# St Mary's Church, Chartham, Canterbury, Kent

Archaeological watching and recording brief

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**Summary**

*Between October 2010 and March 2011 the Canterbury Archaeological Trust monitored repairs and refurbishment to the rainwater drainage system along with other minor works at St Mary's Church, Chartham (church centred at NGR 610695 155073).*

*Evidence of previous truncation of nave, chancel and transept foundations by existing pipe trenches was observed, but in the current works only cemetery soils and topsoil were partially disturbed. The work formed the focus of a successful community outreach and education project, and concluded with respectful reinterment within the churchyard perimeter of all human remains recovered.*

# 1 Introduction

## 1.1 Project background

1.1.1 An archaeological watching brief was undertaken during repairs and refurbishment to the rainwater drainage system at St Mary's Church, Chartham (church centred at NGR 610695 155073; Fig 1 and Plate 1) between October 2010 and March 2011 (along with other minor works; Diocese of Canterbury Faculty No 0096). The work, conducted by the author for Canterbury Archaeological Trust with the advice of the Diocesan Archaeologist (Paul Bennett), was part funded by St Mary's Parochial Church Council (PCC), with the help of financial legacy, and part voluntary. The project was seen as an educational opportunity and community venture, and the author was assisted in the work by members of the PCC and St Mary's congregation as well as helpers from the wider parish and other volunteer archaeologists (see acknowledgements).

1.1.2 This technical report presents the archaeological results; an account of the outreach aspects of the project will be presented elsewhere (Weekes *forthcoming*; see acknowledgements however).

1.1.3 The archaeological works were conducted in accordance with the Institute for Archaeologists *Standard and Guidance for an Archaeological Watching Brief* (2008). The Canterbury Archaeological Trust is a registered organisation with the Institute for Archaeologists and conforms to their by-laws, standards and policy statements.

## 1.2 Location and geology

1.2.1 St Mary's Church is situated in the centre of the large village of Chartham, in the Stour Valley approximately 5km to the west of Canterbury (Figure 1, Plate 1).

1.2.2 The existing turfed cemetery surface appears level with some moderate undulations, with levels taken during the current project at just under 17m above the Ordnance Datum (OD).

1.2.3 Geology in the area is recorded as Alluvium, overlying Seaford Chalk (British Geological Survey 1:50,000 DiGMapGB-50 dataset, accessed 07 June 2011). Stour 2nd Terrace gravels are marked in the general vicinity.

## 1.3 Archaeological and historical background[1]

1.3.1 Sporadic finds of prehistoric, Romano-British and early Anglo-Saxon archaeology are well known in the Stour Valley more generally, but there are not many reports of evidence of these periods near to Chartham Church. The nearest are stray finds, both to the south-east: a Palaeolithic axe (HERTR 15 SW 19) approximately 200m from the church and a late Bronze Age leaf-shaped, looped and socketed, spearhead (HERTR 15 NW 14), found in 1861approximately 100m away at Chartham Paper Mill.

1.3.2 Earlier phases of the church itself (HERTR 15 NW 646), the earliest being of at least Anglo-Norman date and probably late Anglo-Saxon, were partially investigated during installation of new toilet facilities on the north-west corner of the nave in 2001 (Willson and Linklater 2001).

1.3.3 Most of the present church (HERTR 15 NW 16),[2] dedicated to St Mary the Virgin, is cruciform and was built in stages between the end of the thirteenth and the early fourteenth century (*c*. 1294–1315), on the site of and replacing the earlier late Saxon church. A new tower was added to the west end of the church in the late fifteenth century.

1.3.4 The church underwent various post-medieval refurbishments, the most drastic being its restoration in 1875. The latter also had implications for the churchyard. The specification for 'general repairs,

[1] Historic Environment Records (HER) are cited from the KCC on-line database.
[2] Linklater and Willson (2002) provide a more detailed account of the history and development of the church.

alteration, restoration and refitting...' (1874; CCA-U3-154/6/23) indicates that the existing rainwater drainage system was first laid out at this time, with 'four inch socket jointed drain pipes...to be laid round the church ... with 1½ [inches] fall to every 10 feet and to have all necessary bends and junctions...'. The same document calls for a general clearance of up to '1/6' (= one and a half feet?) of soil from around the external faces of church walls for a space of 10 feet all around in order to bring the external surface in keeping with new floors within. There is also a stipulation for ground and graves around the south side of the chancel to be reduced so as to be not more than '1/6' (= one and a half feet?) above the level of the church yard path (*ibid*). Clearly therefore there was considerable landscaping at this time. The specification ordered that all surplus soil produced should be removed to the extremities of the church yard (see report findings below, however).

1.3.5 There have been refurbishments to the rainwater drainage system since, with specifications for general works in 1932 calling for a new down pipe on the south side of the chancel, a concrete gully at the foot of the pipe and a new 4 inch drain, 20 feet long, to run to a new soakaway 3 feet in diameter, filled with large stones and turfed over (CCA-U3-154/6/10). Specifications for works in 1960 also called for an overhaul of the rainwater drainage system 'as necessary' (CCA DCb E/F Chartham St Mary 16), which may have included refurbishment or replacement of pipes or other facilities.

1.3.6 The churchyard was closed to burial by order of her majesty in 1900, except in certain cases: in vaults or wholly walled burials, in earthen burials if widows, widowers, brothers or sisters of those already interred were to be buried, or in earthen burials if children of those already interred were to be buried, but only if new burials could be made at a minimum 4 feet deep with no disturbance of existing remains (CCA-PC4/C/1/4). The last burial at St Mary's was carried out in 1943, although the yard had officially signed over to the Parish Council by churchwardens in 1934 in accordance with the Local Government Act (*ibid*). The PCC obtained a faculty for removing tomb stones and levelling the church yard in 1954 and the work was carried out later that year and during the next (*ibid*).

## 2 Project objectives and methodology

### 2.1 Objectives

2.1.1 The watching and recording brief was conducted to monitor any impact on the buried archaeological resource caused by excavation of the drainage runs, soakaway pits or other groundworks, and to ensure preservation by record of all exposed archaeological deposits and features.

2.1.2 The opportunity would also be taken during the course of the investigation to place and assess any archaeology revealed within the context of the heritage asset (the church and its churchyard) and other archaeological investigations in the immediate area.

2.1.3 The work was also seen as an outreach and educational opportunity and appropriately managed as a small-scale community archaeology project (Weekes *forthcoming*).

### 2.2 Field methodology

2.2.1 The work included location of previous drainage runs (traced from the location of down pipes on the church building and identification of the drainage trench cut), excavation and removal of drainage trench backfills and old pipes and installation of new pipes (including some partial re-routing in order to rationalise the system), excavation of two new soakaway pits and of a new drainage run in association, excavation of a gully for pea-shingle drainage adjacent to the church and of a pit to house re-used stone as hardstanding. The author also excavated a pit for re-interment of disturbed human bone within the churchyard. More detail on the nature and scope of individual archaeological interventions is given alongside the archaeological results (below).

2.2.2 All excavation was carried out by hand by the Churchwardens and PCC members (and other parishioners), continuously monitored and assisted by an experienced archaeologist.

2.2.3 All excavations were recorded using a fieldwork notebook and scale drawings of plans, sections and profiles on drafting film (these records remain in the project archive but have not been reproduced in this report, photographic depiction being considered sufficient). A full digital photographic record (see

plates for selection) of the site investigation works was maintained and a digital survey obtained using a total station. A watching brief for significant residual finds was maintained during the backfilling of the trenches. Volunteers also surveyed spoil heaps for disturbed human bones and metal detected finds.

2.2.4 On-site health and safety was conducted in accordance with the Canterbury Archaeological Trust's *Health and Safety Policy* (2010).

### 2.3 Finds, human bone and environmental samples

2.3.1 A sample of artefacts was recovered during the project in order to characterise the components of the mixed assemblages present, and for outreach demonstration purposes (processing methods and display). All of the finds recovered were residual, collected from mixed cemetery soils and the topsoil deposits. Other than noting their presence, further analysis of this material was not warranted and only a selection of representative artefacts were retained for demonstration purposes by the PCC. These finds were retained because of their intrinsic interest and for display in the church at a later date. All retained finds were processed by Emily Weekes to a minimum acceptable level, packaged, and are to be deposited with St Mary's Church.

2.3.2 A considerable quantity of disarticulated human bone was collected by hand during excavation. This was stored in the church and reinterred in keeping with Church of England and English Heritage Guidelines (2005); in this case reinterment of the remains took place within the perimeter of St Mary's churchyard following a short service.

2.3.3 No soil samples were collected for environmental analysis.

### 2.4 Archive and assessment methodology

2.4.1 Following completion of the fieldwork a project archive was prepared in accordance with Appendix 3 of *Management of Archaeological Projects 2* (English Heritage 1991, 30–31). The project archive conforms with the *Guidelines for the preparation of excavation archives for long term storage* (UKIC 1990), *Standards in the museum care of archaeological collections* (Museums and Galleries Commission 1992) and the *Selection, Retention and Dispersal of Archaeological Collections: guidelines for use in England, Wales and Northern Ireland* (Society of Museum Archaeologists 1993).

2.4.2 The paper and digital archive generated by the work will be curated by the Canterbury Archaeological Trust Archive summaries and a copy of this report will be submitted to the OASIS (Online Access to the list of Archaeological Investigations) project on-line.

2.4.3 Continual rather than formal assessment was carried out in the field and during further preparation of the site archive (but in accordance with the principles of *Management of Research Projects in the Historic Environment: The MORPHE Project Managers' Guide* and *MoRPHE Project Planning Note 3: Archaeological Excavation;* see English Heritage 2006 and 2008 respectively). It was not felt that the results of the excavation warranted formal assessment or analysis.

## 3 Excavation results

### 3.1 North-east: pipe replacement and partial re-routing (Fig 1; plates 2 and 3)

3.1.1 The rainwater drainpipe to the north of the chancel was located at the down pipe adjacent to the north transept and traced some 2.8m to the north-east, where it joined other sections of pipe. Beyond the junction (also to be replaced) a further 1.8m of pipe heading approximately due east was also removed. Excavation was generally limited to within the existing pipe trenches and entailed removal of pipe trench backfill and cleaning of the base to reveal deposits into which the trench had been cut. Extensions to the existing trench were only made at the junction in order to install new facilities, and only affected the south side of the trench. The resulting trench ranged from approximately 0.35m wide to 0.65m wide at the extended junction point.

3.1.2 The earliest deposits seen in this area were cemetery backfill (1106), revealed at 16.25m OD, 0.52m below the present surface, which appeared from surface cleaning and inspection to contain no post-medieval material. The offset foundation for the chancel buttress (1103; 1107) was observed cutting

these deposits, squared off in line with the buttress and extending some 0.6m from its surface base. It's upper surface lay at 16.52m OD, 0.25m below the modern ground level.

3.1.3 The north-west corner of the chancel foundation had in turn been truncated by the southern edge of the existing flat bottomed pipe trench (1102, filled by 1101). The latter had a moderately steep slope cutting from a maximum depth of 0.51m up to 0.38m below the present surface (16.26–16.39m OD). Topsoil was observed to a depth of 0.25m in this trench.

3.1.4 A summary of recorded contexts from this intervention is shown in Table 1.

| Context | Cut/fill | Description |
|---|---|---|
| 1100 | Fill | Topsoil: dark organic rich loose silty loam with typical residual cemetery material |
| 1101 | Fill | Pipe and backfill of existing pipe trench: loose sandy, silty loam with residual cemetery backfill inclusions including common various post-med peg-tile fragments and occasional window glass, human bone, nails and coffin fittings, potsherds and building materials (flint, mortar, other stone fragments) |
| 1102 | Cut | Cut of existing pipe trench |
| 1103 | Wall | Truncated chancel buttress foundation: squared chalk blocks at base and tiles and flint nodules set in loosened buff mortar |
| 1104 | Cleaning | Cleaning number for 1106 |
| 1105 | VOID | |
| 1106 | Fill | Old cemetery deposits (surface cleaned): compacted medium orangey grey silty clay with occasional human bone, potsherds, small fragments of ceramic building material (CBM), chalk flecking |
| 1107 | Cut | Chancel foundation cut (presumed) |

*Table 1. North-east pipe replacement and partial re-routing context list*

### 3.2 Northern pipe replacement (Fig 1; plate 4)

3.2.1 The rainwater drainpipes to the north of the nave were located at down pipes adjacent to the north transept and midway between the transept and the recently installed toilet block respectively, and removed as far as the junction for a new soakaway extension (see 3.3). Excavation was limited to within the existing pipe trench and entailed removal of pipe trench backfill and cleaning of the base to reveal deposits into which the trench had been cut. These trenches were on average approximately 0.35m wide (often less) and comprised approximately 10m of trenching overall.

3.2.2 The earliest deposits observed were compact and relatively loam-free cemetery deposits (1204), which appeared from surface inspection to contain no post-medieval material. These had been truncated by the existing pipe trench (1202, filled by 1201) at a maximum depth of 0.5m below the modern ground surface level (at 16.48m OD). Two infant femurs recovered from the backfill (1201) of the existing pipe trench are potentially worthy of note (Fig 1). Topsoil was observed to a depth of 0.2m in this trench.

3.2.3 A summary of recorded contexts from this intervention is shown in Table 2.

| Context | Cut/fill | Description |
|---|---|---|
| 1200 | Fill | Topsoil: dark organic rich loose silty loam with residual cemetery material |

| | | |
|---|---|---|
| 1201 | Fill | Pipe and backfill of existing pipe trench: loose sandy, silty loam with residual cemetery backfill inclusions; includes two infant femurs |
| 1202 | Cut | Cut of existing pipe trench |
| 1203 | Cleaning | Cleaning number for 1204 |
| 1204 | Fill | Old cemetery horizon (surface cleaned): compacted medium orangey grey silty clay with occasional human bone, potsherds, small fragments of CBM, chalk flecking |

*Table 2. Northern pipe replacement context list*

### 3.3 North-west pipe replacement (Fig 1)

3.3.1 The rainwater drainpipe at the north-west corner of the nave was located at the down pipe adjacent to the recently built toilet block and removed as far east as the junction for a new soakaway extension (3.4), this section of trench being approximately 3.3m in length and on average just 0.25m wide. Excavation was limited to removal of pipe trench backfill and cleaning of the surface into which it had been cut.

3.3.2 Compact and relatively loam-free cemetery deposits (1304), which appeared from surface inspection to contain no post-medieval material were observed in the base of the trench, cut through by the existing pipe trench (1302, filled by deposit 1301) at a maximum depth of 0.5m below the modern ground surface level (at 16.48m OD). Topsoil was observed to a depth of 0.15m in this trench.

3.3.3 A summary of recorded contexts from this intervention is shown in Table 3.

| **Context** | **Cut/fill** | **Description** |
|---|---|---|
| 1300 | Fill | Topsoil: dark organic rich loose silty loam with residual cemetery backfill inclusions |
| 1301 | Fill | Pipe and backfill of existing pipe trench: loose sandy, silty loam with residual cemetery backfill inclusions |
| 1302 | Cut | Cut of existing pipe trench |
| 1303 | Cleaning | Cleaning number for 1304 |
| 1304 | Fill | Old cemetery horizon (surface cleaned): compacted medium orangey grey silty clay with occasional human bone, potsherds, small fragments of CBM, chalk flecking |

*Table 3. North-west pipe replacement context list*

### 3.4 Northern soakaway extension and pit (Fig 1; plates 5 and 6)

3.4.1 The new soakaway pit to the north of the nave was situated 6m north of the old pipe alignment, with a new drainage extension running to it. The ground surface was notably uneven in this area, rising from approximately 16.83m OD at the southern end of the trench to 17.03m OD 2.25m to the north and falling away (16.73m OD) in the area of the soakaway pit, some 5.5m further to the north. This pattern was observed to west and east of the soakaway excavation, amounting to a linear mound flanking the northern side of the church.

3.4.2 The drainage extension trench (aligned north–south) was 6.75m long and ranged from approximately 0.2m to 0.3m wide, varying in depth from 0.44m below the present surface (16.39m OD) at its southern end to 0.65m deep at its northern end (16.18m OD). The confined dimensions of the trench largely precluded clear inspection of deposits.

3.4.3 The earliest deposits encountered in the pipe extension trench were compact and relatively loam-free cemetery deposits at the southern end (1414, a continuation of deposit 1304, see above); a rim sherd spot-dated to approximately the turn of the fourteenth century was recovered from a surface clean of this deposit, which appeared from this inspection to contain no post-medieval material. The exact relationship between this material and later cemetery soils (1401–7) sealing it could not be established with any certainty, but it is likely that intensive post-medieval burial lay to the north of this approximate boundary.

3.4.4 The soakaway pit was aligned north–south and measured 1m by 1m. It was excavated to a depth of 0.90m (15.83m OD) below the modern ground surface level (Plates 2 and 3).

3.4.5 The earliest deposits comprised very mixed post-medieval burial backfills representing intensive burial activity (1413; 1410: equivalent to 1401–7). An east/west aligned near vertical grave cut (1409), which cut through the earlier stratigraphy, was identified within the soakaway pit and individually excavated for public demonstration purposes. Several discrete deposits were recorded within the typical burial backfill (1406; 1408; 1411–12). The burial was not fully excavated as the formation level for the soakaway facilitates had been reached. Of interest were very occasional residual fragments of burnt flint and Roman tile (*tegula*) from the grave backfills. Considerable variation in and mixing of disarticulated bone was also noted. Topsoil was observed to a depth of 0.2m in this area.

3.4.6 A summary of recorded contexts from this intervention is shown in Table 4.

| Context | Cut/fill | Description |
|---|---|---|
| 1400 | Fill | Topsoil: dark organic rich loose silty loam with residual cemetery backfill inclusions |
| 1401–5 | Fill | Post medieval cemetery soils |
| 1406 | Fill | Upper fill of grave cut 1409; compacted peg-tile, gravel and occasional bone, quite compacted |
| 1407 | Fill | Post medieval cemetery soil |
| 1408 | Fill | Fill of grave cut 1409; peg-tile, bone and gravel rich loam, quite compacted |
| 1409 | Cut | Vertical cut partially seen of E–W aligned grave (post-med), not bottomed |
| 1410 | Fill | Post medieval cemetery soils within soakaway pit |
| 1411 | Fill | Loamy lens (0.1m thick) within grave cut 1409 |
| 1412 | Fill | Fill of grave cut 1409; peg-tile, bone and gravel rich loam, quite loose |
| 1413 | Fill | General number for mixed cemetery backfills (post-med) |
| 1414 | Fill | Old cemetery horizon (surface cleaned): compacted medium orangey grey silty clay with occasional human bone, potsherds, small fragments of CBM, chalk flecking |

*Table 4. Northern soakaway and extension context list*

### 3.5 Southern soakaway pit (Fig 1; plate 7)

3.5.1 The southern soakaway pit was aligned approximately north–south and measured 1m long by 0.6m wide. It was excavated to a depth of 0.85m below the modern ground surface level (15.61m OD). An adjoining short section of connecting pipe trench, emerging from the southern edge of the churchyard path and of irregular form approximately 0.75m by 0.85 in extent, was also uncovered and partly remodelled during this intervention. This was only excavated to a depth of some 0.5m, however (15.96m OD).

3.5.2 The earliest deposit encountered within the southern soakaway trench comprised a homogenous, moderately firm sandy clay loam (1502/1503; at least 0.65m thick but not fully excavated). Whilst finds were relatively sparse in this deposit, a concentration of notably intact but disarticulated cranial and

other bones and fragments was observed at approximately 0.7m beneath the surface (at 15.76m OD), along with occasional large nails (possible coffin nails of some antiquity) and occasional fragments of much abraded CBM throughout; a clay pipe stem, dated 1887, was also recovered from this deposit. The upper surface of deposit 1502/1503 lay at 16.01m OD**;** the topsoil (1501) sealing it to a depth of 0.15m beneath the present surface was also notably free of inclusions.

3.5.3 A summary of recorded contexts from this intervention is shown in Table 5.

| Context | Cut/fill | Description |
|---|---|---|
| 1500 | VOID | |
| 1501 | Fill | Topsoil: relatively free of inclusions |
| 1502/1503 | Fill | Medium orangey brown sandy clay loam, friable to firm, relatively few inclusions but burial backfill containing occasional to moderate CBM, corroded nails, bone, particular bone concentration (large skull fragments, vertebrae, scapula and long bones included) and a clay pipe dated 1887 with the word 'Jubilee'. |

*Table 5. Southern soakaway context list*

### 3.6 Southern pipe replacement from south transept down pipes (Fig 1; plates 8 and 9)

3.6.1 Rainwater drainpipes were located at the down pipes adjacent to the south transept and removed, to the west as far as the junction for the southern pipe replacement and partial re-routing (3.7) and to the east for a short section. Excavation was limited to removal of pipe trench backfill and cleaning of the surfaces into which it had been cut.

3.6.2 The resulting trench to the west of the south transept was 2.5m in length (aligned north-west–south-east) and a maximum of 0.65m wide (though tapering to just 0.3m wide at the northern end). The earliest deposits observed here were friable to firm, relatively loam-free cemetery deposits (1606), which yielded occasional scraps of medieval or early post-medieval pot. These deposits were cut by the chalk block and mortared flint foundation of the church (1603) and its presumed cut (1604; not clearly seen) which had in turn been truncated by the existing pipe trench (1602, filled by 1601), the latter cutting to a maximum depth of 0.5m (16.32m OD) below the modern ground surface level. Topsoil was observed to a depth of 0.2m in this trench.

3.6.3 Significantly neither the cut nor the backfilling for the 1991 excavation (see Linklater and Willson 2002) were seen during excavation of this run.

3.6.4 The trench for replacement of pipe work to the east of the transept was just 1m by 0.5m in extent and shallow. The earliest deposit seen here was the truncated chalk block transept foundation (1609), truncated by the existing pipe trench (1608, filled by 1609). In this case only minimal excavation was required, to a depth of *c* 0.35m (approx 16.30m OD) in order for installation of new pipe work. There was little topsoil (= 1600) in the area of the down pipe, but typical depths existed at the south-east end of this small trench (approximately 0.2m).

3.6.5 A summary of recorded contexts from these interventions is shown in Table 6.

| Context | Cut/fill | Description |
|---|---|---|
| 1600 | Fill | Topsoil: dark organic rich loose silty loam with residual cemetery backfill material |
| 1601 | Fill | Pipe and backfill of existing pipe trench: loose sandy, silty loam with residual cemetery backfill inclusions |
| 1602 | Cut | Cut of existing pipe trench |
| 1603 | Fill | Chalk block foundation truncated |

| | | |
|---|---|---|
| 1604 | Wall | Chancel foundation cut (presumed, not clearly seen) |
| 1605 | Cleaning | Cleaning number for 1606 |
| 1606 | Fill | Old cemetery horizon (surface cleaned): friable to compacted medium orangey brown silty clay with occasional human bone, pottery scraps, small fragments of CBM, chalk flecking |
| 1607 | Fill | Pipe and backfill of existing pipe trench: loose sandy, silty loam with residual cemetery backfill inclusions (east side) |
| 1608 | Cut | Cut of existing pipe trench (east side) |
| 1609 | Wall | Chalk block foundation truncated (east side) |

*Table 6. Southern pipe replacements from transept down pipes context list*

### 3.7 Southern pipe replacement and partial re-routing (Fig 1; plates 10–12)

3.7.1 The existing drainpipe was located at the down pipe adjacent to the south porch and traced and removed along what was found to be a meandering course south-eastwards towards the south transept, from where the pipe adopted a more direct easterly route (see Plate 11). The trench was straightened on its southern side in order to house a straight length of new pipe. The resulting trench was some 23m in length and ranged in width from 0.3m to 0.5m due to straightening and other minor variations.

3.7.2 The earliest deposits observed here were friable to firm, relatively loam-free cemetery deposits (1710), which yielded occasional scraps of medieval or early post-medieval pot and degraded CBM, the surface truncated to a depth of 0.5m (16.60m OD). Possible grave cuts (noticeably those containing distinctive backfills) were observed cutting this material in the northern (extant) side of the pipe trench (1701 filled by 1702; 1708 filled by 1707: see Plate 12); none of these features could be sufficiently excavated in order to further characterise them. The fill of those on the north side of the trench had been cut by the existing pipe trench (1704 filled by 1703). Modification of the southern edge of the trench revealed another probable burial cut and the southern (1706 filled by 1705). Topsoil was observed to a depth of 0.2m in this trench. Either the backfill of the existing pipe trench ((1703) or cemetery soils encroached upon by widening of the trench during the current project produced some interesting finds, only recovered during backfilling: two large fragments of medieval painted floor tile, one with a distinctive representation of a stylised animal's legs and feet, the other apparently geometric in design.

3.7.3 A summary of recorded contexts from this intervention is shown in Table 7.

| **Context** | **Cut/fill** | **Description** |
|---|---|---|
| 1700 | Fill | Topsoil: dark organic rich loose silty loam with residual cemetery backfill material |
| 1701 | Fill | Fill of probable burial cut, including much chalk and CBM inclusions |
| 1702 | Cut | Probable burial cut, southern extremity only, partially seen at northern side of pipe trench |
| 1703 | Fill | Pipe and backfill of existing pipe trench: loose sandy, silty loam with residual cemetery backfill inclusions; this included two large fragments of medieval painted floor tile, one with a distinctive representation of a stylised animal's legs and feet, the other apparently geometric in design |
| 1704 | Cut | Cut of existing pipe trench |

| | | |
|---|---|---|
| 1705 | Fill | Fill of partially seen presumed burial cut (chalky fill) 1706 |
| 1706 | Cut | Partially seen burial cut on southern side of remodelled pipe trench |
| 1707 | Fill | Partially seen chalk blocks and flint on northern side of existing pipe trench |
| 1708 | Cut | Presumed cut containing deposit1707 (not clearly seen) |
| 1709 | Cleaning | Cleaning number for 1710 |
| 1710 | Fill | Cemetery soils (surface cleaned): friable to compacted medium orangey brown silty clay with occasional human bone, moderate potsherds, small fragments of CBM, chalk flecking, notable for higher frequency of med pot scraps |

*Table 7. Southern pipe replacement and partial re-routing context list*

### 3.8 South-east: pipe replacement and re-routing (Fig 1; plates 13 and 14)

3.8.1 North–south aligned existing pipe work was traced between an inspection point 1.12m east of the most south-easterly buttress of the chancel and the churchyard path, this trench being some 2.5m in length and 0.25m to 0.3m wide. Excavation within this part of the trench was limited to removal of pipe trench backfill and cleaning of the surfaces into which it had been cut. The pipe heading towards the inspection point from the west was to be re-routed south-east to avoid the junction at the inspection point and meet the north–south aligned pipe nearer to the path. This entailed cutting a small trench to prospect for the pipe (approximately rectangular and aligned south-west/north-east; 0.6m long and 0.4m wide) and a new trench aligned south-eastwards, 1.4m long and 0.2m–0.25m wide.

3.8.2 A general number (1803) was given to mixed cemetery soils seen throughout the trench, although this may in fact represent various burial backfills of different dates. The upper surface of this general deposit was observed in section at 16.32m OD, 0.17m below the present surface. Cutting this deposit at the north-west end of the trench, a presumed burial cut or pit (1808: not clearly seen) contained a mass of small, medium and large chalk blocks, mortared flints and CBM (1806). This material was clearly formed of redeposited medieval foundation material and was so densely compacted that it was at first suspected to be *in situ*. Its upper surface lay at 16.09m OD, 0.4m below the surface.

3.8.3 Another partially seen grave cut (1802) had probably cut the latter grave backfill immediately to the south-eaSt The other side of this near vertical cut was also observed within the new pipe trench, indicating the grave to be 0.65m wide at this point, this south-east edge being seen to continue into the existing pipe trench. The grave cut was particularly clear in this case because there was a considerable void and loose material within (1801). This void was excavated prospectively to a depth of 0.9m beneath the present surface (15.54m OD) and was still continuing to plunge vertically beyond that depth. Loose cemetery loam backfill within the grave (1801) also produced redeposited fragments of mortar, mortared flint and chalk disturbed from the fill of adjacent feature 1808. Two clay pipe stems were also recovered from near the south-eastern edge of the grave cut.

3.8.4 The void within feature 1802 had no doubt been discovered previously during excavation of the existing pipe trench, which cut to a depth of 0.4m below the ground surface in this area and seen in section to have steep sides and a confined sump to house the pipe. Clearly localised conditions had affected the morphology of the pipe trench in this area.

3.8.5 A further chalk block (again no doubt redeposited foundation material) was observed in the section at the southern end of the existing pipe trench (Plate 16). Topsoil was observed to a depth of 0.2m in this trench.

3.8.6 A summary of recorded contexts from this intervention is shown in Table 8.

| | | |
|---|---|---|
| 1800 | Fill | Topsoil: dark organic rich loose silty loam with residual cemetery material |
| 1801 | Fill | Void and loose material within multiple burial cut 1802 |
| 1802 | Cut | Grave cut (possibly for multiple burials as slump created void) |
| 1803 | Fill | Mixed cemetery soil, medium orangey brown silty clay loam, moderate inclusions of small fragments of CBM, chalk flecking, flint, clay pipe stems |
| 1804 | Fill | Pipe and backfill of existing pipe trench: loose sandy, silty loam with residual cemetery backfill inclusions |
| 1805 | Cut | Cut of existing pipe trench |
| 1806 | Fill | Redeposited medieval foundation material including medium to large chalk block fragments, mortared flint, pegtile and degraded mortar fragments in grave cut 1808 |
| 1807 | Cleaning | Cleaning layer for 1806 |
| 1808 | Cut | Presumed cut for grave/pit backfilled with redeposited foundation material (1806) |

*Table 8. South-east pipe replacement and re-routing context list*

### 3.9 South transept: pea-shingle trench observation (Plates 17–18)

3.9.1 Topsoil was removed alongside the east wall of the south transept in order to install pea-shingle drainage, revealing the foundation and packing for a large gravestone.

3.9.2 The earliest exposed deposit was the truncated transept foundation (1903), with typical chalk block surmounted by mortared flint construction. This had been evidently disturbed (1902) by arrangements to erect a large grave stone and re-packing of foundation material for its support (1901). The latter also included two post-medieval bricks set carefully at the edge of the existing pipe trench in this area (1607), their purpose unknown.

3.9.3 A summary of recorded contexts from this intervention is shown in Table 9.

| **Context** | **Cut/fill** | **Description** |
|---|---|---|
| 1900 | Fill | Topsoil: dark organic rich loose silty loam with typical residual cemetery material |
| 1901 | Fill | Redeposited foundation material including medium to large chalk block fragments, mortared flint and peg tile fragments |
| 1902 | Cut/interface | Presumed cut of foundation for large grave stone setting (not investigated) packed with 1901 |
| 1903 | Wall | Truncated transept foundation: squared chalk blocks at base and tiles and flint nodules set in hard buff mortar |

*Table 9. South transept pea-shingle trench context list*

### 3.10 Western porch: hard standing

3.10.1 A shallow pit for bedding hard standing adjacent to the west door, 1.1m north–south by 0.8m west–east, was cut to a depth of approximately 0.25m into cemetery topsoil (see Table 10).

| Context | Cut/fill | Description |
|---|---|---|
| 2000 | Fill | Topsoil: dark organic rich loose silty loam with occasional residual cemetery material |

*Table 10. Western porch context*

## 4 Interpretation

4.1.1 The superficial geology was not encountered during the works. Occasional (probable) prehistoric, Roman and Anglo-Saxon residue was recovered from cemetery soils and burial backfills in the form, respectively, of fragments of burnt flint (one of which had been mortared for inclusion in a later structure, probably an earlier phase of the church), sporadic fragments of Romano-British CBM (also probably re-used in earlier phases of the church) and, possibly, the two infant femurs recovered from the projected alignment of the late Saxon Church (see Fig 1 and cf Linklater and Wilson 2002).

4.1.2 Variation in the cemetery soils encountered is noteworthy. Certainly those within the line of the transept and toilet block on the north side of the church (1106; 1204; 1304) appeared on surface inspection to contain no finds later than medieval, a rim sherd of probable early fourteenth-century date being recovered in one area (1304). Beyond this area on the north side the ground seemed to have been far more intensively disturbed by post-medieval burial, with individual graves very difficult to discern amid a mass of backfilled and loamy material containing much and diverse redeposited human remains. The cemetery soils revealed on the south side of the church presented a different picture, with those close to the church building seeming slightly more disturbed than soils in similar proximity on the north side. Soils in this area (seen during southern and south-east pipe replacement and re-routing) were notable for producing moderate quantities of medieval/early post-medieval scraps of pottery, perhaps representing alternative uses of the north and south sides of the church respectively. Further away from the church, the cemetery soil exposed in the southern soakaway trench (1502/1503) was clearly less disturbed, with denser and less mixed clayey deposits and fewer inclusions; the largely intact concentration of disarticulated bones seen in this deposit could easily have derived from a single disturbed grave. That the latter could also have been of some antiquity was perhaps suggested by a small number of large iron coffin nails also recovered from this pit (via metal detector survey of the spoil heap).

4.1.3 The back-filling in a probable burial next to the southern wall of the chancel with what was clearly medieval foundation material (1806) is interesting in that this material presumably derives from either the current or a previous incarnation of the church building. While it is possible that the chalk block seen in the south-east pipe trench (next to the path; Plate 16) was part of a foundation of another, hitherto unknown building, it may equally have been part of another burial backfill or possibly had been re- used as a foundation of the cemetery path. The void within another burial (1802) seen in this trench suggested a particular taphonomic process, perhaps due to several coffins having been interred either at once or in quick succession and then disintegrating following burial.

4.1.4 In general, the nineteenth-century drainage system was found to have some noteworthy quirks, such as the cavalier way in which it had impinged upon medieval foundations; in the case of the pipe trench near the north side of the chancel, avoidance of the buttress foundation would have meant only a minor detour. On the other hand, apparently arbitrary 'minor detours' characterised the pipeline on the south side of the nave near the porch, its meandering course requiring rectification during the current works. Pipe work removed on the south-side of the chancel was of later manufacture than the Victorian pipes seen elsewhere. It connected to a concrete inspection point and was probably installed either in the 1930s or perhaps the early 1960s (CCA-U3-154/6/10; CCA DCb E/F Chartham St Mary 16; see section 1.3.5, above). It is also possible that the putative burial backfilled with medieval foundation material seen at the south-east of the chancel (1808) related to these works in some way.

4.1.5 Finally from a stratigraphic perspective, it is of note that the cut and backfill of 1991 excavation at the south-west corner of the south transept was not seen during the current works, suggesting that the trench for that excavation was not quite as extensive as marked on contemporary plans; indeed, a section drawing (reproduced by Linklater and Willson, 2002) would seem to confirm that the 1991 intervention was more closely focussed on the wall foundation it sort to investigate.

4.1.6 Several residual medieval and post-medieval finds were retained for display in the church at a later date, including fragments of painted floor tile and a clay pipe stem celebrating Queen Victoria's Golden Jubilee.

## 5 Conclusion

5.1.1 At no time did the recent refurbishments to the St Mary's Church rainwater drainage system impinge on significant archaeological heritage assets. Several previous disturbances of the church foundations were revealed and recorded, but new excavations only removed upper backfills of post-medieval and possibly more recent burials.

5.1.2 While the archaeological findings of the excavations associated with St Mary's new rainwater drainage system were of little research significance, the project provided ample opportunity for community outreach and involvement.

## 6 Acknowledgements

6.1.1 This was a project conducted by the church community and parishioners, but Nikko Hicks (Churchwarden), who promoted, designed and drove the St Mary's Chartham rainwater drains project, leading from the front in all weathers, demonstrated his particular dedication to a very fine building and deserves special mention. Part of the funding for the project was derived from a legacy left by a former PCC member, Paul Hill, whose dual contribution to the maintenance of the church building and its value as a heritage asset is gratefully acknowledged. Thanks are also extended to Churchwarden Gerard O'Sullivan who helped to articulate the various aspects of the project as well as being a core member of the team from a practical point of view. Other helpers from the church included Gordon Steadwood, Andrew Goddard, Tony Frost and members of St Mary's junior church. Diocesan Archaeologist Paul Bennett and Ian Dodd of the Diocesan Advisory Committee provided useful advice and support throughout, and Emily Weekes both gave and supervised archaeological assistance, conducted finds processing and organised the open day display of finds and other information. The Trust supplied information boards for the open day. Thanks are also extended to Richard White of Horton for his archaeological assistance throughout and to Stephen Rawling for his contribution. Hayley Jedrejewski, now of the Trust, kindly volunteered osteoarchaeological expertise, and Gordon Steadwood and Val Goddard carried out spoil heap metal detecting. Gill Hicks is greatly thanked for making sure that hot drinks and biscuits arrived with perfect timing. St Mary's Priest-in-Charge, the Rev Phil Brown conducted a short service for the reinterment of the human remains recovered.

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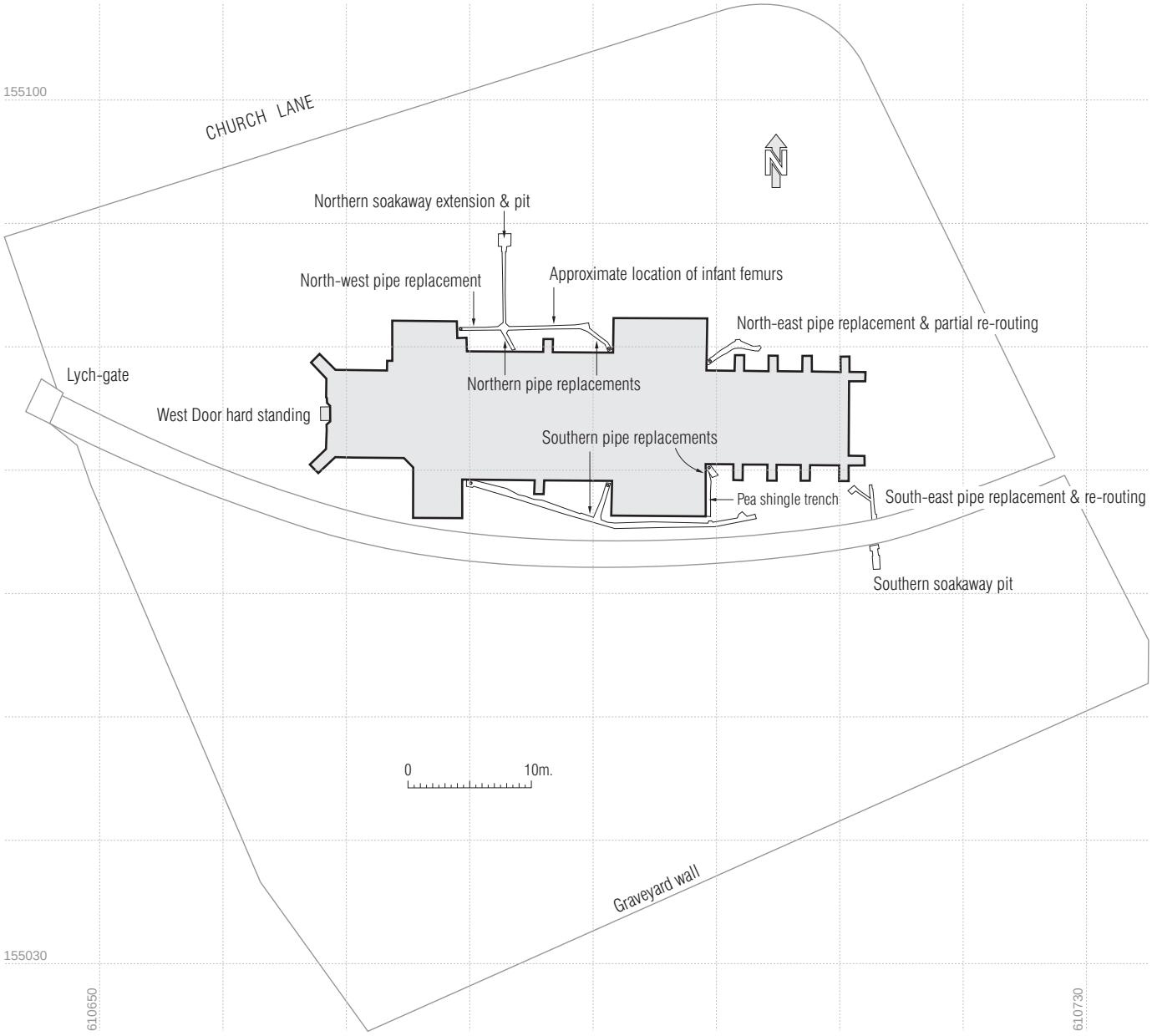


Fig 1. Digital survey of Chartham Church and locations of rainwater drain and other refurbishments

Plate 1: Works underway at Chartham Church, winter 2010-11

Plate 2: Chancel buttress foundation in the north-east pipe trench, looking south (scale 1m)

Plate 3: Detail of Chancel buttress foundation, looking south-east (Scale 0.2m)

Plate 4: Northern pipe trench detail, looking south (Scale 0.5m)

Plate 5: Northern soakaway and pipe trench extension, looking south (Scale 1m)

Plate 6:  Northern soakaway pit, looking west (Scale 1m)

Plate 7:  Southern soakaway pit, looking south-west (Scale 1m)

Plate 8: South transept downpipe (west), looking north-east (Scale 1m)

Plate 9: South transept downpipe (east), looking north-west (Scale 1m)

Plate 10: South transept and southern pipe trench, looking west (Scale 1m)

Plate 11: Souhern pipe trench, looking north-east (Scale 1m and 0.5m)

Plate 12: Southern pipe trench near the south porch, the southern edge straightened, looking west (Scale 1m)

Plate 13: South-eastern pipe trench extension and void, looking north-west (Scale 1m and 0.5m)

Plate 14: South-east pipe trench extension and void, looking east (Scale 1m and 0.5m)

Plate 15: Close up of chalk backfill 1806 (Scale 0.5m)

Plate 16: Chalk block seen in section near path, looking east (Scale 0.5m)

Plate 17: South transept foundation disturbed by gravestone foundation

Plate 18: General shot of pea-shingle trench, looking south