

ST. MARY'S CHURCH PIRTON, HERTFORDSHIRE PROGRAMME OF ARCHAEOLOGICAL TEST PITTING

Albion Archaeology Project No: MVP939

Report No: 2004/29

Date: 30th June 2004

Introduction

Subsidence/foundation movement at St Mary's Church, Pirton has resulted in damage to the north side of the chancel. This consists of substantial cracking in the wall from roof to floor, the window arch, elements of the stone frame of the window, and the floor itself. The Diocesan Archaeological Advisor, Adrian Havercroft, stipulated that limited archaeological work should be undertaken in advance of any engineering works to repair the wall or foundations. The aim of the work was to provide sufficient information to allow assessment of the archaeological impact of any engineering works. These requirements were detailed in a brief. Albion Archaeology was invited by the project architect, Mike Dale, acting on behalf of the Parochial Church Council, to undertake the evaluation. The small nature of the project meant that a formal Project Design was not required. Project Design was not required.

In November / December 2003 one test pit (3.50m E-W, 1.00m N-S, 0.80m deep) was excavated against the north wall of the chancel (at the junction of the chancel and the east wall of the former north transept) directly below the single window in this wall (Figures 1 and 2). A second test pit (2.00m N-S, 1.00m E-W, 0.65m deep) was excavated in February 2004 against the east wall of the chancel, again directly below the single window in this wall. Its purpose was to determine whether or not the foundations of this wall were similar to those observed in the first test pit.

The test pits were excavated by Dan Hounsell and Martin Campbell (Archaeological Supervisors) and Teresa Hawtin and Anthony Clifton-Jones (Archaeological Technicians). This report has been prepared by Dan Hounsell (Archaeological Supervisor) with figures by Joan Lightning (CAD Technician). The project was managed by Drew Shotliff (Operations Manager).

Historical Background³

The church consists of a nave, chancel, central tower, south porch, south transept and the remnants of a, now destroyed, north transept. The church was founded in the 11th century by Ralph de Limesy. It underwent various phases of additional construction, remodelling and collapse throughout the 12th-15th centuries. The upper part of the tower

¹ Brief for Archaeological Evaluation, Fabric Recording and Reporting at the Church of St Mary The Virgin, Pirton, Hertfordshire. Adrian Havercroft, Diocesan Archaeological Advisor 10th July 2003.

² See above Brief, paragraph 1.4

³ For more information on this subject refer to "A short History and Guide, St. Mary's Church Pirton, Hertfordshire" Newbery M.A., 1983.



collapsed in the 13th century (possibly due to an earth tremor in 1298), destroying the north transept, which was never rebuilt. By the time of the institution of the Reverend Ralph Lindsay Loughborough, the first vicar of Pirton solely, in 1851, much of the church building was in a very dilapidated condition. The south transept was in ruins and the tower was again collapsing. There then followed a period of renovation/restoration which was complete by 1883. This included the demolition of what remained of the tower and its reconstruction from foundation level. The south transept was reconstructed in 1914.

Results of Test Pit 1

Chancel north wall and foundations

Test Pit 1 indicated that, at some (relatively modern) point, the lower wall and foundations of the north wall of the chancel had undergone substantial repair.

At c.0.40m above current ground level a single course of bricks (context 1001) was laid head to head, bonded to the original clunch face of the wall (context 1000) (Figures 2, 3 and 5). These dark grey bricks were 1.38m long and 0.17m tall and bonded with a hard, dark grey mortar, typically 0.01m thick. They were angled to be flush with the original wall at their top end but 0.11m proud of the wall at their bottom end. Below this 'step out' from the original face of the chancel wall, created by these bricks, was what appeared to be a face of clunch stonework (1002). This section of wall was c.0.45m tall, running from directly under the angled facing bricks to just below current ground level. Utilising the same type of clunch, in the same rough hewn style (cut to the same size, typically 0.17m x 0.18m) and laid in a similar random, uncoursed pattern, this section of wall appeared to be a facing to the original wall and was clearly designed to be in keeping with it. It even used similar sandy, limestone, orange mortar (of a variable thickness, but typically 0.03m). It was, however, a little more regular – the stones were actually laid in two rough courses, not in the completely random pattern of the original clunch wall.

Below ground level the construction of the wall changed. The above ground section of *faux* clunch wall sat on, and was bonded to, a foundation of modern, neatly squared, rectangular, fired clay bricks (1003). These bricks were 0.23m long and 0.06m tall, yellow in colour and laid in a regular, stretcher bond with a 0.01m thick, slightly friable, yellow, limestone-based mortar. This section of the wall was six courses tall (*c*. 0.50m) and sat on a poured concrete/conglomerate foundation pad, which was 0.27m thick and projected 0.40m beyond the brickwork (Figure 5).

The crack in the north wall of the chancel ran through the angled bricks, through the clunch- and brickwork and even penetrated (although did not completely split) the foundation pad (Figures 2-4).

The construction date of this work is unclear. However, loose, frogged bricks in the backfill of the construction trench (see next section) are of the same size and nature as the bricks of (1003). They suggest a very modern date for the work; it was possibly associated with the late 19th century restoration work or even the chancel repairs of 1944, which followed damage by a German bomb.



Construction trench backfill

The repair work to the north wall of the chancel required the excavation of a construction trench. Its outer, northernmost edge was not revealed in the test pit. However, its layers of backfill are tabulated below in stratigraphic order (latest first):

Context	Dimensions	Description and Interpretation	Above	Below
	LxWxD			
1005	>3.50m x >1 m	A loose, dark brown, silty loam with occasional small	1010,	-
	x 0.12m	stone inclusions. Topsoil.	1006	
1006	>0.96m x >1m	A firm, creamy brown, clayey silt with frequent small	1007	1005,
	x 0.56m	 large rubble inclusions (brick, clunch and tile). 		1013
		Construction trench backfill.		
1007	>0.96m x >1m	A heavy, mid grey/blue clay with occasional small	1008	1006
	x 0.09m	chalk fragment inclusions. Construction trench		
		backfill.		
1008	>0.96m x >1m	A friable, light yellow/brown sandy, clayey silt with	1009	1007
	x 0.11m	frequent small chalk fragments and rubble inclusions.		
		Construction trench backfill.		
1009	>0.96m x 1m	A moderately compact, clayey silt with occasional	-	1008
	x 0.19m	small chalk fragments and stone inclusions. A		
		natural subsoil, slightly disturbed.		

A small number of badly damaged and disarticulated human bones were noted in backfill layers (1006) and (1007). This would appear to indicate that at least one burial had been disturbed by the cutting of the construction trench, with the remains redeposited as part of its backfill.

Modern drain

A modern drain was located at the west end of the test pit (Figures 2 and 6). It was aligned NE–SW, c. 0.40m wide and ran for 1.13m on a similar alignment to the remaining stub wall of the north transept. Its construction cut [1013] was regular, straight and steep-sided (c. 70° from horizontal) with a concave base. It was c. 0.30m deep and cut completely through layer (1006). It was backfilled with a firm, dark grey/brown, clayey silt with a moderate amount of chalk and rubble inclusions (1010), in which a plastic drain pipe was set. The pipe was connected to the bottom of a downspout which ran down the chancel wall into a drain cover. No leaks, splits or any other form of damage were noted along this drain.

North transept foundations

The western end of Test Pit 1 exposed the eastern face of the surviving wall of the north transept. What may have been the lowest course of this wall and its original foundations were revealed.

Context (1011) lay directly below the above-ground elements of the transept wall. It consisted of a single course of grey, roughly hewn, rounded, rectangular blocks of clunch, c. 0.15m long x 0.11m wide x 0.10m thick (Figures 2 and 7), laid end to end and bonded by a layer of soft, black (ash-based) mortar. This stonework may represent the lowest surviving course of the transept wall.

Context (1011) lay directly over a layer of small (0.07m x 0.06m x 0.05m) rounded stone cobbles (1012). Two complete courses were seen – indicating a roughly regular construction pattern, before the layer was truncated by the modern drain. However,



similar cobbles were visible below the drain, indicating an overall depth of c.0.40m. These cobbles may represent the original foundation of the transept wall.

Results of Test Pit 2

Above ground level, the angled brickwork and *faux* clunch stonework run around all the walls of the chancel and the south transept. Test Pit 2 was dug to determine whether the foundations of the east wall of the chancel were similar to those seen in Test Pit 1.

Chancel east wall and foundations

Overall the below ground elements of the east wall of the chancel were very similar to those observed in Test Pit 1. There were, however, two slight differences. An extra, 0.04m thick skim of concrete (1021) appeared to overlie the northern half of the main body of the concrete foundation pad (1020) (Figures 2 and 8). In addition, the height of the clunch- (1014) and brickwork (1022) varied slightly, due to the slope of the ground. At the northern end of the test pit, the ground sloped down slightly and as a result there was an extra course of clunch (three rough courses with six brick courses below). As the ground rose up to the south this changed to two rough courses of clunch (as in Test Pit 1) with eight brick courses to bring the wall down onto the foundation pad.

Construction trench backfill

This trench appeared to reveal the outer edge of the construction trench [1019], dug to repair the east wall of the chancel. The trench was 0.65m wide, straight, regular and near vertical. It ran the entire length of the test pit. It was filled with a mid-brown, silty clay (1023) which contained moderate amounts of chalk fragments, small stones and building rubble as well as a very small quantity of damaged, disarticulated, re-deposited human bone.

Beyond the outer edge of the trench, the original soil of the cemetery survived. This comprised a loose, blue/grey chalky clay (1017), within which a badly truncated, but *in situ* burial, was represented by a damaged skull. These remains were probably disturbed during the cutting of the construction trench, a hypothesis strengthened by the presence of a quantity of modern rubble in layer (1017) – concentrated along its western edge. Both the fill of the cut, and the original cemetery soil were sealed by topsoil (1024).

Drainage

A narrow (0.23m), shallow (0.13m), gravel-filled trench [1025] was cut into layers (1024) and partially into (1023) to act as a soakaway for eaves drips from the chancel wall.

Conclusions

It would appear that the ground around the chancel has been heavily disturbed, in fairly modern times – either during renovation work on the church in the late 19th century or in the 1940s as part of repairs to the chancel. This work appears to have included the construction of a brick foundation and concrete pad around the chancel (and presumably the south transept) to help stabilise the existing walls and foundations. This necessitated the cutting of a trench (at least 0.65m wide) around the base of the wall, destroying in the process any *in situ* medieval or post-medieval deposits or burials. The trench backfill included disarticulated human bone. With the possible exception of the original foundation of the north transept (seen in the west end of Test Pit 1) no undisturbed,



original, archaeological deposits or architectural features (such as vaults) associated with the chancel were uncovered. As a result, if any future engineering works can be confined to the earlier construction trench, they will have minimal archaeological impact.



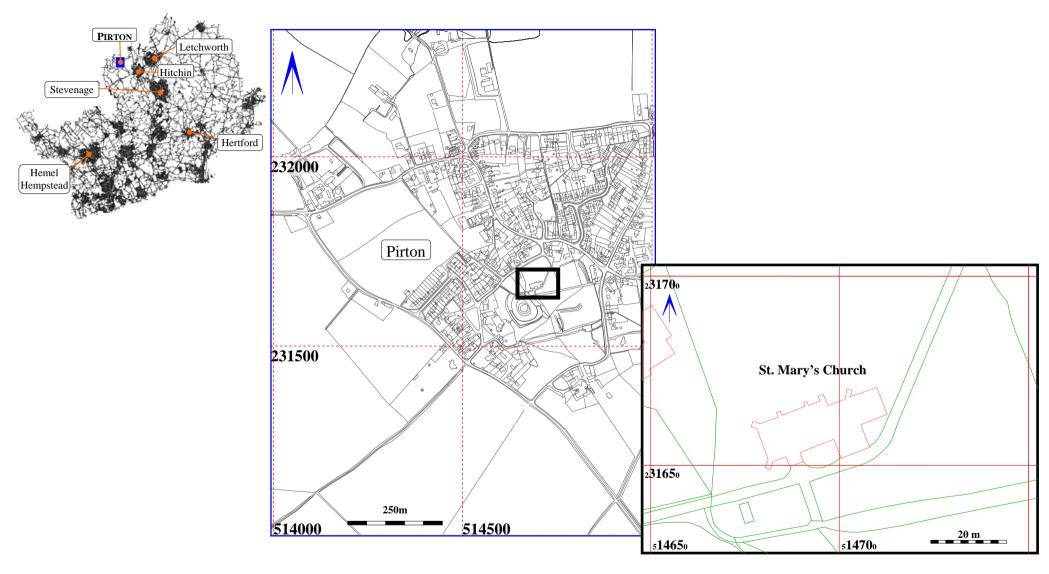
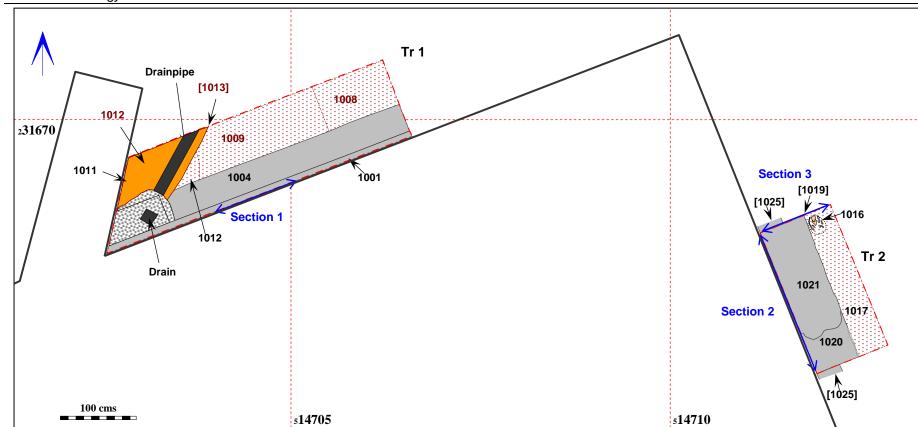


Figure 1: Site Location

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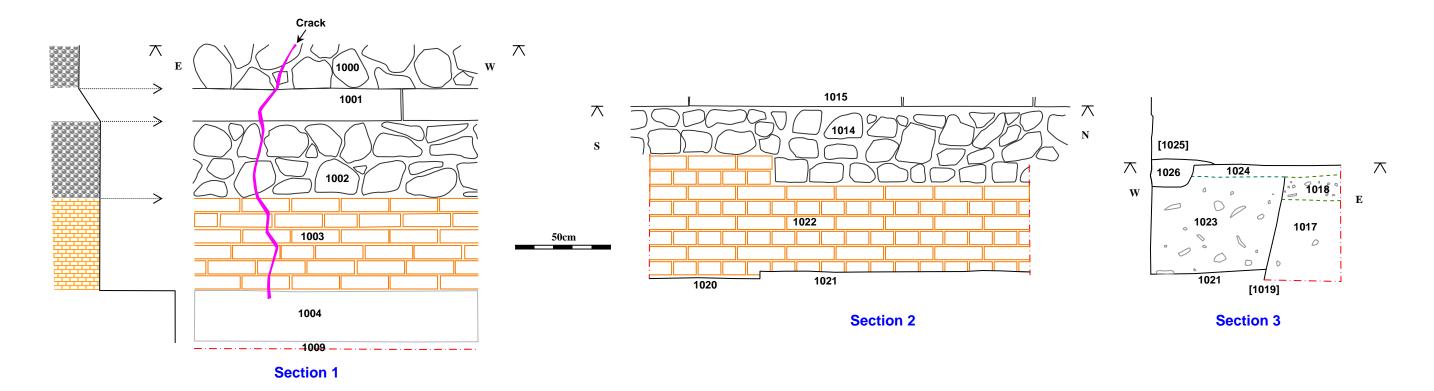
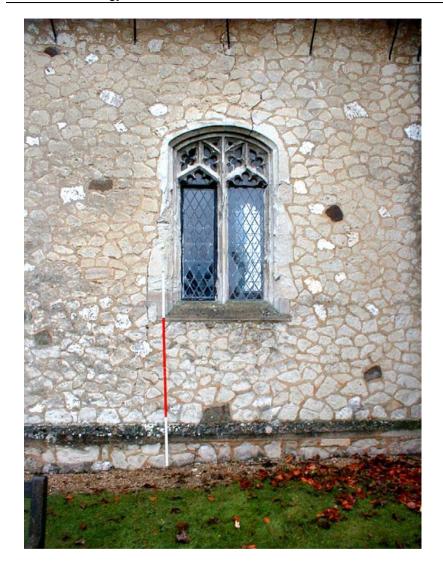


Figure 2: Test Pits 1 and 2





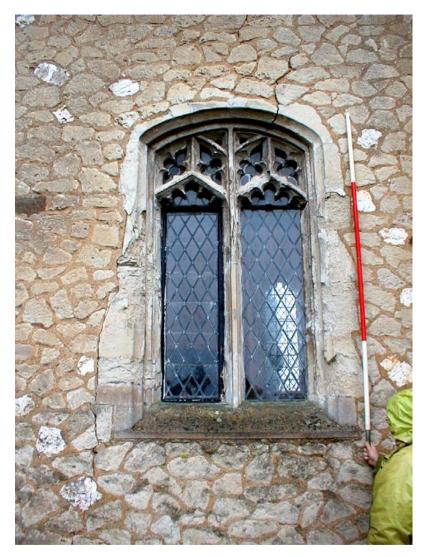
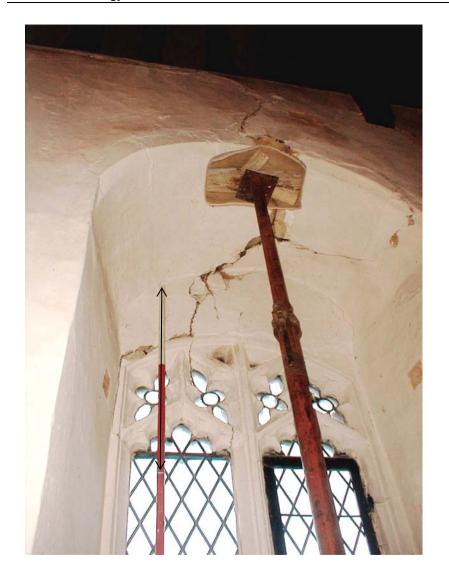


Figure 3: Photographs illustrating exterior damage to north wall of chancel (2m scale).





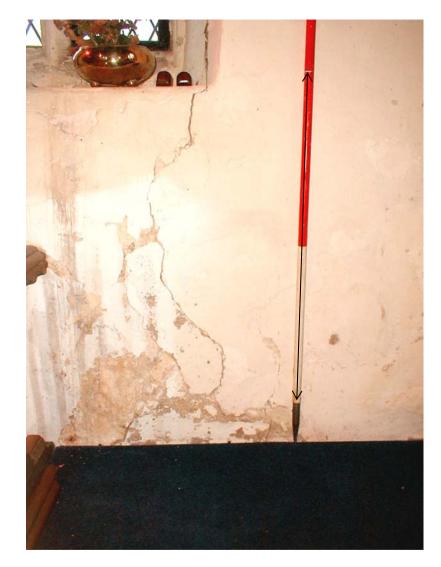


Figure 4: Photographs illustrating interior damage to north wall of chancel (arrowed lines = 1.00m).





Figure 5: Test Pit 1 (looking north).





Figure 6: Test Pit 1: structure and position of modern drain.







Figure 7: Test Pit 1: truncated north transept foundations.







Figure 8: Test Pit 2: east wall of chancel (scale 1.00m)