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St Cross Church
Oxford

Historic Buildings Recording
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Balliol College is proposing to undertake a development at St Cross Church in Oxford which would see the conversion of the large majority of the church to the college’s archive store. OA has been commissioned by Montgomery Architects, on behalf of Balliol College, to undertake a programme of archaeological recording of features within the floor which have been exposed by the removal of pews and floorboards.

Features exposed within the cleared areas were to be expected in a church of this size and date. On the south side of the nave, some dark areas of soil were visible, representing possible grave cuts, as well as part of a possible raised brick vault. Immediately west of this, and beside the west tower foundation, an inscribed slab and another possible brick vault were exposed. The north side of the nave featured several slabs, some of which are inscribed, and a possible stone burial chamber at the east side. Other exposed features include 19th and 20th century utilities and very occasional displaced human remains and coffin fixtures. Throughout the exposed areas, the ground is very uneven, suggesting more undetected burials from various periods.

The foundations for the new archive units will comprise concrete rafts at a maximum depth of 300 mm below the existing floor level, on permanent shuttering. In some areas of proposed development, voids are as shallow as 220mm, raising issues concerning the impact of the development on the archaeology of the church.
1 INTRODUCTION

1.1 Project Background

1.1.1 Oxford Archaeology (OA) has been commissioned by Montgomery Architects on behalf of Balliol College to undertake a programme of archaeological investigation and recording in St Cross Church in Oxford. The work relates to a proposal to convert most of the church, which is no longer used, to an archive store for the college.

1.1.2 OA has previously undertaken an Historic Building Assessment of the church (February 2009) and the current project has formed recording of vaults and other features exposed in the floor by the removal of pews prior to the start of the conversion works. The current document is intended to be read alongside the assessment report and there are various elements in the previous study such as the historical background, maps and memorials catalogue which are relevant to the current work, but which have not be reproduced here.

1.1.3 A geophysical (ground penetrating radar) survey has also previously been undertaken by Strata scan to gain some indication of the probable layout and extent of the burials in the church.

1.1.4 In March 2009 the Diocesan Archaeological Advisor issued a brief outlining the recording works required.

1.2 The site

1.2.1 St Cross Church stands in the medieval suburb of Holywell, on the corner of Manor Road and St Cross Road, to the north-east of the line of Oxford's historic city walls in the parish of Holywell. The west tower of the church faces the road and the structure dominates the well-used junction. The large graveyard extends south of the church alongside St Cross Road and back towards the river, to the east.

1.3 Proposed Development

1.3.1 The proposed development entails converting the majority of the church to an archive store.

1.3.2 Mobile shelving units will be inserted into the aisles, parts of the Nave and Vestry. These units will be supporting on concrete raft foundations which will be located in floor voids created by the removal of pews and wooden flooring.

1.3.3 More detail on the proposed development is included in the previous assessment report.

1.4 Aims and objectives

1.4.1 The main aim of the work was to take the opportunity afforded by the development to provide a record of the features temporarily exposed within the floor. It is anticipated that the large majority of the features exposed will remain in-situ in the development but they will be recovered and semi-permanently obscured by the book-stack units.

1.4.2 A second objective was to gain a better understanding of the nature of the floor and a more accurate indication of the depth of the voids. Therefore the details of the raft foundations can be finalised and their potential impact on the existing fabric determined.

1.5 Methodology

1.5.1 The current report details two distinct phases of recording at St Cross church: one undertaken in October 2008 and one in October 2009. The work in 2008 comprised rapid
recording of a number of minor vaults and features revealed by the removal of pews and wooden board floor from the aisles and nave.

1.5.2 The second phase of work, in October 2009, comprised a continuation of the earlier recording and it effectively superseded the initial works. It included clearing considerable quantities of dust and detritus from the voids in the floor from where the pews and boards had been removed and recording features such as stones over vaults, sleeper walls for the 19th-century boarded floor (now removed) and compacted plaster surfaces.

1.5.3 The detritus included considerable fragments of bone and therefore, as a licence would have been necessary to remove this from the church, it is understood that this material will be stored in bags in an existing deep cellar adjacent to the Vestry.

2 Historical Background

2.1 Introduction

2.1.1 As referred to above the previous assessment report (OA, Feb 2009) contained a detailed historical background and although this has not been reproduced here a short summary would be of use. The background was based on research undertaken at the Oxfordshire Record Office and the Centre for Oxfordshire Studies. It was also based on a Pastoral Measures Report undertaken by Joseph Elders and useful information supplied by Dr JH Jones (Senior Fellow, Balliol College).

2.1.2 The earliest parts of the current church at St Cross (the chancel and part of the chancel walls) probably date from the first half of the 12th century. This chapel would probably have merely comprised a nave and chancel and it would have served a small extra-mural settlement at Holywell, which had grown outside the East Gate of the town in the Saxon period.

2.1.3 During the 13th century a tower was added to the west end of the nave and the north and south aisles, which had by this date been constructed, were extended west to flank the tower.

2.1.4 In the 15th century part of the tower appears to have collapsed, causing damage to the aisles, and in 1464 it was rebuilt (and possibly heightened) by Henry Sever, Warden of Merton College (RCHM, 1939). Possibly following this collapse the aisles were pulled down other than the western bay of the north aisle (as shown on Loggan's map of 1675) and the eastern bay of the south aisle (the chapel).

2.1.5 A porch was added in 1572 to the south aisle (shown on early 19th-century views) and in 1685 the north wall of the nave was rebuilt. In 1837-8 a new north aisle was added which extended from the east end of the nave to the lean-to adjacent to the tower which had been used as a vestry.

2.1.6 Reused 15th-century windows were inserted in the wall of the north aisle and clerestory windows were added to the south wall of the nave.

2.1.7 In 1843-4 the remains of the former south aisle were also taken down, together with the small lean-to on the north side of the tower. A new south aisle was built the full length of the nave and tower and the north aisle was extended at its west end (replacing the vestry lean-to) to match. A new porch, to replace the previous one, was also built to the south aisle. Clerestory windows were added at this time to the south wall of the nave.

2.1.8 In 1874 the tower was repaired and the parapet rebuilt. A vestry and an organ chamber were added in 1876 to the north of the chancel. In 1892-4 new
clerestory windows were added (or enlarged) by EP Warren and the tower was repaired again in 1908.

3 DESCRIPTION

3.1 Introduction
3.1.1 The recording in the current report concentrates purely on the features within the floor which have been exposed by the removal of floorboards and pews. The current report therefore does not contain a detailed description of the building although such a description is included in the previous assessment report.

3.2 General Description of floor
3.2.1 It is clear from the character of the paving that there has been a wholesale re-flooring of the church probably in the 19th or early 20th century, probably in association with replacement of pews or installation of a new heating system. A heating plan dated 1898 (PAR199/17/MS1/18) suggests that the layout of floorboards and pews was at that date largely the same as that which survived until their recent removal. The plan suggests that the pipes extended around the edge of the church rather than along the length of the nave and aisles. This suggests that the heating system would not have caused extensive disturbance to below-ground features.

3.2.2 There are six areas in total exposed by the pew removal within the church (fig. 2). All of the north aisle has been cleared and most of the south aisle to the east of the south porch. The nave has been entirely cleared except for the central aisle and a small causeway running north south towards the west end of the south side. There is another small opening directly east of the south aisle clearance, under the pulpit.

3.2.3 Attempts have been made to locate burials with radar survey, with limited success. The removal of pew platforms has allowed a more direct investigation of visible remains.

3.3 North Aisle
3.3.1 Although the opening in the north aisle is the largest, there are relatively few archaeological features exposed here (plate 1). A sleeper wall of rubble and stone, 430mm wide and 200mm high, with imprints of joists, runs through the centre of the aisle and is truncated for heating pipes at the east end. This is probably of the same phase as the external wall and the south wall of the north aisle (plate 2). At the east end, there is a later brick foundation for a floor and a 19th century red brick heating fixture in the north east corner. There seems to be a dark area immediately south of this, however, it appears to be too small to be a grave cut. Towards the west end, the ground rises and is more uneven indicating possible burials.

3.4 South Aisle
3.4.1 At the eastern end of the south aisle, a collapsed vault structure (no. 1, fig. 2) has been partially exposed which appears to be a shaft grave (plate 3). This is orientated north to south and is c.85 cm wide with some bones visible inside. It is truncated by some red bricks in the centre supporting the stone edge. No more defined burials are visible, although various large fragments of human bone were found throughout the area during brushing back, particularly in the south west corner. This would suggest that the area has been used over time for burials and has been disturbed. The sleeper wall which runs
through the aisle has been taken down to its brick foundation and is level with the exposed soil.

3.5 North side of nave

3.5.1 Towards the western end of the exposed area on the north side of the nave is a burial vault (no. 2, fig. 2) which has been partially exposed. This is 90cm deep, 2.3m long (orientated east to west), c.50 cm wide and constructed with 19th or 20th century bricks (plate 4). Towards the eastern end of the grave a bar is visible running across the chamber and approximately 60cm from the base of the chamber. Studs are visible on this bar, indicating that at one time it was upholstered. There would also have been a second bar on which one of the coffins would have rested but this has now disintegrated.

3.5.2 There is also evidence of another similar burial vault immediately to the east of the one partially exposed (no. 3, fig. 2). The second vault remains covered so its dimensions and form are currently uncertain. There are also further stone slabs to the east which are less disturbed than other areas of the nave and are suggestive of intact burials or vaults (Plate 5). One of these slabs has an inscription on it. The words “Will Russell who died August 27 170[?] aged 66 years..” are legible (no. 4, fig. 2).

3.5.3 At the east end of the north half of the nave, immediately south of the sleeper wall, are three stone slabs covering a burial about 1.75m in length and 0.6m wide (no. 5, fig. 2), orientated east west (Plate 6).

3.6 South side of nave

3.6.1 There are no clear shaft graves visible in the exposed area in the southern half of the nave but there are several dips and depressions in the eastern half of this area. These are suggestive of possible buried vaults which have partially collapsed. There are also some displaced red bricks and a cavity (Plate 7) at the south end indicating a possible collapsed vault (no. 6, fig. 2). In the centre of the opening, there is a defined dark area, likely a burial, orientated north south. There is another similar, larger dark area 1m west of this (Plate 8). The western half of this area is more consistent and smoother than the east.

3.6.2 The opening at the very end of the nave on the west side, just under the south east corner of the tower, features and inscribed slab and what appears to be a partially uncovered red brick vault immediately north of it (Plate 9).

4 Potential impact of raft foundations in development

4.1.1 The foundations for the new archive units will comprise concrete rafts at a maximum depth of 300 mm below the existing floor level, on permanent shuttering. Levels were taken throughout the cleared areas, using the stone paving in the nave as datum to measure potential impact of the development on areas of archaeological interest.

4.1.2 The north aisle reached a depth of 490mm at the east side and raised to approximately 360mm on the west side, creating a suitably deep void for foundations.

4.1.3 The exposed surface in the nave however, is much more uneven, particularly within areas of archaeological interest. At the lowest point of the north side, it reached a depth of 310mm where the stone lined burial chamber is located at the east side. Along the centre of the north side however, where archive units will protrude from the north aisle into the nave, it is as shallow as 220mm in places, particularly over inscribed stones, necessitating further clearance before development.
4.1.4 The south side of the nave reaches a depth of 410mm in places. Where archive units protrude from the south aisle into the nave, the void is approximately 360mm below datum, although this is quite uneven. There is a stone slab at a level of 190mm towards the west of the south side but this should not be affected by development.

4.1.5 Where the possible shaft burial has collapsed at the east side of the south aisle, it reaches a depth of 500mm below datum. However, the rest of the area averages at a level of 240mm necessitating further clearance for foundations.

4.1.6 The is necessary to carry out further investigation in the area of the aisle paths.

5 CONCLUSION

5.1.1 Besides the removal of the font from the south aisle, direct impacts on the fabric of the church occur entirely below ground. From the levels taken in the current work, we can conclude that the impact of raft foundations inserted during development in the centre of the north side of the nave and in the south aisle raises archaeological issues which will have to be looked into further. The discovery of occasional fragments of displaced human bone and coffin fixtures throughout the south side of the nave and the south aisle, as well as stone slabs in the north side of the nave that may mark intact burials or vaults, provide reason enough to believe that development in these areas may disturb human remains. It may be that clearing these areas to an appropriate level for foundations does not have a direct impact on burials but further archaeological work will be required before and during works to ensure that any remains are dealt with appropriately.

Deirdre Forde
December 2009
APPENDIX A. BIBLIOGRAPHY

Clarke, A.  
Wood's City of Oxford (O.H.S. 1899) [Vol. iii for memorials]

Crossley, A. (ed.)  
A History of the County of Oxford: Volume 4. Victoria County History

Cocke, T. D. et al.  
Recording a Church: An illustrated glossary. (CBA, 1996)

Dodd A.  
Oxford Before the University (2003)

Elders J.  
Pastoral Measure Report: Oxford (Holywell), St Cross. (2007 for CCC)

Hibbert, C. (ed).  

Oxford Archaeology  
St Cross Church, Oxford: Historic Buildings Assessment (Feb 2009)

R.C.H.M.  
An Inventory of the Historical Monuments in the City of Oxford (1939)

Sherwood, J & N Pevsner  

Sherwood, J.  

Tyler, R.  
'Archaeological Investigations during Refurbishment of St. Aldate's Church, Oxford, Oxoniensia 66 (2001), 369-409

Information also obtained from the Centre for Oxfordshire Studies (Westgate Library) and the Oxfordshire Record Office.
APPENDIX B. LISTED BUILDING DESCRIPTION

Building name: Church of St Cross
Location: OXFORD, OXFORDSHIRE
LBS Number: 245806
Grade: I
Date listed: 12th January 1954
Date of last amendment: 17th October 2007
National grid ref.: SP5201406658

APPENDIX C. BRICK SHAFT GRAVES

The following text provides background information on shaft graves. It was prepared after an initial visit to St Cross after the removal of pews and floorboards had exposed features relating to buried vaults.

In the 18th- and 19th-centuries, concern over premature disturbance of the remains of family members, and the increasing use of death ritual for social display led to the establishment of subterranean brick-built family vaults and shaft graves within churches and in the churchyard beyond. The graves often contained the remains of multiple burials.

A vault traditionally has a vaulted roof, the entrance to the interior commonly being through a doorway in one of the sidewalls (often with a set of steps leading down to it). A brick shaft grave is essentially a rectangular or single break grave cut lined with a single or double layer of bricks and mortar. Brick shaft graves may be of single or double width, and vary in depth from 0.75 m – 2.5 m. Coffins were stacked vertically one above the other within the grave, sometimes resting on metal racks. The top of the grave is covered by horizontal ledger stones (often sandstone or limestone slabs), which may be removed for subsequent interments. Such racking and ledgers were visible in one of the graves at St Cross Church, Oxford, in the south-west part of the central aisle. A gap between the ledger stones of this grave allowed limited inspection of the internal structure of the shaft grave, which appeared to comprise a single skin of bricks, with horizontally placed iron bars which would have acted as racking for the coffins. Fragments of decayed coffin wood, with numerous round, metal upholstery studs, were visible within the grave. From the late 17th century onwards it became customary to cover the coffin with upholstery and to decorate the lid and side panels of coffins with studs and metal coffin fittings.

Extra-mural shaft graves and vaults were originally surmounted by above-ground memorial. Memorial stones for intra-mural shaft graves were often set into stone flooring within the church, inscribed with the name, age, date of death and other biographical details. Numerous memorial stones such as this were observed in the flooring at St Cross church. Two such memorial stones, situated in the walkway in front of the chancel, at the east end of the central aisle, read: Near this place lieth / GEORGE SEIDEL D. D. / Dyed 20 Oct. 1761 / Aged 81 and Here / Lyeth the Body of / SOPHIA AUGUSTA SEIDEL / who died June 24 / 1712 (?) / Aged (?).

The presence of intra-mural brick shaft graves at St Cross Church indicates the presence of upper-middle to upper class graves, as the cost of interment within a church was considerably greater than burial within a churchyard or within a crypt below the church. The presence of these may also indicate that other higher status grave characteristics may be present within the church, such as elaborate wooden coffins and possibly lead coffins (although this is unlikely as Stratascan's geophysical survey would probably have identified such dense features). It is difficult to estimate the total number of graves that may be present within St Cross, but cursory examination during the site visit revealed the presence of probably at least five such burials, identified by either the presence of ledger stones, or areas of ground collapse. It must be highlighted that this is by no means the total number. It is probable that more will be revealed when removal of the wooden flooring and joists is complete, and when the total floor space is more carefully cleaned and examined.

There is tremendous variation in the number of intramural shaft graves that have been found within other churches in the late post-medieval period. A local example where intra-mural shaft graves have been found was St Aldate’s. Here, such a large number (48) were revealed, that the floor beneath the church was almost ‘honey-combed’ in appearance. A brick vault was also revealed within the central aisle.
The depth and density of brick shaft graves and vaults has structural ramifications for the laying of flooring. Backfilling the lumens of the graves with sand or gravel have been undertaken on other sites, but the acidic nature of the substrate will probably prove detrimental to the human remains within them. Overlying the uppermost courses with re-inforced concrete slabs is another alternative approach.

**Helen Webb, Oxford Archaeology**
Figure 1: Site location
Figure 2: Phasing plan of St Cross Church
Plate 1: North aisle facing west

Plate 2: Sleeper wall of north aisle, facing south
Plate 3: Possible shaft grave in south aisle

Plate 4: Interior of shaft grave, west end of north side of nave
Plate 5: Central slabs in north side of nave, facing north

Plate 6: Burial, east end of north side of nave, facing east
Plate 7: Possible collapsed vault at east end of south side of nave, facing east

Plate 8: Possible burials in south side of nave, facing south
Plate 9: Inscribed slab at west end of south side of nave, facing west

Plate 10: Possible vault at west end of south side of nave, facing west