

ST MARY'S CHURCH,  
STUDLEY ROYAL, NORTH YORKSHIRE

ARCHAEOLOGICAL WATCHING BRIEF

Ed Dennison Archaeological Services Ltd  
18 Springdale Way  
Beverley  
East Yorkshire  
HU17 8NU

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Author: Ed Dennison & Shaun Richardson

Ed Dennison Archaeological Services Ltd  
18 Springdale Way  
Beverley  
East Yorkshire HU17 8NU

On behalf of

English Heritage  
37 Tanner Row  
York  
YO1 6WP

**ARCHAEOLOGICAL WATCHING BRIEF, ST MARY'S CHURCH,  
STUDLEY ROYAL, NORTH YORKSHIRE**

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## **EXECUTIVE SUMMARY**

An archaeological watching brief was undertaken during groundworks associated with a new drainage scheme at St Mary's Church, Studley Royal, North Yorkshire (NGR SE27536930) by Ed Dennison Archaeological Services Ltd (EDAS), on behalf of English Heritage. The site work was carried out in March 2005.

A hard-packed stone rubble encountered in all three drainage trench alignments was probably associated with the construction of the church between 1871-78, and it may have been laid down to provide a level platform upon which the structure could be raised. The form and orientation of a few linear features cut into this deposit suggest that they are unlikely to pre-date the late 19th century, and they may represent part of an early drainage scheme associated with the church. A pit-like feature seen in a soakaway pit dug to the north of the church could be a remnant of a former planting scheme. The only apparent natural deposit encountered by the watching brief was a firm red-brown clay, seen in the base of the soakaway at a depth of 0.72m below existing ground level.

The watching brief exposed little in the way of new information relating to the structure of the church. As might have been expected, stepped footings were revealed beneath some of the buttresses of the north aisle. An underground barrel-vaulted rectangular brick-built chamber, measuring 2.65m long by 1.65m wide and 1.74m high internally, was exposed on the north side of the north aisle. It was probably an underground water tank associated with the adjacent boiler room in the basement of the church.

## **1 INTRODUCTION**

- 1.1 In March 2005, Ed Dennison Archaeological Services Ltd (EDAS) were commissioned by English Heritage, through their project architect, Peter Gaze Pace, to undertake an archaeological watching brief during ground works associated with a new drainage scheme at St Mary's Church, Studley Royal, North Yorkshire (NGR SE27536930).

## **2 SITE LOCATION AND DESCRIPTION**

- 2.1 St Mary's Church lies in an elevated position on the west side of the National Trust's Fountains Abbey estate (NGR SE27536930) (see figure 1). The church is located within a sub-rectangular churchyard enclosed by a low stone wall; on the north, east and south sides of the church, the wall runs along the base of a broad ditch or linear depression. The ground surface of the churchyard is considerably higher than that of the surrounding parkland beyond the stone wall and ditch, suggesting that it was artificially raised to provide a level platform prior to the start of construction. The church lies at an elevation of c.110m AOD.

## **3 BACKGROUND INFORMATION**

- 3.1 St Mary's Church was built between 1871-78 by the Marchioness of Ripon to the designs of the architect William Burgess, at a cost of about £15,000. It is considered to a "masterpiece of High Victorian architecture built in an Early English style". It is listed as being of Special Architectural and Historic Interest, Grade I; the full listed building description appears as Appendix 2. The church has also been described by Pevsner (1967, 504).
- 3.2 The church has a simple plan form, comprising a 4-bay aisled nave, a 2-bay chancel, a south porch, and a two-stage west tower with spire above the west porch, with a vestry at the east end of the north aisle (see figure 2). The church is noted for its High Victorian architecture which includes extravagant scrolled and figured ironwork on the south and west doors, and polygonal spirelets and elaborate crocketed hood-moulds on the outside. Inside, there is an extravagant use of decorative and coloured stone and marbles, and painted and gilded details, the latter with the theme of Paradise lost and regained. The Marquis of Ripon's chapel lies at the east end of the south aisle, and the Marchioness was buried here in 1908. There appear never to have been any burials within the surrounding churchyard.
- 3.3 The listed building description notes that the church was built at the west end of the long drive and vista laid out by John Aislabie, replacing the obelisk as the focal point. It was designed to be viewed on all sides, especially on the west which contains the principal entrance.

## **4 AIMS AND METHODOLOGY**

- 4.1 The watching brief took account of, and followed, existing archaeological guidance produced by the Association of Diocesan and Cathedral Archaeologists (ADCA 2004) and the Institute of Field Archaeologists (IFA 1999). The aim of the watching brief was to monitor the groundworks associated with the new drainage scheme, and to record and recover any information relating to any archaeological features or deposits which might be uncovered or disturbed by the works.
- 4.2 The new drainage works involved the excavation of two trenches along the north wall of the church, as well as a third running off in a north-east direction towards the

position of a new soakaway pit (see figure 3). Trench 1 and the soakaway pit were excavated on the 22nd March 2005, the trench dug under direct archaeological supervision and the pit dug by the archaeologist. Trench 2 was excavated on the 23rd March 2005 by the contractors without an archaeologist present, as it cut through the same deposits already observed and recorded in Trench 1. However, Trench 2 was left open and was subject to a detailed archaeological inspection on the 28th March 2005, when Trench 3 was also excavated under direct archaeological supervision. All the trenches measured 0.40m wide and 0.40m deep, and the soakaway pit was 1.0m square and 1.0m deep. All excavations were undertaken by hand, and the turf was carefully removed and stacked for subsequent reinstatement.

- 4.3 Each discrete stratigraphic entity (e.g. a cut, fill, or layer) recorded by the watching brief was assigned an individual context number and detailed information was recorded on *pro forma* context sheets. A total of ten archaeological contexts were recorded, and these are described in the following text as three digit numbers (e.g. 005) (see also Appendix 1). In-house recording and quality control procedures ensured that all recorded information was cross-referenced as appropriate. The positions of all excavations were marked on a general site plan, and more detailed plans and sections were made as necessary; a photographic record was also maintained using 35mm colour prints. No artefacts were recovered by the watching brief and no human remains were encountered.
- 4.4 The project archive, comprising written and photographic elements, has been deposited with York Office of English Heritage (site code SRC 05).

## 5 WATCHING BRIEF RESULTS

### Trench 1 (see figure 3)

- 5.1 Trench 1 ran virtually parallel to the north side of the north aisle of the church, c.1.5m beyond the wall face (see plate 1). It started towards the west end, adjacent to a rainwater downpipe and ran c.13.00m to the east, where a buried brick-lined chamber was encountered (see below). A short continuation of the trench ran to the east of the chamber, returning to the south to reach an external water tap. The trench was 0.40m wide and was excavated to a maximum depth of 0.40m below existing ground level (BGL) along its entire length.
- 5.2 Following the removal of the turf and topsoil (001), which was 0.12m deep, a very shallow, intermittent layer of reddish-brown clay (002), only 0.02-0.03m thick, was exposed. This was found to overlay the line of a disused 0.10m diameter glazed ceramic drainpipe, which followed the alignment of Trench 1 almost exactly. The drainpipe was contained within a deposit of hard-packed angular pieces of sandstone / mudstone rubble (005) set within a gritty yellowish sand, mostly derived from decayed stone; the rubble contained very occasional fragments of abraded red brick, none of which were complete enough to obtain finished size measurements from. The sandstone / mudstone rubble continued beneath the base of the trench. The exposed ceramic drainpipe was removed from the trench and the ground reinstated.
- 5.3 At its east end, the drainpipe had discharged into a buried brick-lined chamber (010) set between the north aisle's two easternmost buttresses. This chamber was accessed through an opening in its roof covered by a sandstone slab or capstone. Health and Safety concerns meant that the interior could not be inspected in detail, but it was established that the chamber was rectangular in plan, with internal

measurements of 2.65m long (east-west) by 1.65m wide (north-south), and a height of 1.74m from the floor to the apex of the barrel-vaulted roof. At the time of the watching brief, there was 0.50m depth of water in the base of the chamber. A number of pipes were visible entering or exiting the chamber. The main outflow was apparently formed by a vertical ceramic pipe rising out of the east end of the floor; at the time of the watching brief, the open upper end was set some way above the internal water level. A lead pipe ran down the east wall adjacent to the vertical ceramic pipe, whilst a further ceramic pipe and metal pipe projected from the north wall. The chamber was built throughout of red hand-made bricks (average dimensions 225mm by 110mm by 70mm) laid in stretcher bond and set with a buff lime mortar; the east wall was shown to be c.0.3m wide but the north wall, revealed in Trench 3, was slightly narrower although disturbed.

### **Trench 2** (see figure 3)

- 5.4 Trench 2 ran along the north edge of the north aisle of the nave, following the line of the external buttresses, from the north-west corner of the church eastwards as far as a low wall which surrounded some steps leading down to a boiler house located beneath the vestry. The trench was 0.40m wide and was excavated to a maximum depth of 0.40m below existing ground level (BGL) along its entire length.
- 5.5 The same overall sequence of deposits (001, 002 and 005) exposed in Trench 1 were noted in Trench 2, apart from the ceramic pipe within context 005. Trench 2 also revealed that the rock-faced masonry footings visible elsewhere around the base of the church were present at the base of the north aisle, commencing c.0.55m below the level of the chamfered plinth here. As might have been expected, the buttresses to the north aisle were revealed to have stepped footings beneath the rock-faced masonry. The trench was filled with a new PVC land drain wrapped in geotextile, and the trench infilled with gravel (see plate 2).

### **Trench 3** (see figures 3 and 4)

- 5.6 Trench 3 ran north-east from the eastern end of Trench 1 towards a soakaway pit located to the north of the vestry. The north-east/south-west aligned trench was 10m long, and was 0.40m wide and 0.40m deep below existing ground level (BGL) along its entire length. It terminated in a 1.0m square soakaway pit which was excavated to a maximum depth of 1.0m BGL (see plate 3).
- 5.7 Following the removal of the turf and topsoil (001), the same very shallow layer of reddish-brown clay (002) seen in Trenches 1 and 2 was intermittently exposed. At the south end, this material overlay the north wall of the brick chamber (010) described above, which was visible in plan only; disturbance along the north-east side of the wall might represent the original construction cut for the chamber. Approximately 1.50m to the north-east of the chamber wall the trench was crossed by a poorly defined feature (009), apparently an east-west aligned linear cut 0.70m wide and c.0.30m deep, backfilled with a dark brown silty clay. The linear feature appeared to be cut into the hard-packed angular stone rubble (005) described under Trench 1 above.
- 5.8 Within the excavation for the soakaway, the band of reddish-brown clay (002) was cut by a steep-sided pit-like feature (003), visible in the north-facing and west-facing sections only. The fill of this pit (004) appeared to comprise three ill-defined layers – the upper fill, a compacted silt loam containing angular pieces of sandstone rubble, overlay a thin band of reddish-brown clay similar in appearance to context 002. This in turn overlay a mixed deposit of red-brown clay, silt loam topsoil and gravel.

- 5.9 A second feature (006) crossed the north side of the soakaway pit, comprising a steep-sided linear cut, aligned north-east/south-west and 0.70m wide at the top (see plate 3). Unlike the pit-like feature (003), the linear cut was sealed by the reddish-brown clay (002). The cut narrowed towards its base, which was not clearly defined and which may have continued below the base of the soakaway. The fill of the cut (007) was a mixed deposit comprising contexts 001, 002 and 005 in equal proportion; in its lower part, the fill contained a high proportion of angular stone gravel.
- 5.10 Both cut features noted in the soakaway had been dug into the hard-packed angular stone rubble (005), which the section showed to be 0.55m thick. This rubble contained a very high proportion of mudstone within the soakaway, far higher than was seen in Trenches 1 or 2. The rubble overlay a presumed natural deposit (008) of firm red-brown silty clay, the top of which lay 0.72m BGL. The soakaway pit was subsequently filled with gravel and the ground surface reinstated.

## 6 DISCUSSION AND CONCLUSIONS

- 6.1 The results from the drainage trenches can be summarised as follows. The only apparent natural deposit encountered was the firm red-brown clay (008), seen in the base of the soakaway at the north-east end of Trench 3 at a depth of 0.72m BGL. Other than this, the hard-packed stone rubble (005) encountered in all three trench alignments was probably associated with the construction of the church between 1871-78, and it may have been laid down to provide a level platform upon which the structure could be raised. Given that all the recorded features encountered were cut into this deposit, they are unlikely to pre-date the late 19th century; none contained any dating evidence to suggest an earlier origin. The form and orientation of the linear features (006 and 009) suggests that they may represent part of an early drainage scheme associated with the church, whilst the pit-like feature in the soakaway pit (003) could be a remnant of a former planting scheme.
- 6.2 The watching brief exposed little in the way of new information relating to the structure of the church. As might have been expected, stepped footings were revealed in Trench 2 beneath some of the aisle buttresses. The barrel-vaulted rectangular brick-built chamber exposed in Trench 1 would appear to be contemporary with the church itself, and it may have been an underground water tank, possibly to serve the adjacent boiler room. The number of metal and ceramic pipes visible within the chamber indicate that there are further drains / pipe-runs crossing the churchyard which were not exposed and located during the watching brief.

## 7 REFERENCES

ADCA (Association of Diocesan and Cathedral Archaeologists) 2004 *Guidance Note 1: Archaeological Requirements for Works on Churches and Churchyards*

IFA (Institute of Field Archaeologists) 1999 *Standard and Guidance for an Archaeological Watching Brief* (and subsequent revisions)

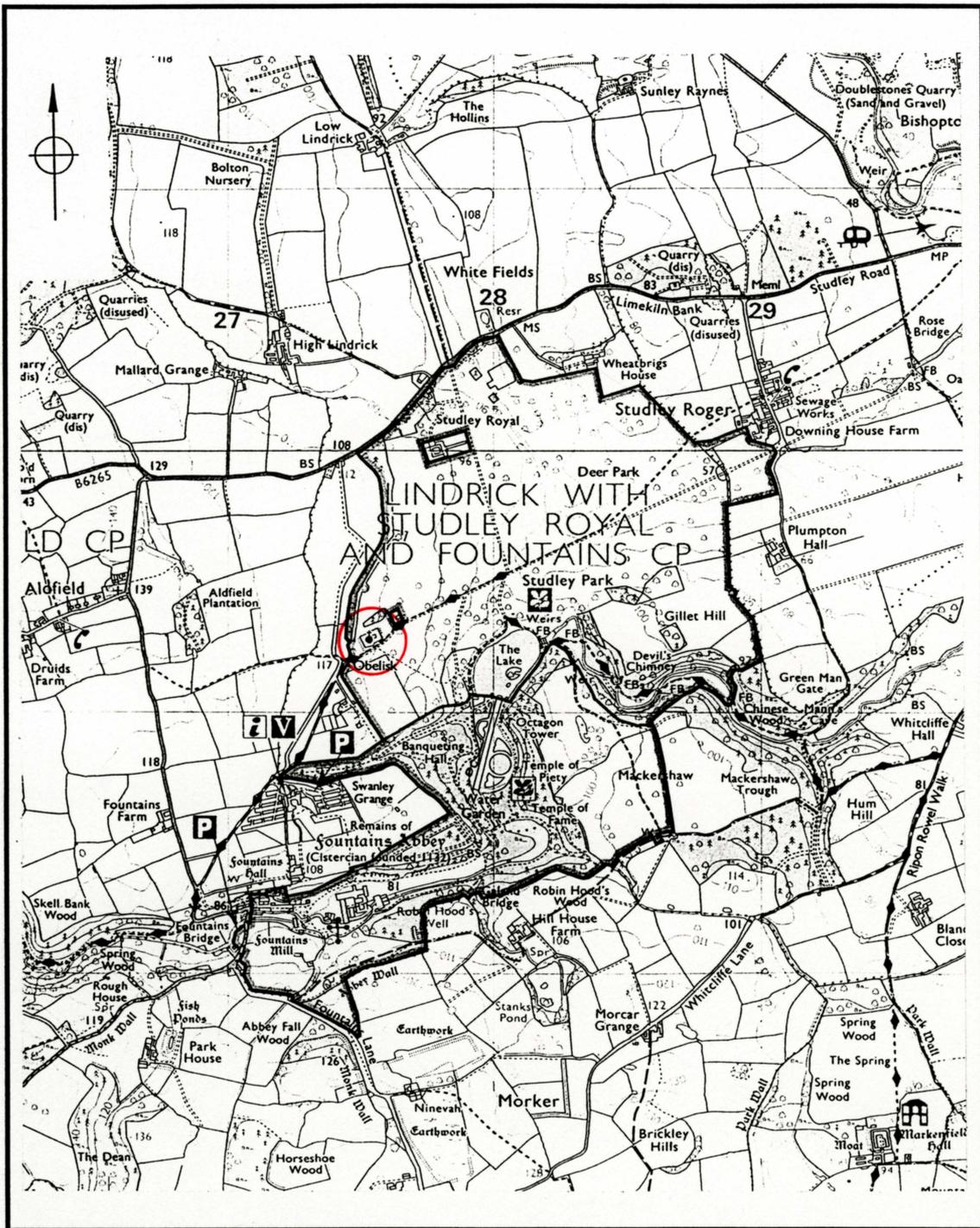
Pevsner, N 1967 *Buildings of England: Yorkshire West Riding*

## 8 ACKNOWLEDGEMENTS

- 8.1 The archaeological watching brief at St Mary's Church was commissioned by English Heritage, through their project architect, Peter Gaze Pace. EDAS would like

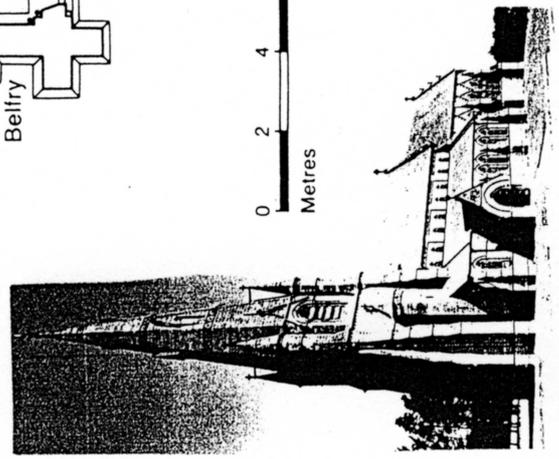
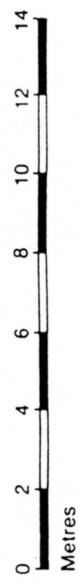
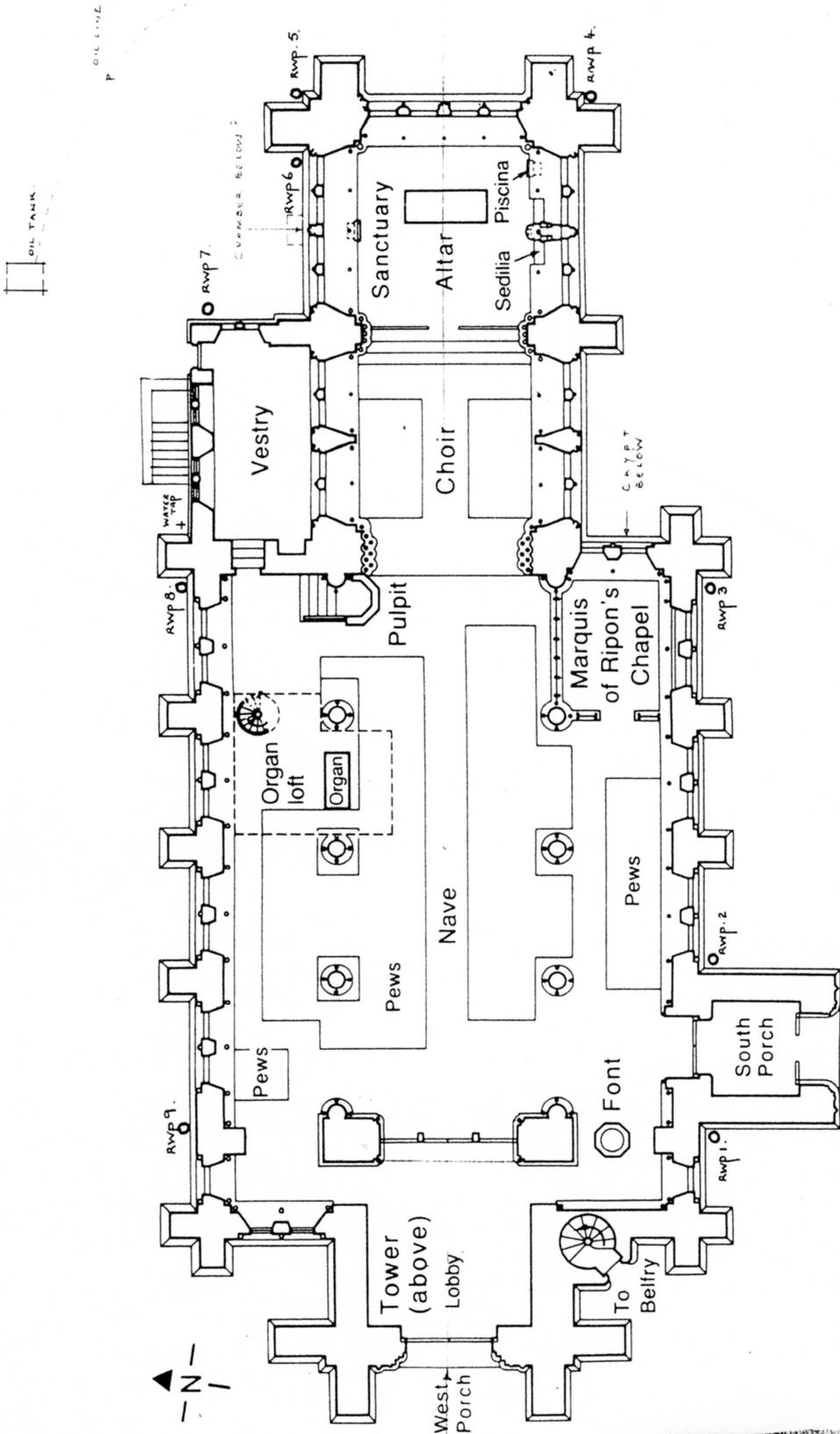
to thank them, and the main contractors, Historic Property Restoration, for their co-operation in carrying out the watching brief.

- 8.2 The watching brief was undertaken by Shaun Richardson of EDAS. Shaun Richardson produced the fieldwork records and Ed Dennison and Shaun Richardson produced the final report and drawings. The responsibility for any errors or inconsistencies remains with Ed Dennison.



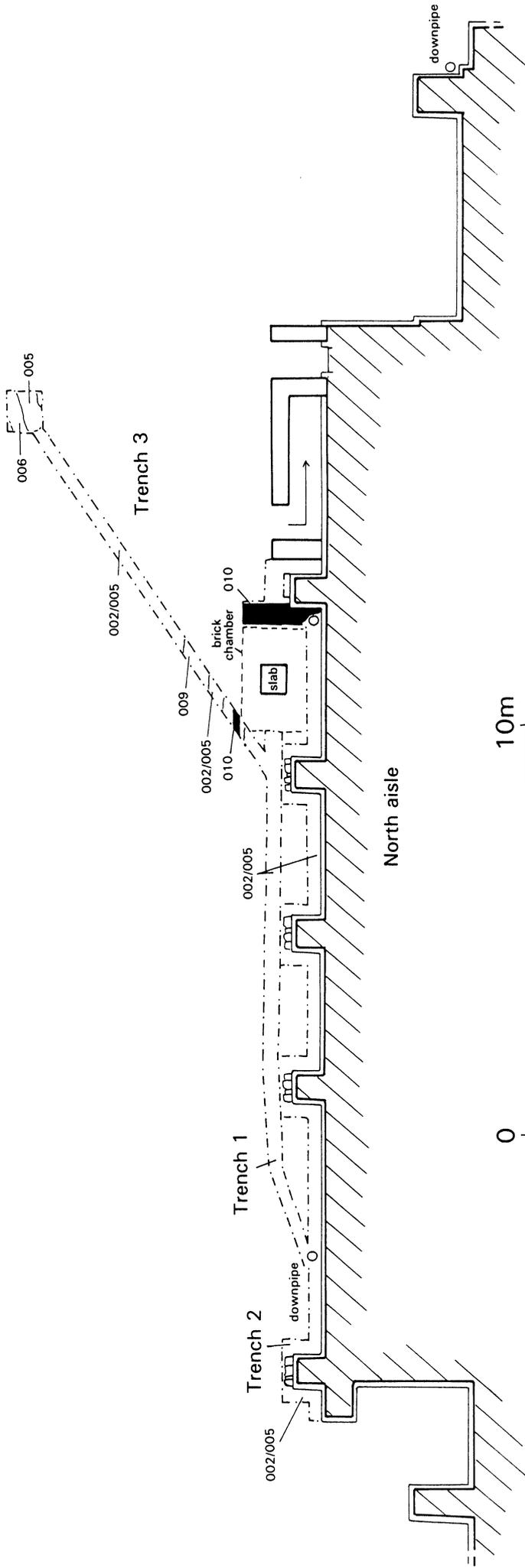
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PROJECT	
ST MARY'S CHURCH, STUDLEY ROYAL	
TITLE	
GENERAL LOCATION	
SCALE	DATE
AS SHOWN	MAR 2006
EDAS	FIGURE
	1

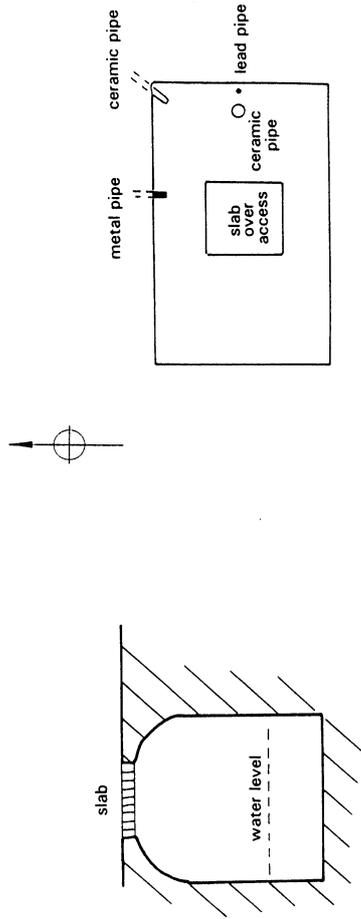


PROJECT ST MARY'S CHURCH, STUDLEY ROYAL	
TITLE CHURCH PLAN	
SCALE AS SHOWN	DATE MAR 2006
EDAS FIGURE 2	

Plan provided by Peter Gaze Pace



Trench plan

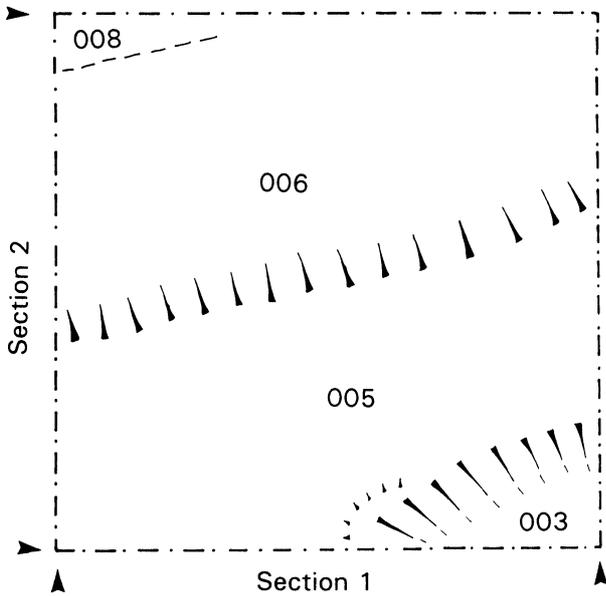


North-south section

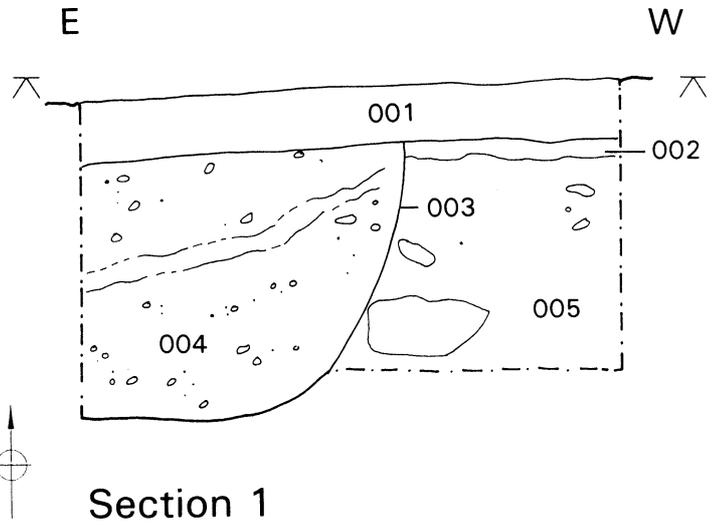
Plan (internal)

Underground chamber

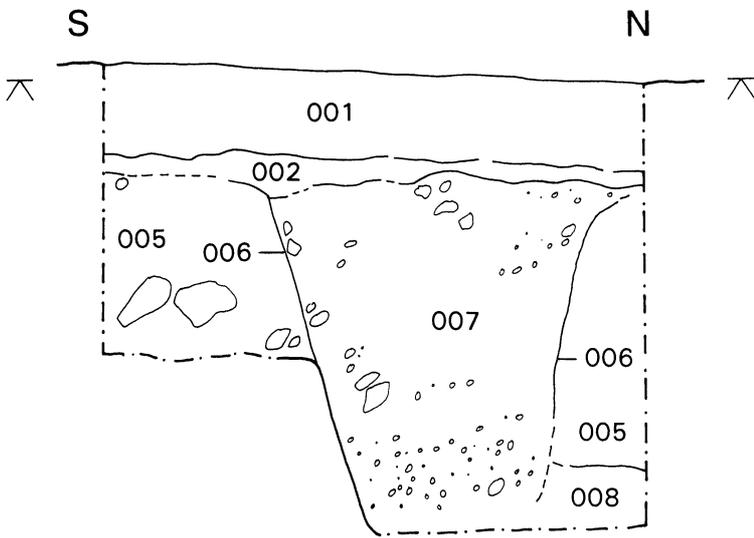
PROJECT		ST MARY'S CHURCH, STUDLEY ROYAL	
TITLE		WATCHING BRIEF RESULTS	
SCALE	AS SHOWN	DATE	MAR 2006
EDAS		FIGURE	3



Plan



Section 1



Section 2

Soakaway pit



PROJECT ST MARY'S CHURCH, STUDLEY ROYAL	
TITLE WATCHING BRIEF RESULTS	
SCALE AS SHOWN	DATE MAR 2006
EDAS	FIGURE 4



Plate 1: View along Trench 1 after removal of ceramic pipe, with cap stone to underground chamber in foreground, looking west.



Plate 2: View of Trench 2 after insertion of new pipe and partial backfilling, looking west.

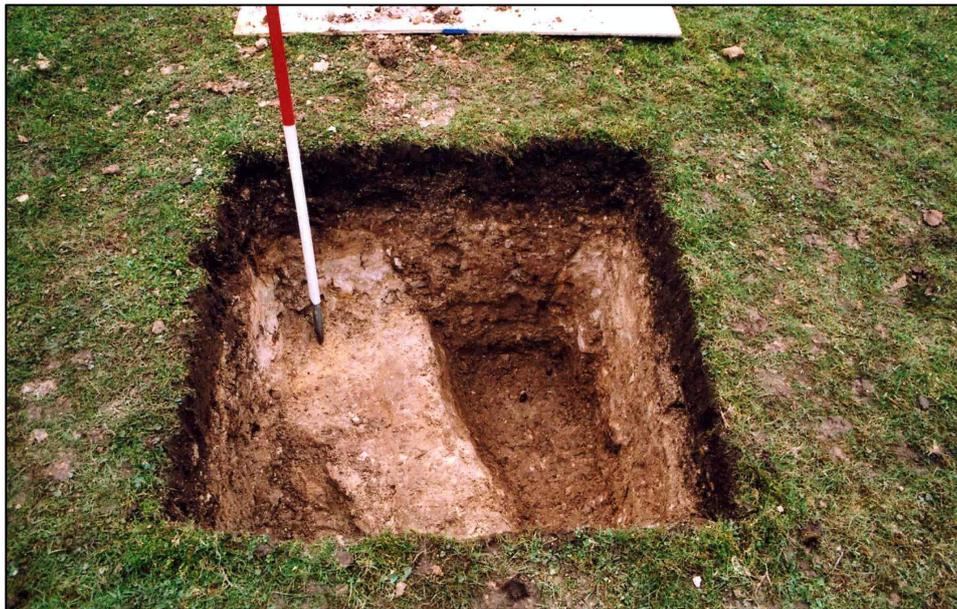


Plate 3: West side of soakaway pit at end of Trench 3, looking west.

## **APPENDIX 1**

## APPENDIX 1: LIST OF CONTEXTS

- 001 Turf / black silty topsoil, 0.12m thick
- 002 Thin layer of reddish-brown clay, 0.02-0.03m thick
- 003 Steep-sided cut visible in soakaway forming sub-circular pit
- 004 Fill of 003 – brown silty loam with reddish-brown clay
- 005 Compacted angular pieces of sandstone / mudstone rubble, 0.55m thick
- 006 Steep-sided linear cut
- 007 Fill of 006 – mixed deposit of 001, 002 and 005
- 008 Firm red-brown silty clay – natural deposit
- 009 Possible cut feature, poorly defined, 0.70m wide and c.0.30m deep, containing clean firm dark brown silty clay
- 010 Underground brick-built chamber, side walls exposed in trenches

## APPENDIX 2

## APPENDIX 2: LISTED BUILDING DESCRIPTION

Location : CHURCH OF ST MARY, LINDRICK WITH STUDLEY ROYAL AND FOUNTAINS,  
HARROGATE, NORTH YORKSHIRE

IoE number : 331055

Date listed : 06 MARCH 1967

Date of last amendment : 06 MARCH 1967

Grade : I

SE2769

LINDRICK WITH STUDLEY

STUDLEY PARK  
ROYAL AND FOUNTAINS

9/51

Church of St Mary

Church of St Mary. 1871-78 by William Burges for the first Marchioness of Ripon. Fine-grained grey limestone from the Morcar quarry near Markenfield Hall, interior creamy white limestone from Lord Ripon's own quarries (Crook, p233); grey slate roof. 2-stage west tower with spire; 4-bay nave with clerestory, aisles and south porch; 2-bay chancel. A masterpiece of High Victorian architecture in an elaborate Early English style. Among the many striking features are: the south and west doors with extravagant scrolled and figured ironwork; the latter recessed under an unusual segmental arch; the west window of 4-lights with a rose and similar to the east window which is flanked by sculptured groups and surmounted by a crucifix, all details under elaborate crocketed hood-moulds. The tower: belfry windows have gables carried up into the spire; polygonal spirelets; lucarnes; a weather cock crowns the top-most crocket. Interior: lavish, with extravagant use of coloured stone and marbles; carved details painted and gilded, flat surfaces painted with saints, angels, stars and symbols all with the theme of Paradise lost and Paradise regained. Nave arcade of circular piers with 4 Purbeck shafts; the chancel arch has 7 shafts to each side. The chancel represents the ultimate achievement of Burges' eclecticism: the shafts of blue, red and green marble; a lion supports a shaft above the sedilia. Floor of polychrome tiles and mosaics; walls lined with alabaster, a waggon roof and domed east bay with trefoil-headed panels and painted angels. Contemporary fittings include organ reached by stone spiral staircase in the north aisle and the font of Tennessee marble with figures of gilded bronze representing the four ages of man. South aisle: white marble effigy of the first Marchioness of Ripon (d1909) on a chest tomb. The stained glass designed by F Weeks and made by Saunders and Co., sculpture by T Nicholls. The church was built at the west end of the long drive and vista laid out by John Aislabie, replacing the obelisk (qv) as the focal point. It was designed to be viewed from all sides with particular attention to the west side, the principal entrance. The same team of architect, sculptor and designer worked in 1871-2 on the Church of Christ the Consoler in the grounds of Newby Hall, for Lady Mary Vyner, a relative of Lord Ripon. N Pevsner, *Yorkshire, The West Riding*, 1967, p504. J Mordaunt Crook, *William Burges and the High Victorian Dream*, 1981, pp232- 237.

Source: Images of England website ([www.imagesofengland.org.uk](http://www.imagesofengland.org.uk))