave cut and extended over most of the trench, raising the level to 13.46m OD. This probably dated to the 19th century and represented make-up for the contemporary floor level. The material above this was concrete and brick rubble, which supported a flagstone floor, context [4], at 13.61m OD and also filled two cuts, the one to the south being fairly deep. These may have been associated with drainage or ductwork and the concrete possibly dated to the early to mid 20th century. The present parquet floor lay at 13.74m OD.



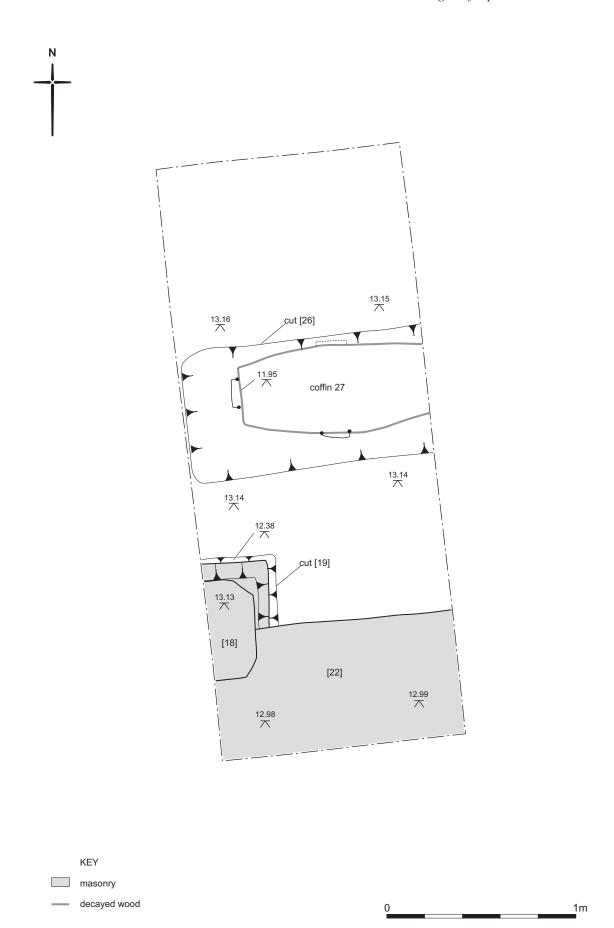


Fig 5 Plan of Trench TP2 showing significant features

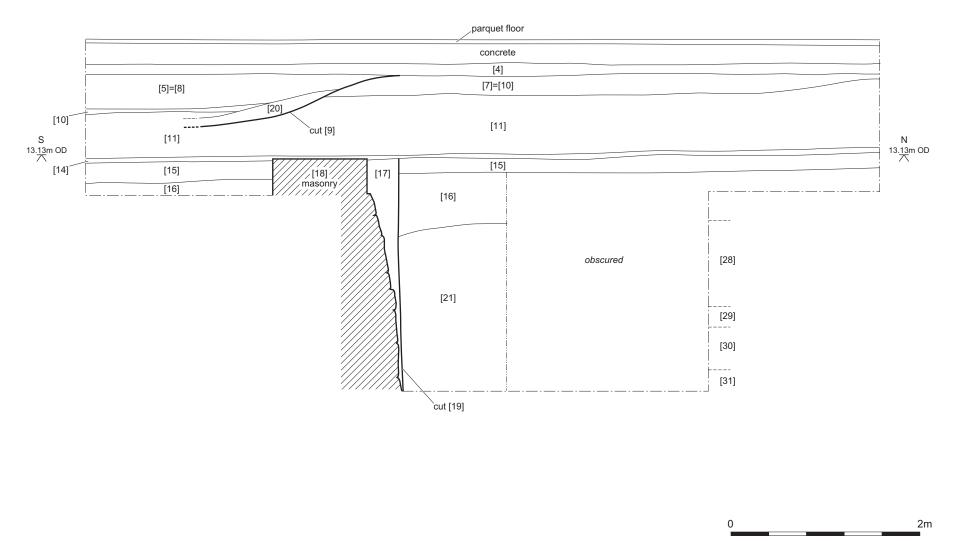


Fig 6 Drawing of S6, east-facing section of TP2

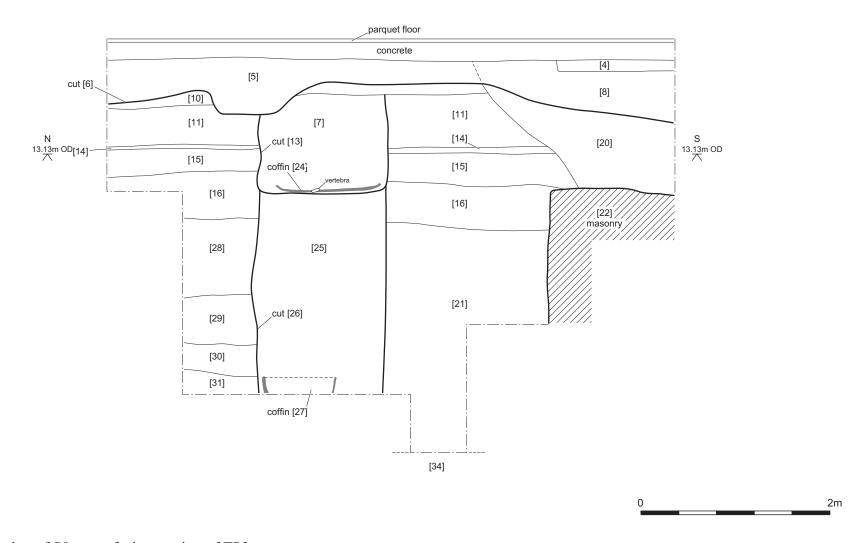
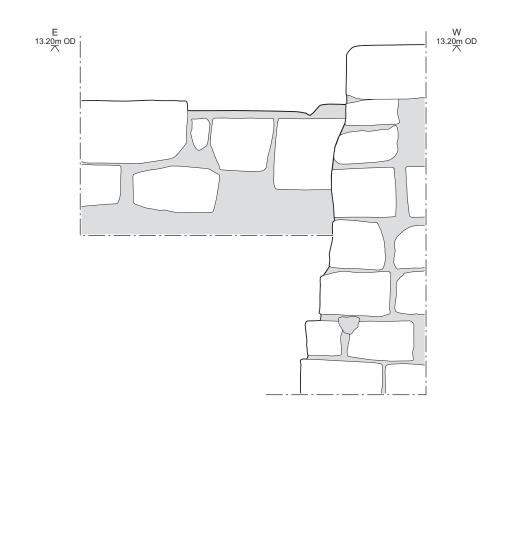


Fig 7 Drawing of S8, west-facing section of TP2

1m

KEY stone

mortar



Fig~8~~Drawing~of~S9,~north-facing~elevation~of~the~foundations~[18]~and~[22],~TP2



Fig 9 Photograph of the coffin [27] (west to top), TP2



Fig 10 Photograph of the foundations [18] and [22], looking south, TP2



Fig 11 Photograph of foundations [18] and [22], after full depth of excavation, TP2

3.2.3 The watching brief

The locations of watching brief features are to be found on Fig 12.

3.2.3.1 The central room

The central room possessed a vaulted ceiling supported on four pairs of columns. In this area the floor and deposits beneath were removed to a depth of c. 13.20m OD. This revealed that the columns were constructed on ground beams running east-west across the room, composed of limestone rubble in a lime mortar. Beneath the modern floor and make-up the material was very similar to layer [1] excavated to the north in trench TP1 interpreted as redeposited graveyard soil. It was mixed with stone fragments and mortar and contained disarticulated human bone. A duct run across the north of the room revealed that there was a mortar layer beneath this material, again reflecting the sequence in TP1.

Towards the north two stone slabs [32] were discovered at 13.47m OD, just beneath the floor. The largest to the east was black granite and measured 2.08m east-west x 0.83m n-s x 0.25m thick (see Fig 13). The four side surfaces were highly polished but the top surface was rough hewn with 8 distinctive fixing marks surrounded by thin mortar. The second slab was limestone and measured 1.09m n-s x 0.38m e-w x 0.11m thick. It was laid 0.55m west of the granite slab at precisely the same top level and parallel to the latter's west end. It was supported on a rough brickwork structure with hard mortar beneath it.

There was no clear indication of the function of these two slabs. The smaller was probably in situ and was possibly originally a step; the larger may have been deposited here ex situ as a method of disposal prior to construction of the modern floor. Its original use could have been as a plinth or base for an 18th- or 19th-century monument. Both were reburied in the central room at a deeper level in a pit which confirmed the presence of mortar beneath the top make-up deposit..