Birmingham University Field Archaeology Unit

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WOLVERHAMPTON CROSS SHAFT, AN ARCHAEOLOGICAL ASSESSMENT, AUGUST 1992

by
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An Archaeological Assessment at Wolverhampton Cross Shaft, August 1992

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1.0 Introduction

This report outlines the results of a small excavation by Birmingham University Field Archaeology Unit at the base of a Saxon cross shaft located on the south side of St. Peter's church in the centre of Wolverhampton (NGR SO9142 9976) (Fig.1). The cross is a Scheduled Ancient Monument (West Midlands No. 42) and is believed to date to the mid-9th century. Its steadily deteriorating condition has prompted Wolverhampton Metropolitan Borough Council to consider proposals to secure its long term preservation. The information provided by the excavation is intended to assist in the decision over its future.

The cross shaft is located approximately 30m from the southeast corner of the main porch entrance into the church, in the northwest corner of an area that is currently used as public open space with tarmac paths, flower beds and park benches. This area was formerly part of the church graveyard.

2.0 Condition of the Monument

The surface of the cross-shaft is considerably blackened with industrial pollution deposits and is now in a critical condition. A comparison with late 19th-century photographs (eg Plate 1) indicates that a great deal of surface detail has been lost in recent years.

The modern base of the shaft comprises a rough setting of random sandstone rubble in a cement mortar around the cross shaft, on top of an earlier (possibly original) large circular base stone. Further, smaller, mortared rubble provides support under the base stone. Some of the mortar is very recent, and is testimony to recent repairs, although these are not fully documented.

The cross shaft is enclosed by a circular iron railing, about 4m in diameter. Nineteenth century gravestones are situated up against, and protrude under, the railing on the west side of the monument.

3.0 Previous Archaeological Work

A plaster cast of the shaft was made in 1877 by the Victoria and Albert Museum, where it is still on display. The decoration was recorded in 1913 by the Society of Antiquaries and drawings were published in their Proceedings (XXV).

In 1960 Michael Rix published an iconographical account of the decoration in the Archaeological Journal in which he dated the shaft to about the year 850 A.D. (Rix 1960). This account also makes brief reference to a small excavation which he carried out in 1949 on the eastern side of the base. The stated objective was to determine the form of the complete base and whether it was erected on undisturbed soil. He concluded that the base may have at one time constituted a circular flight of steps. "Beneath this was a deposit of rubble and mortar forming a foundation which lay directly upon a natural glacial deposit of sand and pebbles" (quoted from a report by Rix reproduced in a letter from the Town Clerk to the Ministry of Works and dated August 1950). From this Rix concluded that the cross stood on its original base as erected some eleven centuries ago. Referring to Rix's work Mander and Tivesley (1960, 185) suggested that there is no evidence for burials below the shaft but that some were so near as to cause some subsidence. This, they believed, was the reason for the stone rubble and cement around the base.

In December 1990 an inspection of the cross shaft was undertaken by Richard Marsh Conservation (Marsh 1991).

4.0 Objectives of the Assessment

The objectives of the assessment as set out in the draft specification were:

1/ to provide an analytical record of the form and subsequent changes which have been made to the base, drawn from documentary sources and antiquarian views.

2/ to establish the present form and degree of survival of the base of the monument by

means of a small-scale excavation.

3/ to determine whether the cross shaft stands on its original site.

4/ to make recommendations for the eventual display of the monument.

5/ to make recommendations for the preservation of any archaeological deposits on the cross shaft site in the event of removal of the monument, and re-use of the site for the display of a replica or other sculpture on the same site.

5.0 Documentary Evidence

The cross shaft is mentioned by several authors in the early part of the 19th century (eg Shaw 1801, 166; Pitt 1817, 169 and Calvert 1830, 17). The location of the cross shaft, indicated by these early descriptions, corresponds with the present location; in the vicinity of the south porch or main entrance to the church. This is supported by an early pictorial representation of the cross shaft and the church which accompanies the plan of Wolverhampton by Isaac Taylor dated 1750 (reproduced in Shaw's 'The History and Antiquities of Staffordshire' (Shaw 1801)). A similar position is indicated in several subsequent illustrations contained in the 'Staffordshire Views' collection in the William Salt Library, Stafford (Mander 1946, 247–248). These include an engraving which appears in Shaw's 'History' (Shaw 1801, plate XXIII), three sepia drawings by J. Buckley (1838 and 1845) and a drawing by R. Noyes (Plate 2) which appears as the frontispiece of 'An Historical and Descriptive Account of the Collegiate Church of Wolverhampton' by G. Oliver (1838). These early illustrations give the impression of a 'step-like' base to the cross shaft and it is noticeable that all suggest very little height difference between the base and the surface of the adjacent path leading to the south porch. Today, the visible base of the cross shaft (528.84 A.O.D.) is 1.86m higher than the surface of the adjacent path (526.98 A.O.D.). The possible significance of this apparent anomaly is discussed below. The early illustrations also indicate that considerable alterations have taken place to the layout of the southern churchyard since the early 19th-century. It seems likely that these alterations coincided with a period of major restoration of the church between 1852 and 1865 (Pevsner 1974, 314) which considerably altered the appearance of the south elevation.

6.0 The Excavation

Method

An attempt was initially made to locate the position of the trench excavated by Michael Rix by removing the topsoil from within the railings to the east of the cross shaft. At first the former trench could not be identified due to the confines of the area examined and the proximity to the surface of a mortar and stone foundation (F1/ 1009) extending out from the base of the cross shaft (Fig. 2). A trench, approximately 2m x 0.5m with a maximum depth of 1.1m, was excavated to determine the full extent and profile of this foundation. In order to minimise damage to existing landscape features, including a tarmac path, the area examined was extended beyond the railings to the southeast

A full written (pro forma record cards), drawn and photographic record was maintained throughout the work.

Results

The earliest deposit identified, 1m below the surface of the tarmac path, was a light brown sand and gravel (1013) interpreted as the natural fluvio-glacial sub-soil (see Appendix I). This was overlain by a light yellow brown silty sand and gravel containing occasional flecks and fragments of lime (see Appendix II) and fragments of disarticulated human bone (1010).

The lower part of the construction trench for the mortar and stone foundation (F1) of the cross shaft clearly cut both these deposits. The foundation was composed of large, apparently semi-coursed, sandstone blocks set in a pink-white mortar (1009). An examination of the mortar suggests a medieval date (see Appendix II). The blocks forming the upper part of the foundation gave the impression of three or four irregular stone 'steps' extending 0.8m beyond the base of the cross shaft. The lower part of the foundation suggested that it filled a 'bowl-shaped' construction trench cutting the underlying deposits at an angle of approximately 45 degrees (Fig. 2B).

During the excavation the foundation was partially undercut in an attempt to determine its total depth. It appeared to bottom-out at a depth of 1.05m below the present ground surface, although the limited working area meant that this was not conclusive.

A substantial pit (F5), filled with a brown silty sand (1004), had been cut right up to the edge of the foundation. This, in turn, was cut by the construction trench for a brick built structure (F3), a vertical-sided pit (F2) and a vertical-sided trench (F4) filled with dark brown silty sand and rubble. All these features contained numerous fragments of disarticulated bone and small quantities of recent pottery and china fragments.

All four of these features were sealed by a dark brown/black silty sand and rubble (1008) which was, in turn, overlain by a surface constructed of re-used gravestone fragments (1003). It is possible that this paving was associated with an arc of large sandstone blocks (1007) sitting on the edge of the mortar and stone foundation, and a ring of smaller stones set on edge (1006).

These stone features, together with the concrete bases of the gate through the iron railings, were sealed by a dark brown/black soil and rubble (1001), the black topsoil (1000) and, external to the iron railings, the tarmac path surface (1002). A George II half-penny (1738) was recovered from the rubble (1001).

Discussion

The excavation was able to provide detailed information about the character and form of the base/foundation of the monument. The lower component appeared to comprise a stone and mortar foundation which may be of medieval date. The upper surface of this foundation resembled a short series of irregular steps which presumably correspond with the steps described by Rix. It seems likely that this upper surface was originally visible and corresponds with the lowermost 'step' or 'steps' represented on the early 19th-century illustrations (eg Plate 2). This is overlain by the large base stone currently visible below the cross shaft. The precise relationship between the cross shaft and the base stone is masked by the cement and rubble consolidation.

It has proved rather more difficult to confirm Rix's conclusion that the shaft stands on its original site. The illustration accompanying Isaac Taylor's map in 1750 indicates that the cross shaft has been in approximately its present location for at least 240 years. The mortar bonding the lower part of the structure suggests that it may have been erected on the site during the early medieval period (see Appendix II). However, as noted above, there is a noticeable difference in the present height of the base relative to the adjacent path leading to the church entrance and that suggested by the early 19th-century illustrations. This tends to suggest that the cross shaft was moved during the extensive landscaping that must have taken place when the south side of the church was restored in the mid-19th century. It may have been physically uplifted and replaced after the ground level was raised. If this was the case the areas of cement and rubble consolidation probably relate to this movement. If the identification of the natural gravel (1013) is correct, this landscaping resulted in a ground level no more than 1m higher than that which formerly existed. Unfortunately, no datable artifacts, which might have helped confirm the 'uplifting' of the cross-shaft, were recovered from the underlying silty sand and gravel (1010). Neither is the condition of the bone from this layer of much help in resolving the matter. In normal circumstances, bone from this kind of sandy deposit is unlikely to have survived for any appreciable length of time. However, it seems that the presence of the lime (see Appendix II) and the protection afforded by the base of the monument, might have allowed bone survival for considerably longer, perhaps even hundreds of years (see Appendix I).

7.0 Recommendations

It seems unlikely that any significant archaeological deposits will be affected if the cross is moved. However, close archaeological monitoring should be undertaken if this decision is made. At present the archaeological evidence tends to suggest that the cross shaft was erected on, or near, its present location during the medieval period and that it was subsequently 'uplifted' during the mid-19th century. Confirmation of this history can probably only be provided by obtaining a positive date for the

deposit (1010) below the structure. Such dating evidence might be forthcoming if, and when, the cross is moved. Alternatively, this could be achieved by obtaining radiocarbon dates from the bone recovered from the underlying deposit.

Whatever the ultimate decision on the future of the monument (whether it is consolidated *in situ* or replaced by a replica), a small explanatory notice would be of considerable value. This could include a short history and an interpretation of the carved motifs. It could also include an illustration showing the original form of the monument as suggested by Rix.

8.0 Acknowledgements

The excavation and documentary research were undertaken by Gwilym Hughes and Steve Litherland. The illustrations were drawn by Mark Breedon. The project was managed by Simon Buteux. The report was edited by Iain Ferris and produced by Liz Hooper. Thanks to Sue Whitehouse (Wolverhampton M.B.C.) and Neil Lang (West Midlands S.M.R.) for their comments during the course of the work.

The archive and finds have been deposited with Wolverhampton Metropolitan Borough Council.

9.0 References

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Appendix I

Soils Report

by Rebecca Roseff

Context 1013 – The Parent Material

Description

Dark yellowish brown (10YR 4/4), sand gravel and stone mix. Unsorted. Stones up to 50mm in length, subrounded although some are shattered. Generally red (2.5YR 4/6) medium fine sandstone, probably of Tertiary age and local derivation and dark yellowish brown (10YR 4/4) fine sandstones. No inclusions. pH 8.09.

Interpretation

This is a glacial deposit, undisturbed by soil forming processes or by anthropogenic activity. It has not been leached of carbonate. It must have been at least 1m below the ground surface during the Saxon period (in fact throughout the Flandrian period).

Context 1010

Description

Dark reddish brown (5YR 3/4), sand and stone mix with inclusions of charcoal and mortar. Stones of same type as underlying layer (1013). pH 8.0.

Interpretation

This is a glacial deposit of the same type and origin as the underlying layer (1013). However, it has been thoroughly mixed with organic matter and mortar which has caused it to have a darker colour. It is an archaeological deposit.

General Conclusions

The base of the foundations for the Saxon cross overlay context 1010 which was clearly archaeological in origin and contained disturbed human bone fragments, probably from graves.

In normal circumstances it is unlikely that the bone, which does not survive well in sand, would have been of any great age. However, in this case the pH level is high and the cross foundation will have provided protection from rain (leaching). Both these factors will have facilitated long term bone preservation immediately below the foundations. The possibility remains that the bone fragments could have come from early burial deposits.

Appendix II

The Mortars

by G.C.Morgan (School of Archaeological Studies, University of Leicester)

Four samples were analysed chemically and physically for their composition and geological nature.

Descriptions

1009a (Foundation): pink sandy mortar with lime lumps. The aggregate was mainly round to sub angular reddish quartz sand with some amorphous silica and red sandstone fragments. 22% acid soluble.

1009b (Foundation): pink sandy mortar with lime lumps. The aggregate was mainly round to sub angular quartz sand with fragments of red and white sandstone. 25% acid soluble.

1010a: partly calcined lime lump with adhering sand. This was not mortar but probably burnt limestone. The residue was well rounded quartz sand with fragments of orange fired clay, silica and oak charcoal. 80% acid soluble.

1010b: as 1010a but 66% acid soluble.

Discussion

The fragments from the foundation (1009) were probably bonding mortars and not concrete-like material. They are probably early medieval but without local parallels it would be unsafe to be precise. The lime lumps are probably waste material.

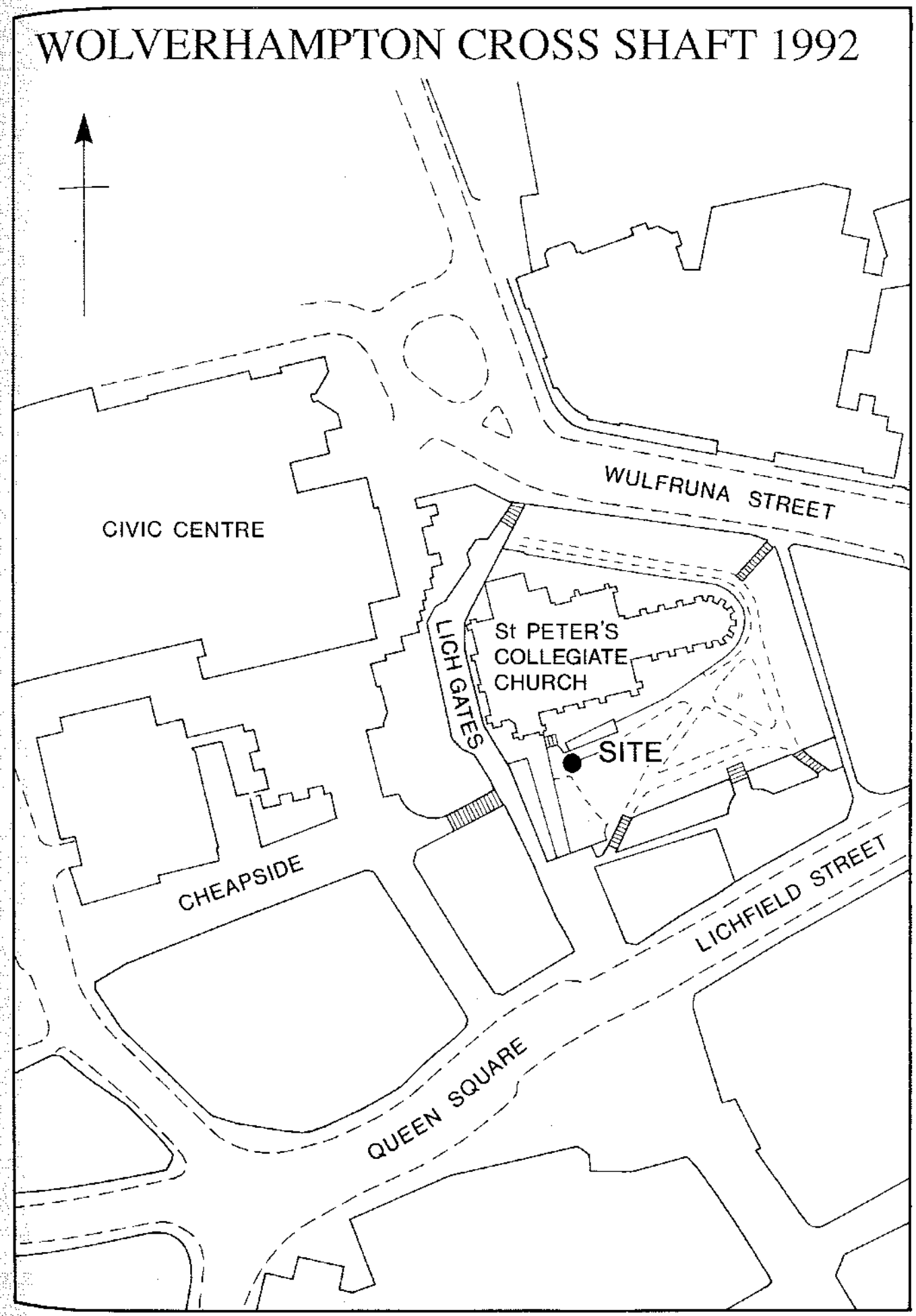

WOLVERHAMPTON CROSS SHAFT 1992
WULFRUNA STREET
CIVIC CENTRE
LICH GATES
St PETER'S
COLLEGIATE
CHURCH
SITE
CHEAPSIDE
LICHFIELD STREET
QUEEN SQUARE

Figure 1

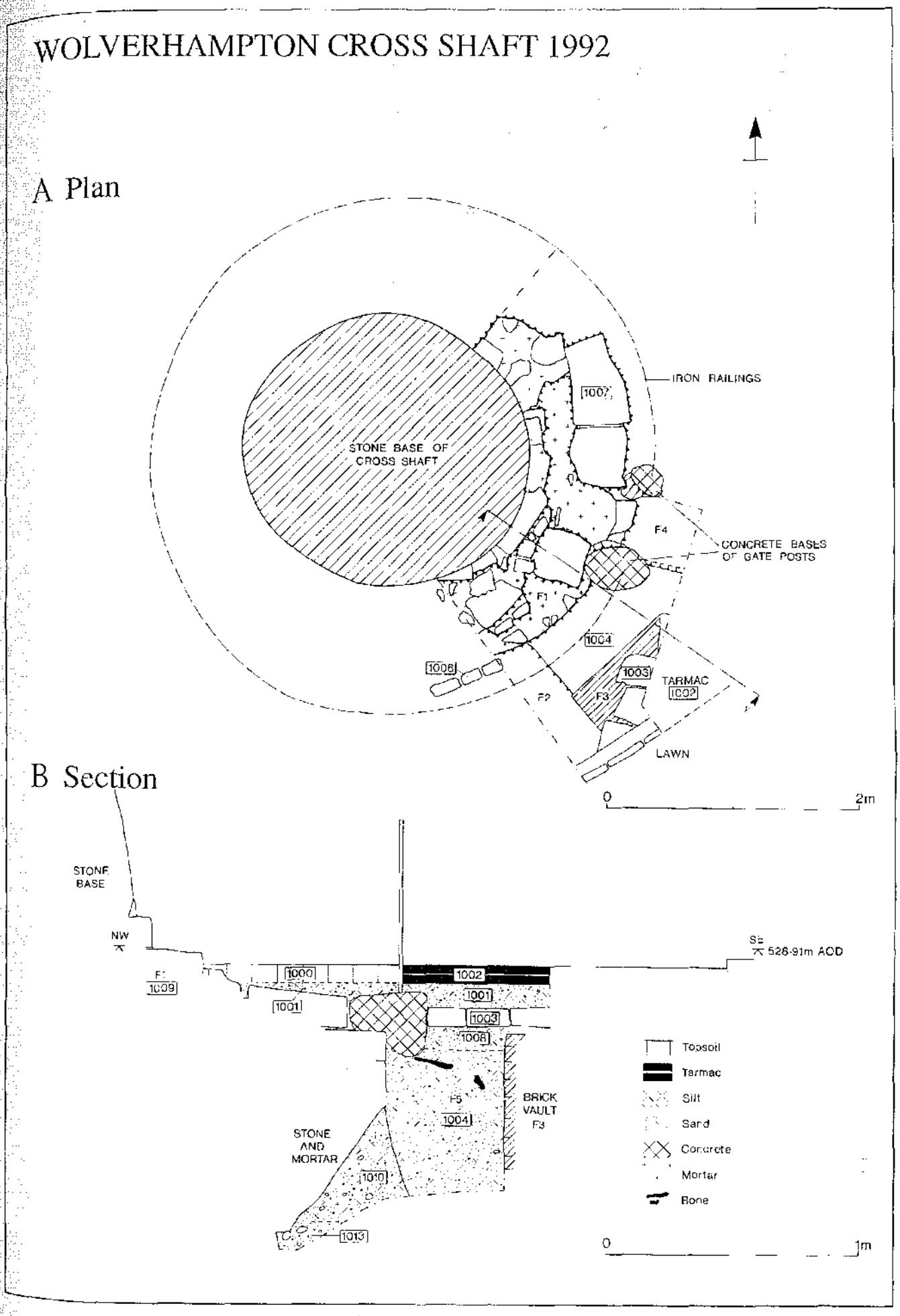

WOLVERHAMPTON CROSS SHAFT 1992
A Plan
IRON RAILINGS
1007
STONE BASE OF CROSS SHAFT
F4
CONCRETE BASES OF GATE POSTS
F1
1004
1006
1003
TARMAC 1002
F2
F3
LAWN
0
2m
B Section
STONE BASE
NW
SE
528·91m AOD
1009
1000
1002
1001
1003
1008
F5
1004
BRICK VAULT F3
STONE AND MORTAR
1010
1013
Topsoil
Tarmac
Silt
Sand
Concrete
Mortar
Bone
0
1m

Figure 2

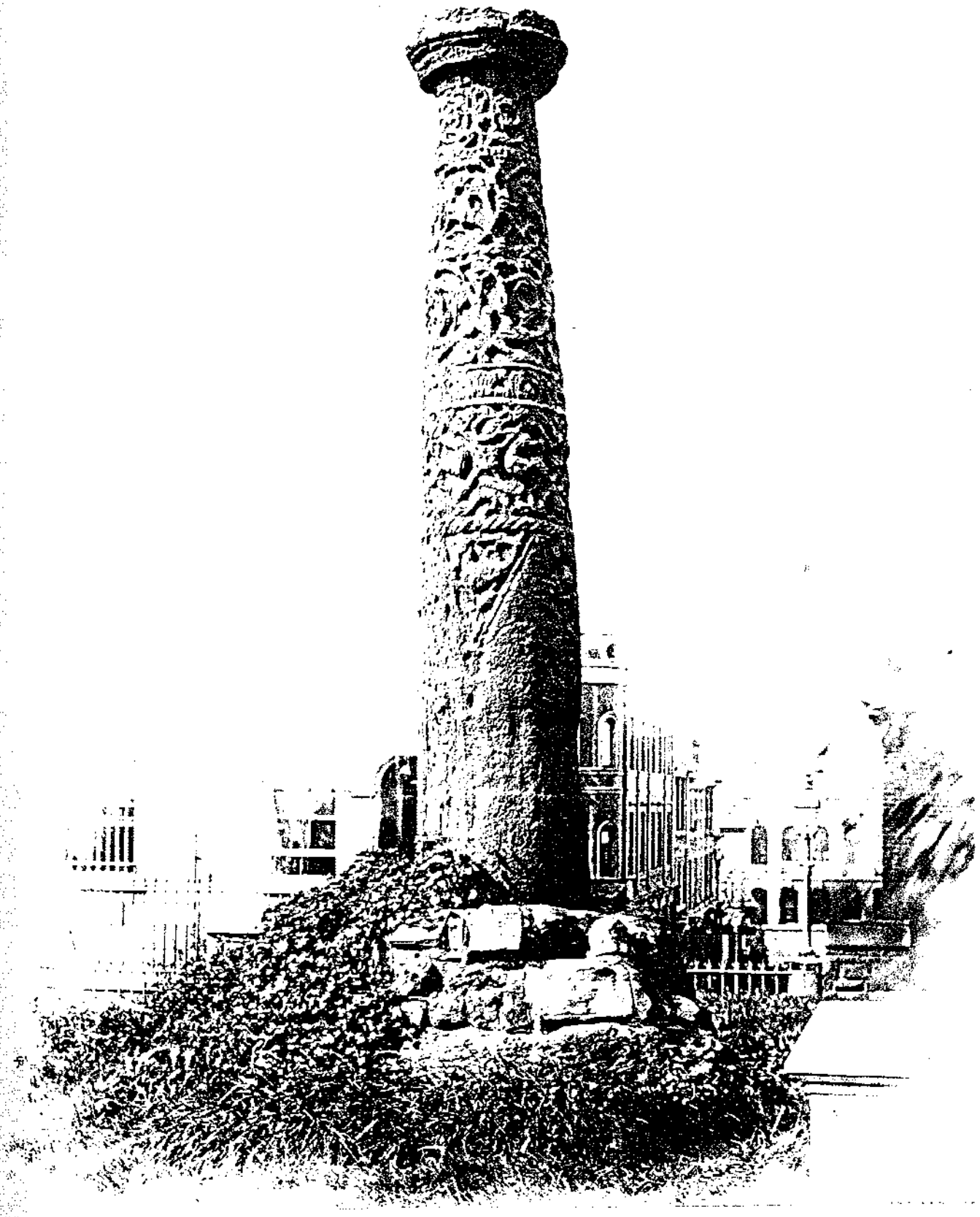
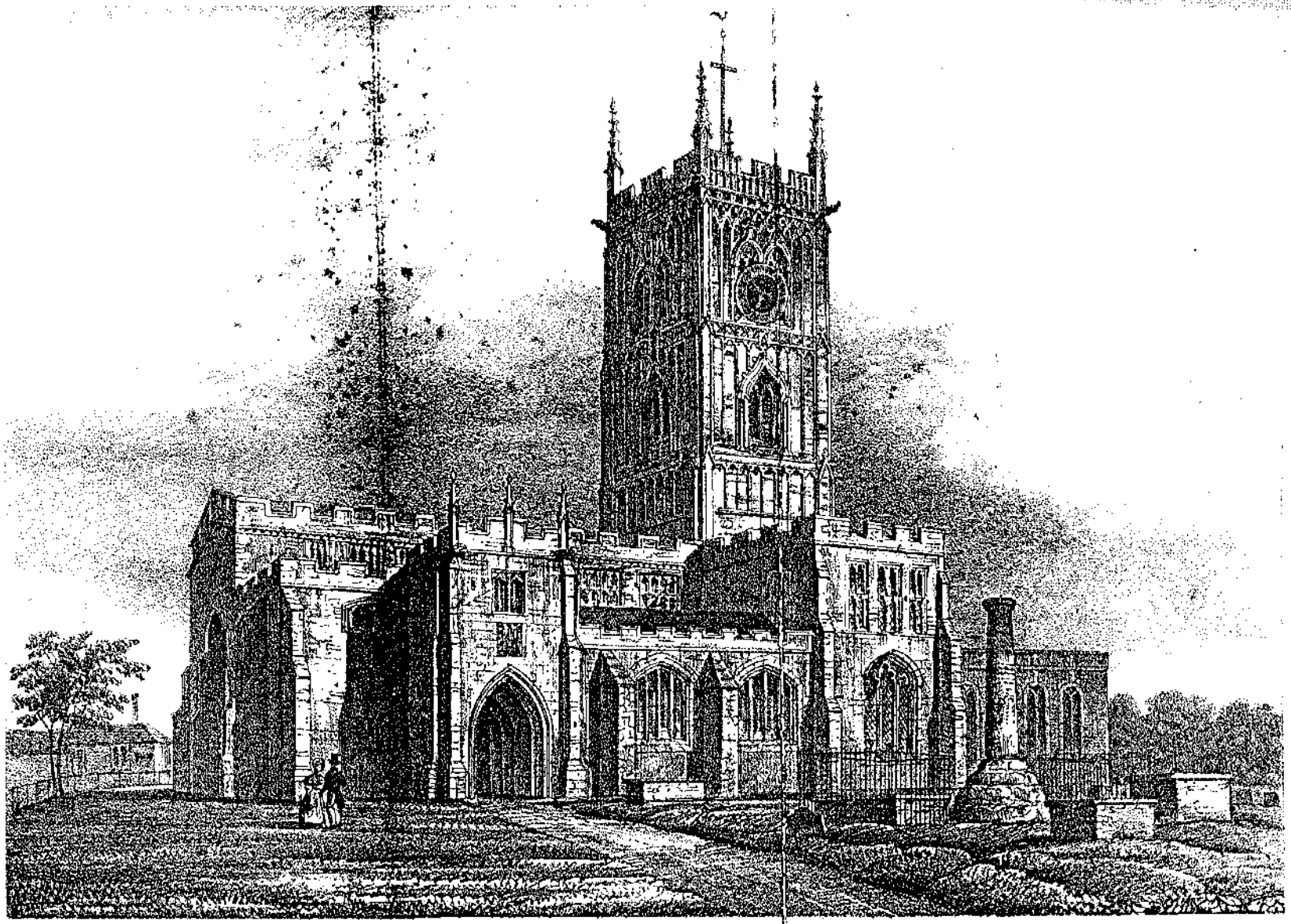


Plate 1



Drawn by R. Noyes.

THE COLLEGIATE CHURCH, WOLVERHAMPTON.

Plate 2