

# GUARD ARCHAEOLOGY



**Archaeological Investigations at the Church of the Holy Rude, Stirling**  
**Data Structure Report**  
**Project 3871**

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## Archaeological Investigations at the Church of the Holy Rude, Stirling

### Data Structure Report

**On behalf of:** Friends of Holy Rude

**NGR:** NS 79206 93710

**Project Number:** 3871

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**Date:**

19/06/2015

*This document has been prepared in accordance  
with GUARD Archaeology Limited standard operating procedures.*

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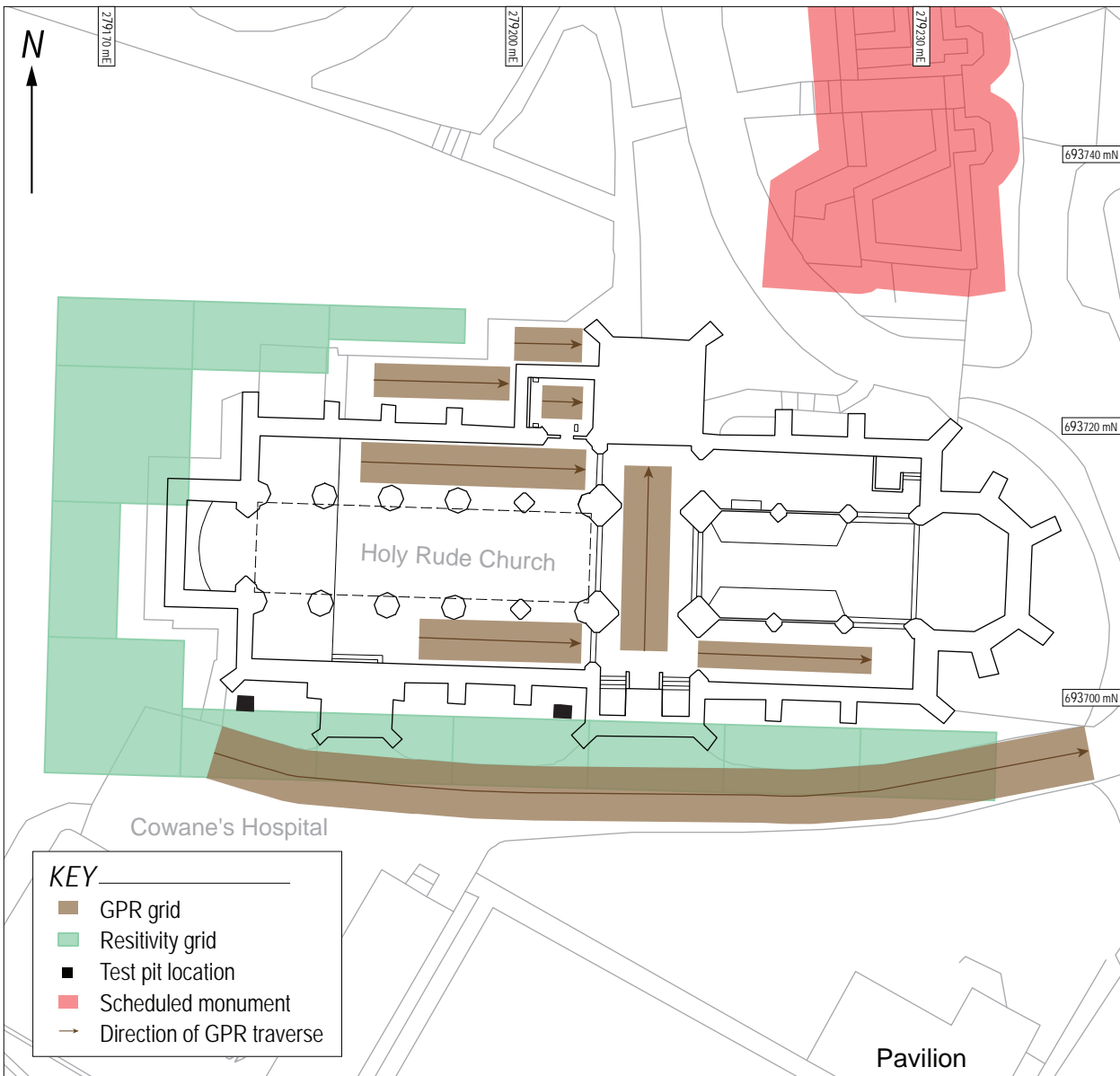
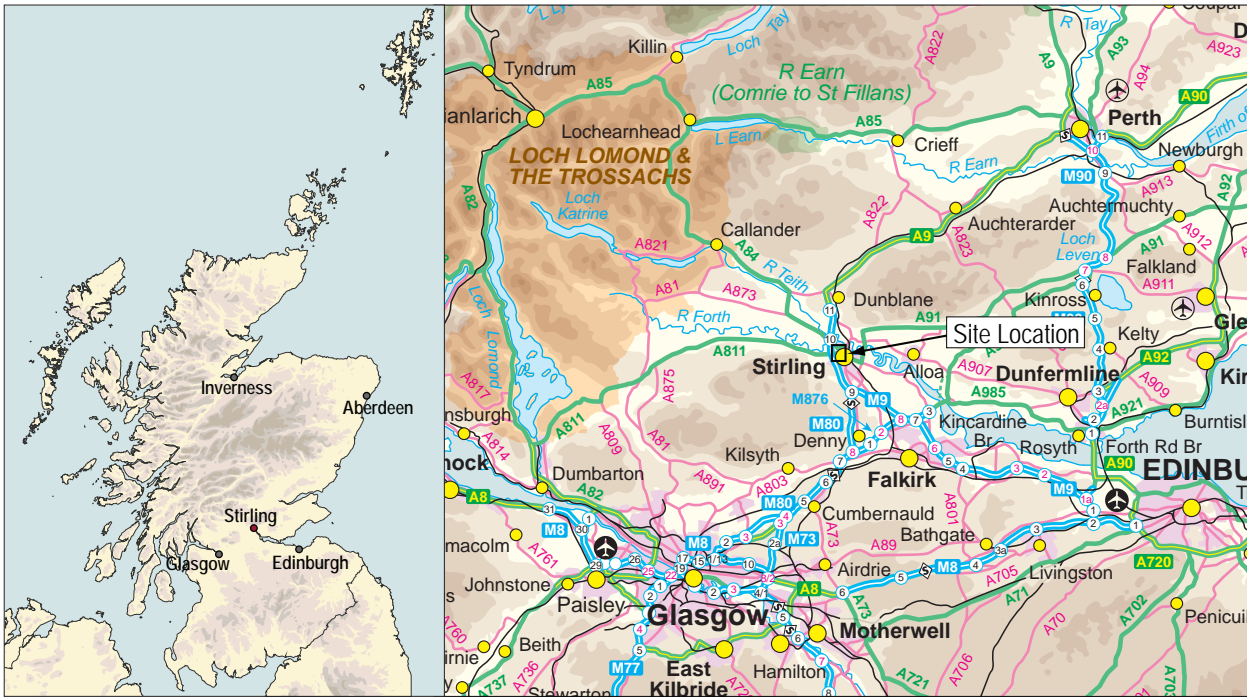
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**KEY**

- GPR grid
- Resistivity grid
- Test pit location
- Scheduled monument
- Direction of GPR traverse

## Executive Summary

- 1.1 GUARD Archaeology Limited was commissioned by the Friends of the Holy Rude to undertake archaeological investigations consisting of geophysical survey and trial trenching at the Church of the Holy Rude in Stirling. This work was undertaken between 27th and 28th March 2015.
- 1.2 The geophysical surveys recorded two linear features at the exterior of the church, four potential burials within the church and what appear to be three voids in the south choir aisle. The trial trench excavation on the south side of the church uncovered the possible remains of a side chapel in trench 1 and a possible burial vault in trench 2 along with a range of artefacts that included medieval pottery and window lead.

## Introduction

- 2.1 This report sets out the results of archaeological investigations undertaken by GUARD Archaeology Limited, on behalf of the Friends of Holy Rude in and around the Church of the Holy Rude, Stirling.
- 2.2 The fieldwork utilised two forms of geophysical survey, as well as trial trenching. An area resistivity survey was carried out on parts of the graveyard and on the grassed areas on the south exterior of the church. A ground-penetrating radar survey was carried out over the paved driveway, two paved areas on the north side of the church and some of the interior of the church interior. Two trial trenches were excavated on the grassed areas on the south exterior of the church.
- 2.3 The archaeological investigations were undertaken with the help of local volunteers, members of the Scottish Artefact Recovery Group (SARG) and children from local schools. The project was developed with the help of Murray Cook the Stirling Council archaeologist. GUARD Archaeology undertook this programme of work on 27th and 28th March 2015.

## Site Location, Topography and Geology

- 3.1 The Church of the Holy Rude is located on the crags near to Stirling Castle, within the heart of the medieval town of Stirling (NGR: NS 79206 93710). The church is situated within its grounds with the graveyard to the west and north, Cowane's Hospital and bowling green to the south, with John Street to the east (Figure 1).
- 3.2 The external areas subject to geophysical survey comprised both grassed areas and paved areas. The terrain within the graveyard sloped down from a higher point at the south-west towards the east, north and north-east. The paved driveway also sloped down quite markedly from west to east, and some landscaping is likely to have been carried out on the south side of the church.
- 3.3 The bedrock over the site is Midland Valley Sill complex, an igneous rock type formed in the Carboniferous period when the local environment was dominated by intrusions of magma. The superficial deposits are not recorded. (British Geological Survey 1974).

## Archaeological Background

- 4.1 The Church of the Holy Rude was originally founded in the 12th century as the parish church for Stirling and was initially under the jurisdiction of Dunfermline Abbey. The building that we see today was largely built in the later 15th century when following various fires and disturbances in the town James II awarded a grant in 1456 to build a parish church and the oldest surviving parts of the present church belong to that building programme. Surprisingly there has been little in the way of archaeological work at the Holy Rude although during the renovations of 1912 there were reports that remains of the early church were discovered at the tower end of the church.



## Aims and Objectives

5.1 The general aims of the archaeological investigations are to determine if there are surviving remains of earlier structures associated with the Church of the Holy Rude below the interior and/or exterior of the existing kirk.

Particular aims were:-

- to locate any surviving foundations of the twelfth century kirk;
- to determine what, if anything, lies below the South East Aisle;
- to identify pre-Reformation chapels known to have existed at the west and north-west of the kirk;
- to identify any burials within the Nave and Tower, and
- to establish the presence/absence of burials within ca. 7 m of the exterior of the kirk.

The specific objectives were:-

- to carry out a Ground Penetrating Radar survey of the South Choir Aisle, the north and south Nave Aisles, St Andrew's Chapel and the Transept;
- to carry out a survey of the land within ca. 7 m of the exterior of the church, using whichever geophysical technique is most suitable to meet the aims of the fieldwork;
- to excavate trial trenches in the grassed areas on the south side of the Church to identify the location of structures or burials;
- to ensure that any surviving archaeological remains, encountered were recorded in accordance with ClfA Standards, and
- to submit a report to data structure level on completion of the archaeological fieldwork.

## Methodology

### Geophysical Survey

6.1 The geophysical survey comprised a ground-penetrating radar (GPR) survey and an area resistivity survey. The GPR survey was carried out using an Utsi Electronics Groundvue 3 fitted with a single antenna, and the resistivity survey was carried out using a Geoscan RM15 Resistivity meter with a twin-probe array and a probe separation of 0.5 m.

6.2 In each area of GPR survey, traverses were parallel, and were spaced 0.5 m apart along the short axis of the area. Readings were taken continuously along each traverse. The exterior areas surveyed using GPR were the paved surface of Kirk Wynd, and two paved areas on the north side of the church. In the church interior, the north and south aisles of the nave, St Andrew's aisle, the transept and the choir south aisle were surveyed. Survey grids were established within the areas to be surveyed using tapes and temporary markers measured into fixed points created by a Total Station survey of the church interior.

6.3 Measurements of earth electrical resistance were recorded using a Geoscan RM15 Resistivity meter with a mobile twin-probe array and a probe separation of 0.5m. A zig-zag traverse scheme was used and data logged in 10 m by 10 m grids. The resistance sensitivity was set to 0.1 ohm, the sample interval was 0.5 m and the traverse interval was 0.5 m, giving 400 survey points for each grid. This survey frequency allowed a good resolution of detail with the minimum impact in terms of the time required to complete the survey.

- 6.4 The resistivity survey was carried out on the grassed areas on the exterior of the church. The location of the exterior geophysical survey was recorded using a Leica Smart Rover sub-centimetre DGPS. This creates fully geo-referenced information for each grid point for the accurate placement of the geophysics results within the Ordnance Survey national grid, allowing for the ease of relocating areas identified for further assessment.
- 6.5 The GPR data was downloaded into an external computer and was processed using the Sandmeier software ReflexW v6.1. The resistivity data was downloaded into an external computer and was processed using the Geoscan software Geoplot. The resulting plots were overlaid onto the existing plan of the site, showing where any anomalies lay in relation to the surface features.

### **Trial Trenching**

- 6.6 Two trial trenches (approximately 1m by 1m) were excavated by hand in spits to the first archaeological horizon. Each trial trench was recorded using proforma recording sheets with a plan drawn to scale and a photographic record of deposits.
- 6.7 Disarticulated human remains were encountered during the excavations and were re-buried in the approximate locations where they were discovered.

## **Technical specifications**

### **Ground penetrating radar**

- 7.1 Ground penetrating radar survey involves transmitting high frequency electromagnetic radio pulses into the earth, and measuring the time elapsed between transmission, reflection and reception. From the GPR antenna, a wave of electromagnetic energy travels down, and portions of it are reflected back where buried discontinuities are encountered. Among other factors, these discontinuities are created by differing electrical properties of the soil, and changes in density at stratigraphic interfaces. Sub-surface void spaces also generate radar reflections due to changes in radar-wave velocity (Conyers & Goodman, 23).
- 7.2 Surveying along regular parallel lines should allow the data to be converted to time-slices, which are computer-generated two-dimensional images produced in a horizontal dimension, akin to plan views that show the data at a given depth. Unfortunately, it was not possible to convert the GPR data to this format, and the illustrations in this report are, therefore, vertical two-dimensional images.

### **Area Resistivity**

- 7.3 Resistivity works by creating a circuit between a set of two fixed probes (one potential current, one direct current) and a set of two mobile probes (also one potential current, one direct current). Readings taken at set points within temporary grids measure the resistance to the current at a point about 0.5 m below ground surface. While the readings are initially recorded as numbers, these are converted to greyscale or trace plot images for the purposes of illustration.
- 7.4 On the greyscale illustration of the resistivity survey, areas of higher resistance are represented by black/dark grey, while lower resistance is shown as white/light grey. The types of anomalies that can produce these are:-
- High resistance is recorded over stone (including bedrock), rubble and heavily compacted features such as paths and tracks;
  - Low resistance is associated with negative-cut/soil-filled features such as pits and ditches, or with ground that is retaining a great deal of moisture.
- 7.5 Although gravestones were located throughout much of the survey area, these did not prove to be an insurmountable obstacle. However, where readings could not be physically taken, dummy readings were substituted. These are shown as blue on the illustration.

## Results

### Geophysical Survey

#### 8.1 GPR survey

8.1.1 The GPR data showed some sub-surface disturbance in all of the areas surveyed, although the majority of these are almost certainly drains and/or vents located both within and out-with the church. All of the disturbance is confined to the upper portions of the radargrams, meaning that the disturbance is at a shallow depth. Within the church, the results show reflections that are consistent with interior floor levels and sub-floor deposits, such as the sand or aggregate used to bed-in flagstones. The cobbles, flagstones and bedding-in material are also recorded in the exterior portions of the survey.

8.1.2 The survey recorded three point source reflections that are generated from sub-surface features. These types of reflection occur when the conical radar beam “sees” an object or feature before passing directly over it, and continues to “see” it after the instrument has passed over it. The reflection will be recorded as a hyperbola on a two-dimensional profile.

8.1.3 A further feature of the survey the apparent blank spots or shadows, where it seems that no data has been recorded below the level of the flag-stones or cobbles. Radar energy cannot penetrate metal, and these blank spots are caused by metal objects reflecting all of the radar energy, and shadowing everything directly below them (Conyers & Goodman, 35).

#### Driveway (Figure 2)

8.1.4 The area surveyed was 64 m long and 4 m wide, and was covered by eight GPR runs. Aside from the drains that are recorded along the length of the drive, one small hyperbola indicates that there may be a buried surface about 19 m from the start point of the survey. This feature was recorded on all of the GPR runs on the driveway, and is therefore likely to be linear in shape.

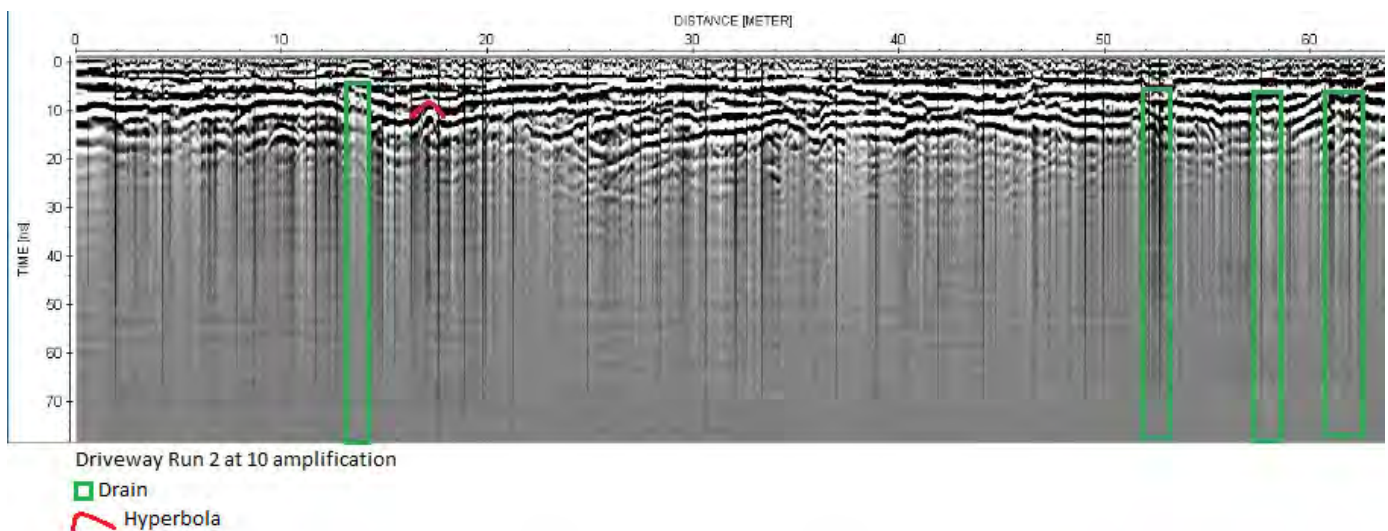


Figure 2: Driveway Run 2 at 10 amplification.

#### North-east exterior area (Figure 3)

8.1.5 This area was 10 m long and, due to the presence of floodlights, was 2 m wide; it was surveyed over four GPR runs. A great deal of shadowing was recorded in this area and, while this most likely represents sub-surface metal pipes associated with drainage, and cabling for floodlights, the presence of burials such as those recorded in St Andrew’s Chapel cannot be discounted. Aside from the metal features, the data shows only ground disturbance associated with these presumed cuts.



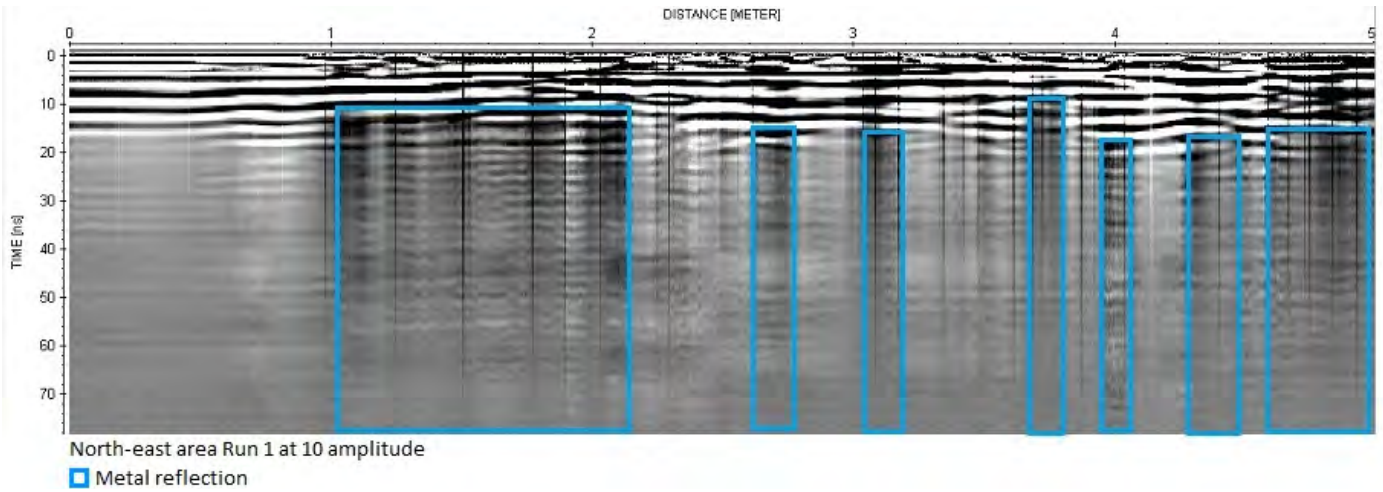


Figure 3: North-east area Run 1 at 10 amplitude.

**North-west exterior area (Figure 4)**

8.1.6 This area was 5 m long and, due to the presence of floodlights, was 2.5 m wide; it was surveyed over five GPR runs. The GPR profiles in this area were very similar to those in the north-east exterior in that much shadowing was recorded. Here too, this is likely to have been the result of the GPR picking up buried metal pipes although, again, the presence of burials cannot be discounted.

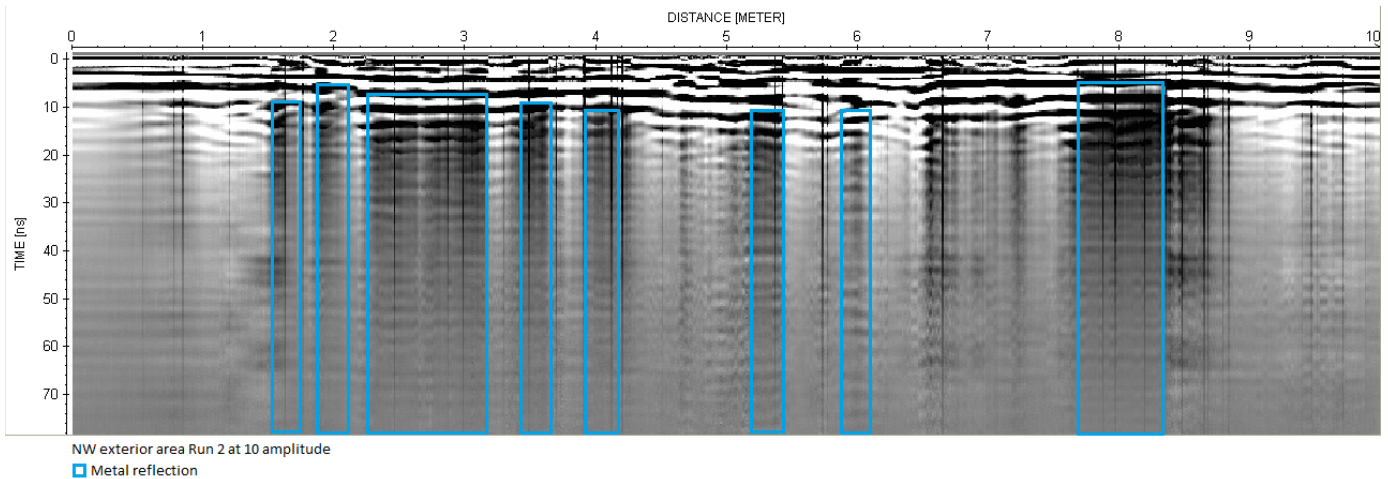


Figure 4: North-west exterior area Run 2 at 10 amplitude.

**South Nave Aisle (Figure 5)**

8.1.7 The area surveyed in the south nave was 11.97 m long and 3 m wide. All of the disturbance in the south nave is confined to the area immediately below the flagstones, and this, coupled with the lack of hyperbolae, suggests that there are no previously unknown buried features within this area. From the GPR radargram, it appears that the ground disturbance is associated with the installation of sub-surface services, possibly drainage and heating as, here too, the shadowing is indicative of buried metal.

**North Nave Aisle (Figure 6)**

8.1.8 The area surveyed in the north nave was 16.48 m long and 3 m wide. In addition to the now familiar metal-shadowing, a hyperbola was recorded towards the east end of this aisle (approximately 14.3 m from the start position). This is a fairly strong reflection that is indicative of a buried object or feature, and is only seen in Run number 2.

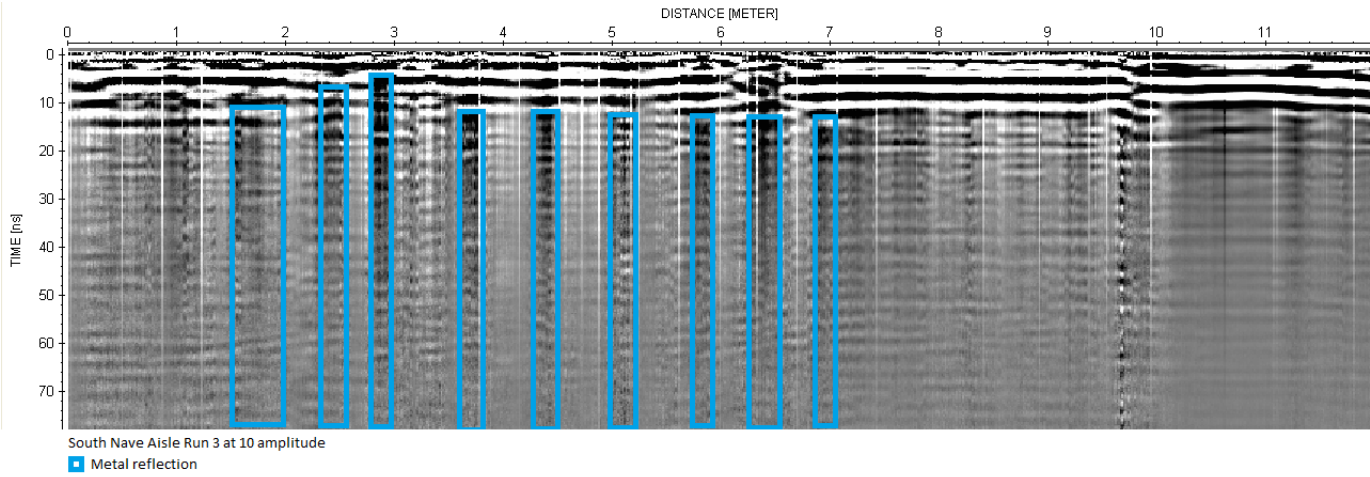


Figure 5: South Nave Aisle Run 3 at 10 amplitude.

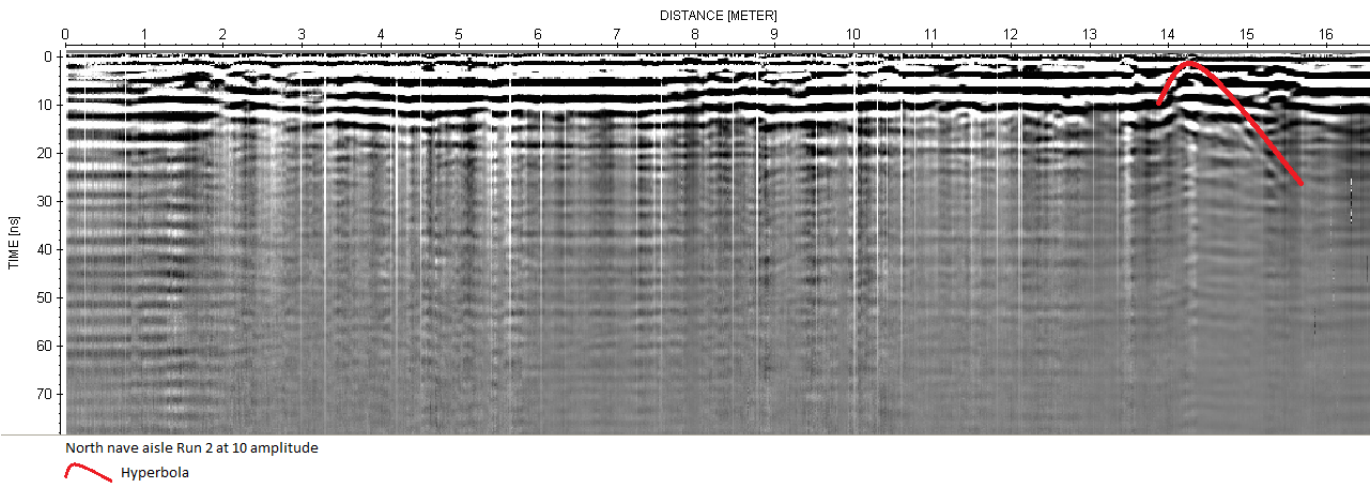


Figure 6: North Nave Aisle Run 2 at 10 amplitude.

**South Choir Aisle (Figure 7)**

8.1.9 The area surveyed in the south choir aisle was 12.82 m long and 2 m wide. The GPR recorded five areas of interest, two of which are almost certainly service vents or drainage ducts. Possible voids below floor level were recorded at the start and end of each GPR run. These differ from the metal reflection in that there is no shadowing below the level of the flagstones.

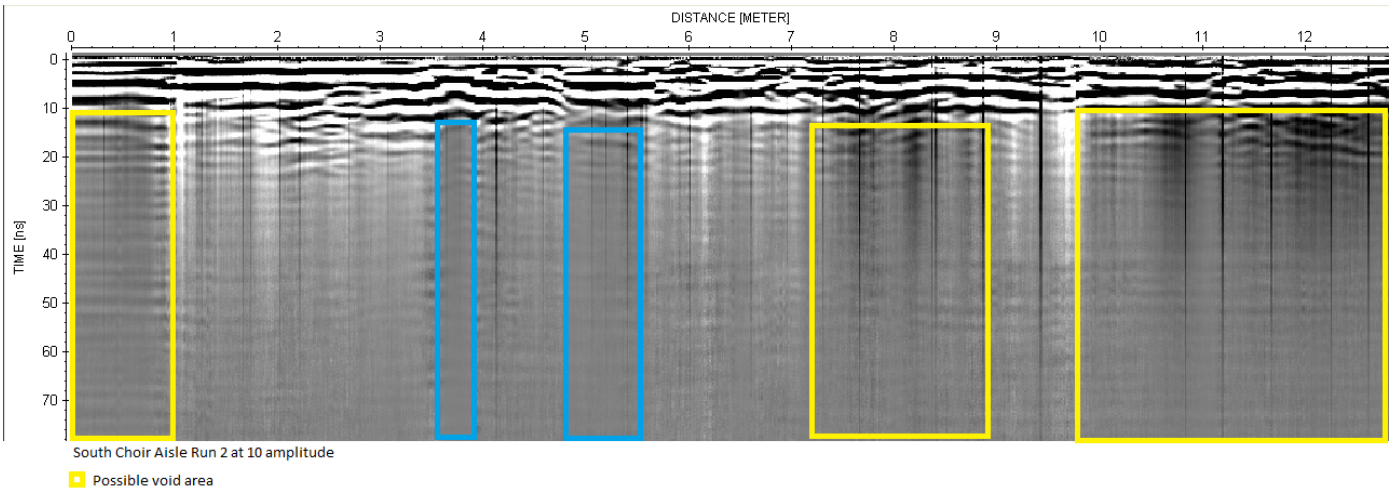


Figure 7: South Choir Aisle Run 2 at 10 amplitude.

**Transept (Figure 8)**

8.1.10 The area surveyed in the transept was 13.68 m long and 4 m wide. A small hyperbola was recorded about 2.2 m from the south end of the area, representing a buried object or feature. The deeper anomaly recorded at the north end of the transept is at the location of the boiler room, and it is this basement space that has been detected by the GPR. One metal reflection, probably from sub-floor pipes, was also recorded in the transept.

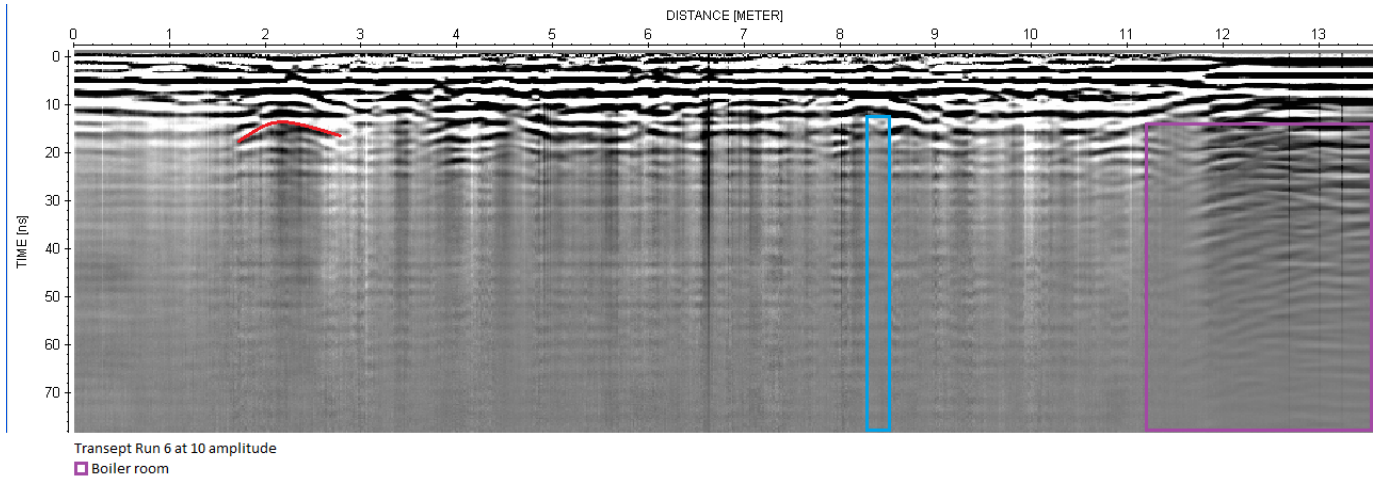


Figure 8: Transept Run 6 at 10 amplitude.

**St Andrew’s Aisle (Figure 9)**

8.1.11 The area surveyed in this small chapel was 2.42 m long and 3 m wide. One of the aims of the survey within this chapel was to attempt to establish the number of burials present. From the GPR results, it would appear that there are four areas where metal has been encountered at a shallow depth. At these points, all of the radar energy has been reflected, creating dark shadows immediately below the surface of the metal.

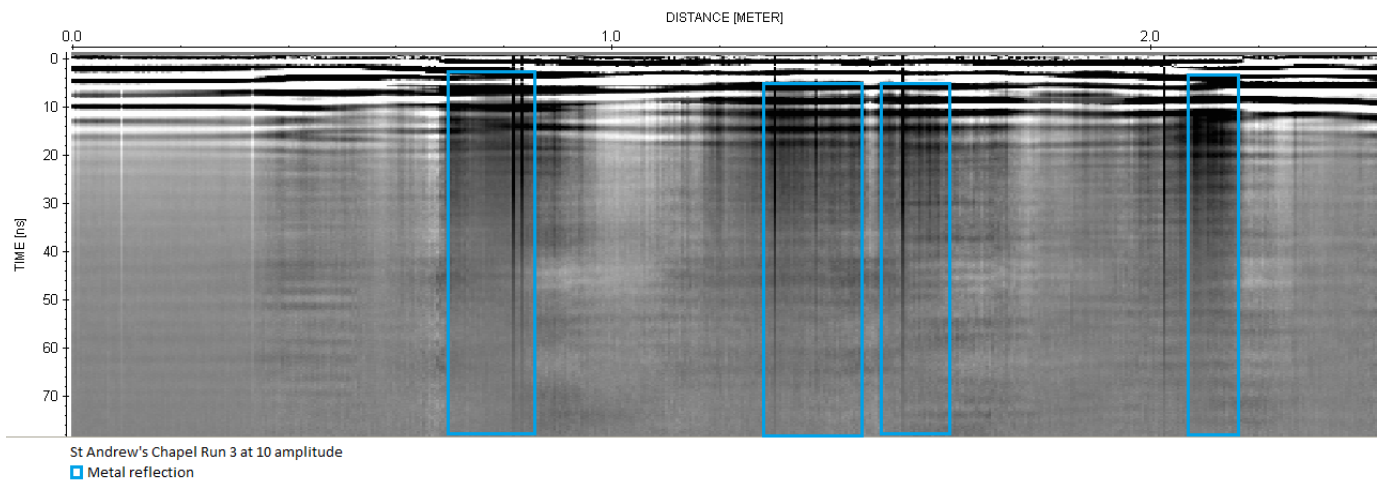


Figure 9: St Andrew’s Chapel Run 3 at 10 amplitude.

**8.2 Resistivity survey**

8.2.1 The results of the resistivity survey (Figure 10) are in keeping with results seen at other graveyards, in that a great deal of ground disturbance was encountered, most clearly seen here at the south-west of the graveyard, and at the south-west exterior of the church. Although the mottled appearance of the survey can be confusing, it does reflect the profusion of graves (white/light grey) and recumbent gravestones or stone features (black/dark grey) within the general area.

8.2.2 The ground disturbance at the south-west church exterior may be partially due to the installation



of services, such as the floodlights, but the similarity in the results from this area and the graveyard south-west corner could indicate that burial has also taken place here.

- 8.2.3 The obvious change in the patterning between the south-west and north-west of the graveyard is due to factors out-with the control of the survey. These areas were surveyed on different days, and overnight rain resulted in differential moisture retention within the soil.
- 8.2.4 A small linear anomaly was recorded on the west side of the church's south door (Anomaly A). This band of slightly higher resistance is about 2.5 m north/south and about 1 m east/west.
- 8.2.5 A small patch of markedly lower resistance (Anomaly B) measures about 1 m north/south by about 0.5 m east/west, and is likely to be a grave-cut.
- 8.2.6 An area of higher resistance (Anomaly C) is located on the north side of the church, and measures about 3 m east/west by about 1.5 m north/south.
- 8.2.7 Higher resistance around the church exterior is due to stone foundations and/or the cobbled walkway.

### **Trial trenches** (*Figures 11 and 12*)

#### **8.3 Trial Trench 1** (*1.2m by 1.2m by 0.3m*)

- 8.3.1 This trench was located at the south-west corner of the church where there was thought to have been a side chapel or aisle similar to St Mary's Ailse on the north-west corner. The trench was positioned at the edge of the cobblestone paved area that surrounds the walls of the church for a distance of approximately 1m. Once the turf was removed all excavation was by trowel and all the soil was sieved on site for the recovery of artefacts. As the topsoil was removed in thin spits modern artefacts including clear window glass was recovered. As the excavation became deeper more artefacts were recovered including fragments of lead both from the roof and from stain glass windows as well as one or two small sherds of medieval pottery. Fragments of disarticulated human bones were found within the topsoil which had presumably originated from a nearby grave that had been disturbed possibly during the various renovations to the church. These fragments were kept and replaced in the trench when the trench was recorded and backfilled. An orange/brown subsoil was revealed at a depth of approximately 0.3m but there was no evidence to suggest graves were located within the trench. In the centre of the trench there was a small groups of flat stones or masonry 0.6m by 0.4m in size that appeared to be at an angle, these may be the remains of wall foundations or possibly a floor surface. Excavation stopped at this level and the trench was backfilled.

#### **8.4 Trial Trench 2** (*1.4m by 1m by 0.5m*)

- 8.4.1 This trench was located to the west of the central crossing by the south door to the church at the location of the now demolished Bowye's Ailse and was again located next to the cobblestone paving. This trench was initially 1m by 1m but was extended to 1.4m east-west due to the presence of a plastic drain pipe that ran diagonally through the trench. Although the pipe was broken in places it was not removed as the pipe seemed to be in line with the nearby floodlights and may have contained the cable to the lights. As the excavation continued the garden soil below the turf was replaced by a mixed layer of light brown silt, stones as well as modern bricks. This material was sieved a similar group of artefacts were recovered, fragments of clear window glass, oyster shells, iron nails and pieces of lead. Several sherds of medieval pottery including a strap handle from a jug were also recovered. As this material was removed more disarticulated bone fragments were recovered including vertebrae and rib fragments. At a depth of 0.5m from ground level a long thin stone slab was uncovered that was aligned east/west parallel with the wall of the church. This stone may be a slab set vertically in the ground and could be part of a grave or building, a small patch of clean sand was also notice on the north side of the slab. At this level three or four fragments from long bones were visible in the north section of the trench again suggesting that a grave had been disturbed in this area during building work to the church. Excavation stopped at this point and the disarticulated bones were re-placed in the trench and the trench backfilled.



Figure 10: Annotated resistivity results.



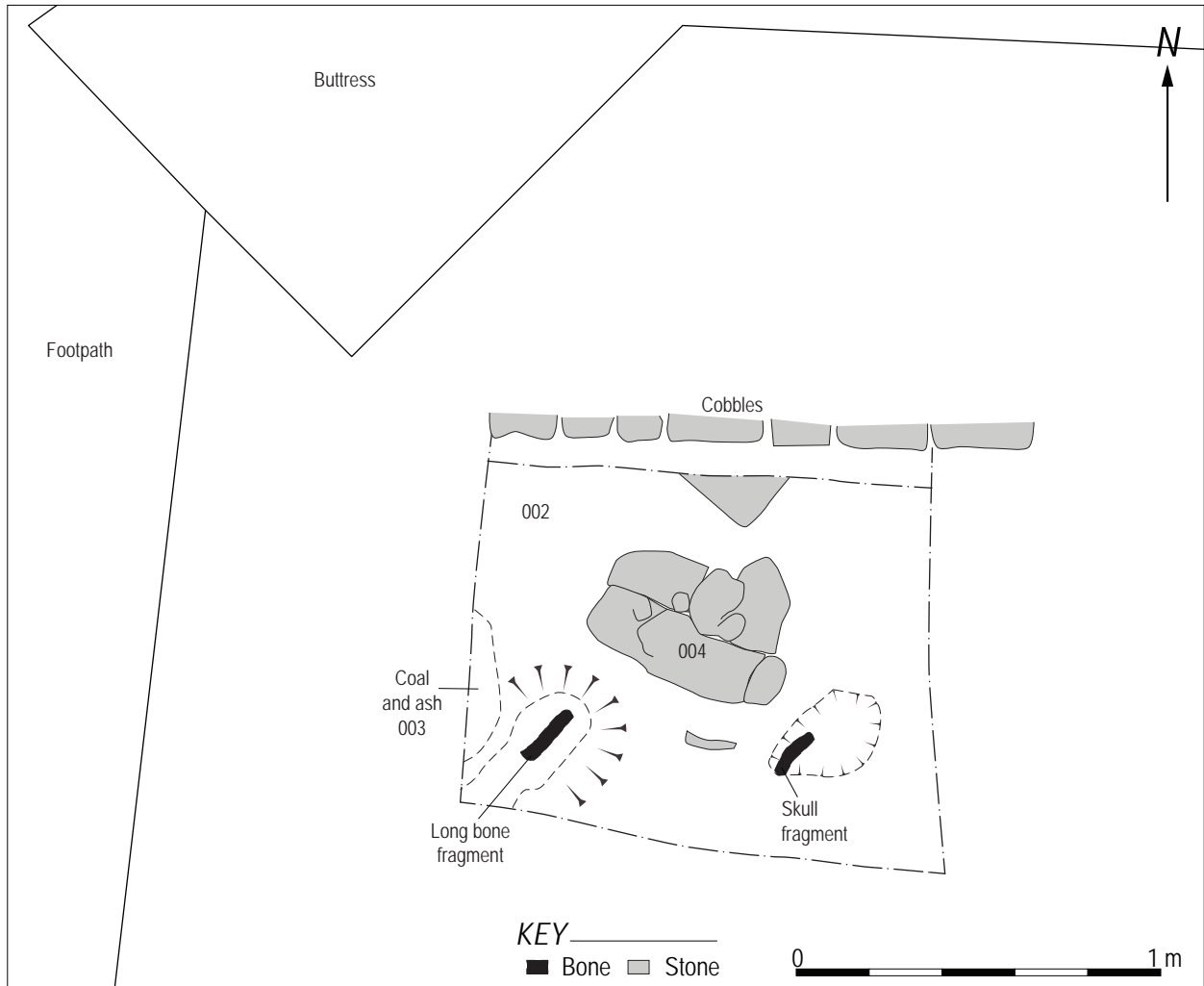


Figure 11: Plan of trench 1.

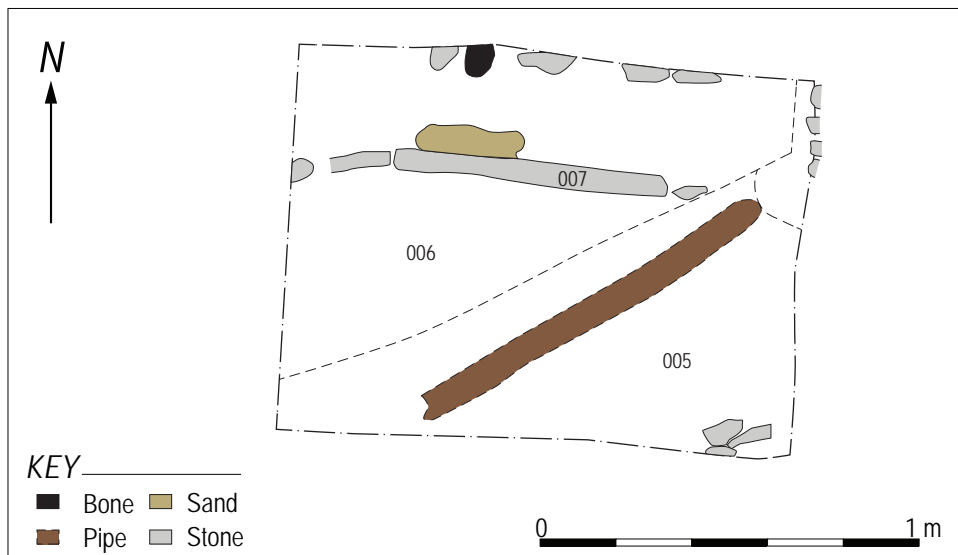


Figure 12: Plan of trench 2.

## 8.5 Artefacts

8.5.1 A number of artefacts were recovered during the investigations from both within the trenches and by metal-detecting and cover a wide date range from the medieval to modern periods. These included 10 sherds of medieval pottery including a strap handle from a jug, fragments of window lead and lead strips possibly from the roof. Iron nails were also recovered including one

with a fragment of wood attached to it may be from a coffin and another larger nail. A fragment of a small lead oval which may be part of a seal was also recovered but this still has to be fully investigated.

## Discussion

### 9.1 GPR Survey

9.1.1 In general, the GPR survey recorded three types of features that can be characterised as metal reflections, buried objects/features and potential voids. The most numerous of these are the metal reflections, the overwhelming majority of which are likely to represent sub-floor service pipes for heating, drainage etc. However, the four metal objects encountered very close to ground surface in St Andrews's Chapel are most probably lead coffins. Lead coffins are believed to slow the rate of decomposition and have a role in maintaining public health. The prohibitive cost of a lead coffin would have been beyond the means of most of the population, and is an indication that the burials in St Andrew's Chapel are probably those of wealthy, high-status individuals.

9.1.2 Buried objects or features, characterised by hyperbolae, were recorded at the west end of the driveway, the east end of the north nave aisle and the south end of the transept. None of the hyperbolae is particularly large, and those in the north nave aisle and transept were noted on only one or two of the GPR radargrams. The hyperbola located on the driveway may indicate the presence of a sub-surface linear feature, and this could potentially be related to Anomaly A recorded by the resistivity survey.

9.1.3 Potential voids were recorded within the south choir aisle at the extreme east and west of the area, and between 7.2 m and 9 m from the survey start point at the west of the aisle. The nature of these possible void area cannot be established without intrusive investigation.

### 9.2 Resistivity survey

9.2.1 The resistivity survey recorded three anomalies that could indicate the presence of sub-surface features. The interpretations of the anomalies is based on their morphology, and on comparison with similar features known from other sites.

9.2.2 Anomaly A is located close to the south exterior wall of the church, and this area of higher resistance suggests the presence of stone or a stone-filled cut. Its linear appearance, and dimensions could indicate that this is a buried wall, and its proximal relationship with the church may suggest an earlier phase of construction.

9.2.3 The low resistance associated with Anomaly B is most indicative of a cut feature, where more moisture has been retained in the soil, relative to the surrounding area. While the most obvious explanation for this is a grave cut, the length of the anomaly is rather less that would be expected for an inhumation. This anomaly could be the grave of a child.

9.2.4 Anomaly C is an area of higher resistance which is irregularly shaped. While this may have been caused by sub-surface stone, such as a recumbent grave-stones, it may also indicate an intrusion of bedrock.

### 9.3 Trial trenches

9.3.1 During the course of the investigations features of archaeological interest were noted in both of the trial trenches. While no graves were uncovered the presence of disarticulated bone fragments at a relatively shallow depth would suggest that graves had been disturbed at some point during building work to the church. In both trenches structural remains were uncovered that may be part of an earlier church or side chapel although the stone slab in trench 2 is more likely to be part of a burial vault within a now demolished side chapel.

## Community and Volunteer Involvement

- 10.1 During the two days on site there were opportunities for volunteers to take part in the investigations. Friday started with an introduction to the 18 or so volunteers who had turned up as a result of earlier publicity about the project. The introduction covered the various aspects that would be undertaken during the course of the project with a particular emphasis on geophysical survey. Once this was completed the volunteers were divided into groups to help with metal-detecting and excavation of the two small trial trenches.
- 10.2 On Friday a school party consisting of 27 children and teachers from St Ninian's Primary School joined in for over three hours and took part in metal detecting and excavation within the trial trenches under supervision from experienced volunteers and GUARD Archaeology staff. In the afternoon there was also a visit from Riverside Primary School who were given a guided tour of the investigations.
- 10.3 Saturday started with a guided tour of the cemetery by Murray Cook followed by a tour of the interior of the church by Brian Morrison, both tours were very well attended. Several volunteers came both days and included complete beginners who had never been on an excavation before and people with more experience, all were given the opportunity to learn new skills on site and to develop their existing skills and expertise.

## Conclusions

- 11.1 The geophysical surveys revealed three potential features, two were located within the graveyard and probably relate to graves and should not be investigated further. The possible presence of a wall on the south exterior of the church (Anomaly A) could be further investigated by excavating a small test pit at the location of the anomaly. The GPR survey within the church did identify anomalies which would necessitate intrusive techniques, which may not be appropriate within a functioning church.

## Trial trenches

- 11.2 The trial trenches revealed that possible structural remains did survive in both locations on the south side of the church and could be the remains of side chapels/aisles or burial lairs that were demolished during the various phases of renovation. Although fragments of disarticulated human bone were recovered there was no evidence for graves in trench 1 but in trench 2 there may be undisturbed graves associated with Bowye's Aisle surviving at greater depth.
- 11.3 A summary of the results of the geophysics survey will be submitted to Discovery and Excavation in Scotland. A copy of the summary is included in Appendix C. The archive for the project, including a copy of the report, will be submitted to the National Monuments Record for Scotland within six months.
- 11.4 The online OASIS form at <http://ads.ahds.ac.uk/project/oasis/> (OASIS Reference: guardarc1-213275) has been completed, and awaits up-loading of the Data Structure Report. Once the Data Structure Report has become a public document by submission or incorporation into the local Sites and Monuments Record, the Stirling Council Archaeology Officer will validate the OASIS form thus placing the information into the public domain in the OASIS website

## Acknowledgements

- 12.1 GUARD Archaeology would like to thank Brian Morrison from the Friends of Holy Rude, Ian White the parish Session Clerk and Murray Cook the Stirling Council Archaeologist for their help and assistance. We would also like to thank John Malcolm for his much appreciated assistance with the geophysical survey. Fiona Jackson carried out the Total Station survey of the church interior, and produced the illustrations. Technical support was from Clark Innes and Aileen Maule. The report was desk top published by Gillian McSwan, and the project was managed for GUARD Archaeology Limited by Bob Will.

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**Section 2: Appendices**



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## Appendices

### Appendix A: References

#### Bibliographic Sources

Conyers, LB & Goodman, D 1997 *Ground-Penetrating Radar: An Introduction for Archaeologists*. London: AltMira Press.

Cuenca-García, C & Jones, R 2012 *A GPR Survey at Paisley Abbey Drain*. University of Glasgow unpublished report.

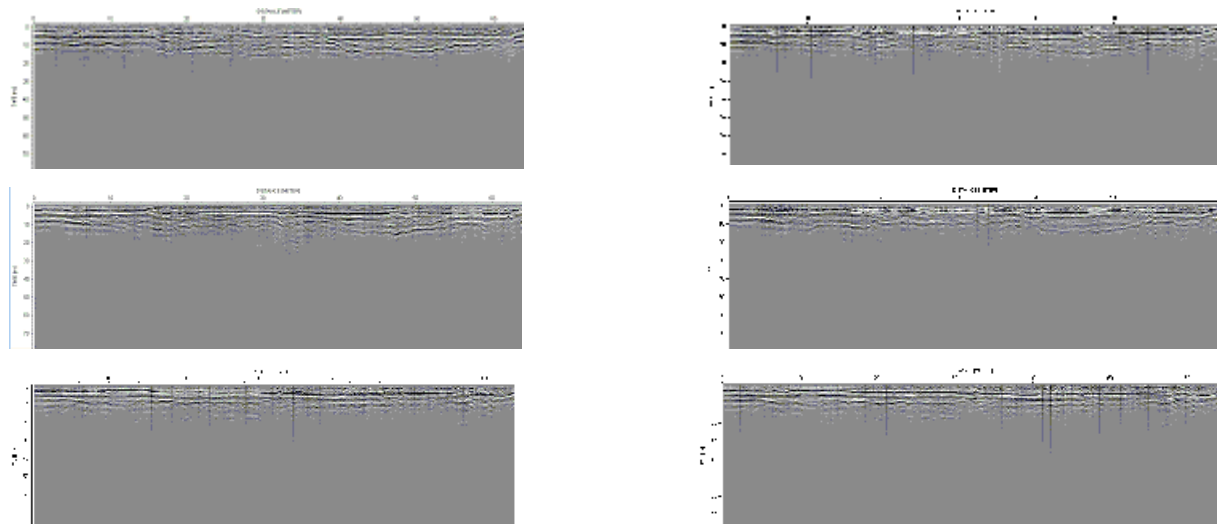
#### Cartographic Sources

British Geological Survey 1974 *Stirling S & D*. 1:50,000 map series.

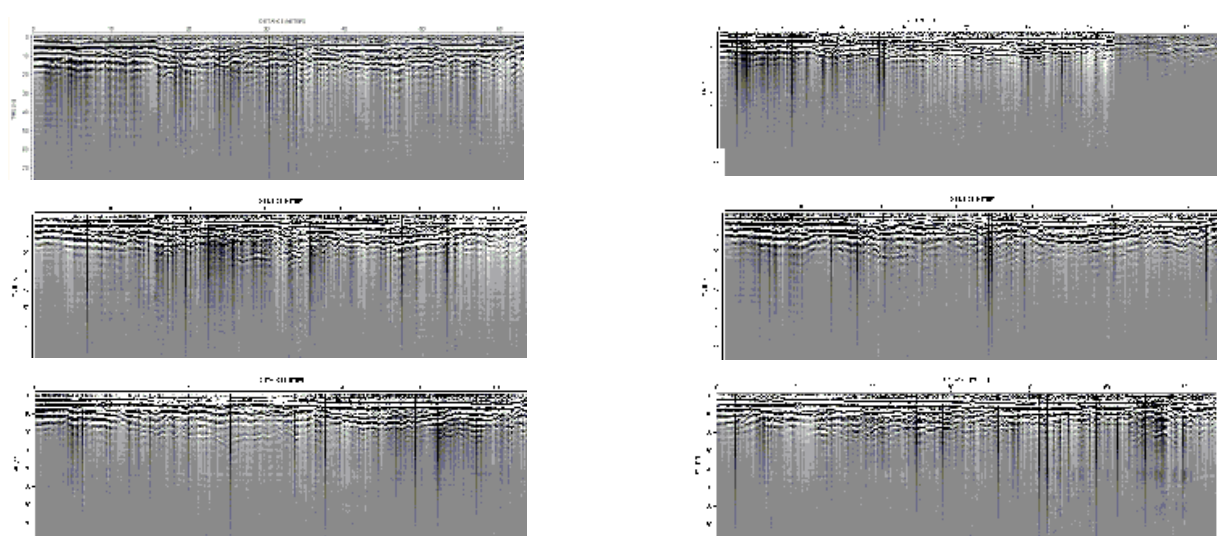
### Appendix B: Geophysical Survey Raw Data

#### GPR Data

##### Driveway at 1 amplitude

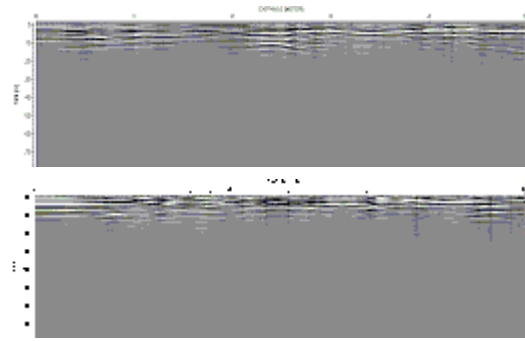
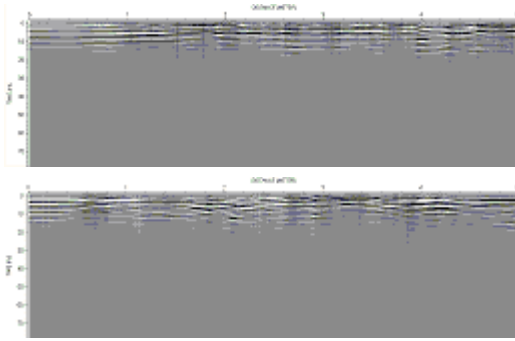


##### Driveway at 10 amplitude

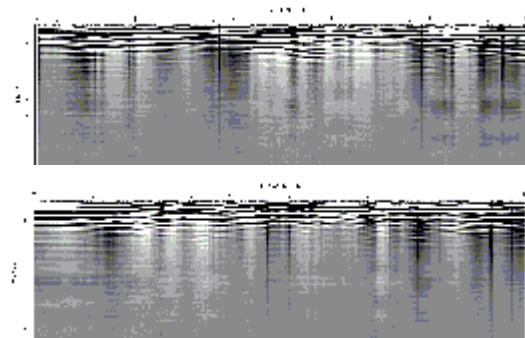
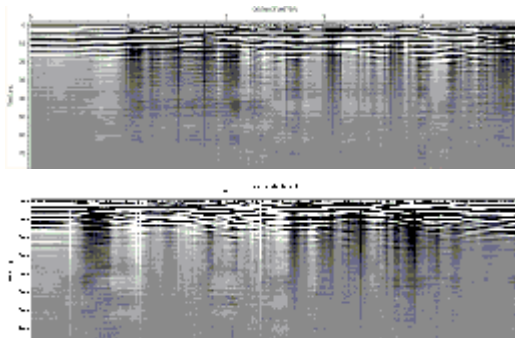




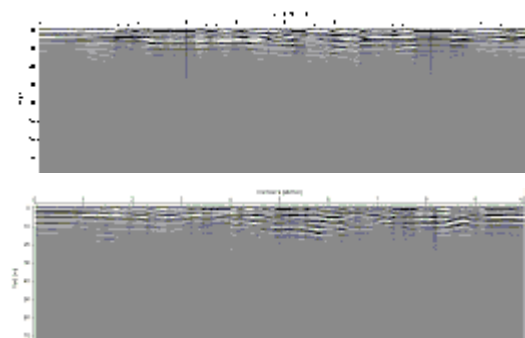
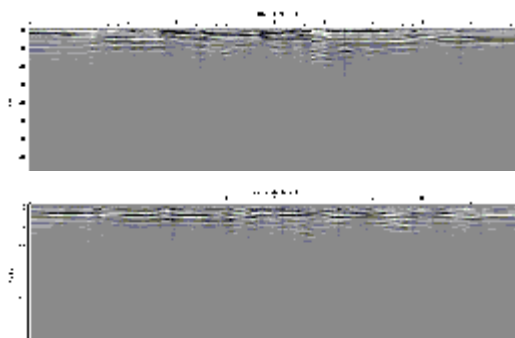
North-east exterior area at 1 amplitude



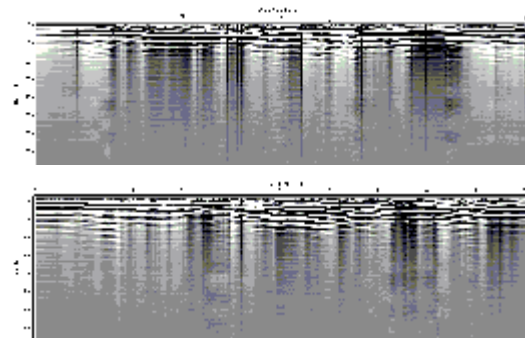
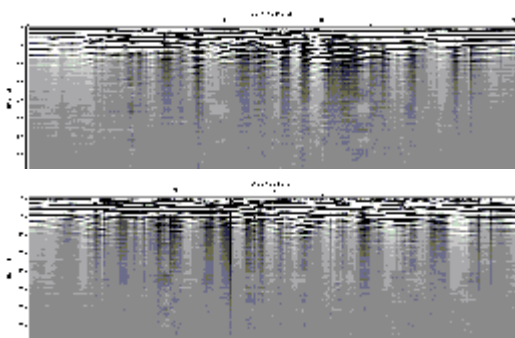
North-east exterior area at 10 amplitude

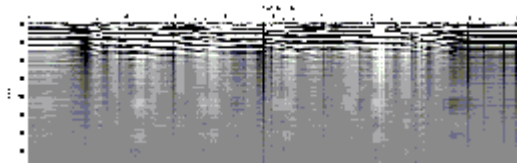


North-west exterior at 1 amplitude

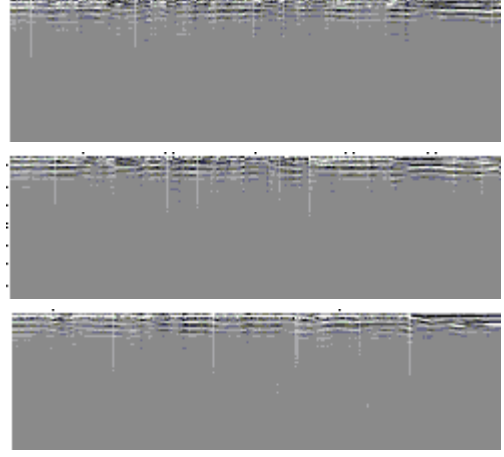
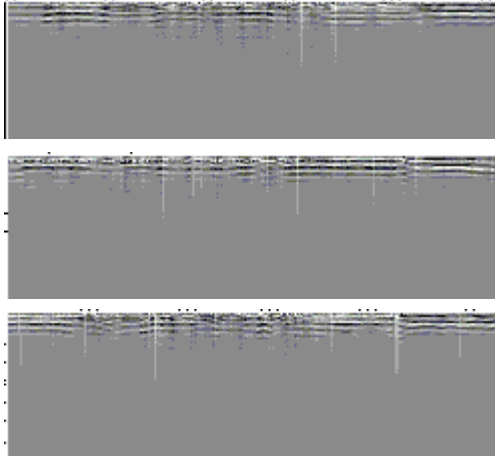


North-west exterior at 10 amplitude

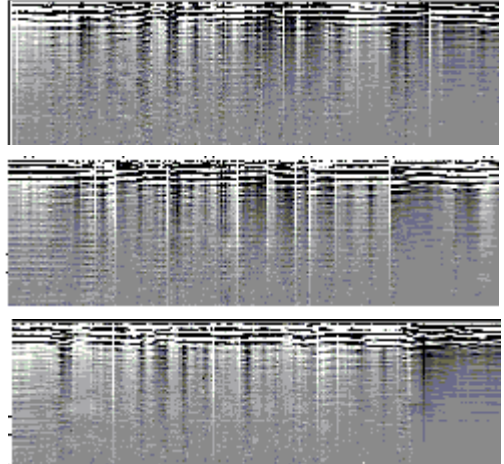
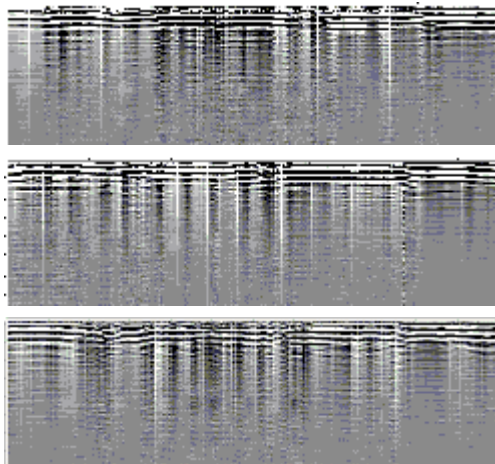




South Nave Aisle at 1 amplitude



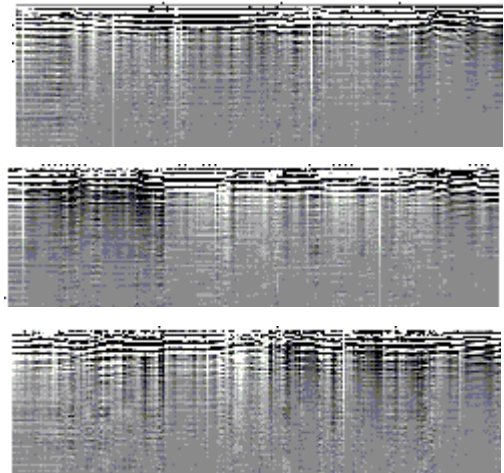
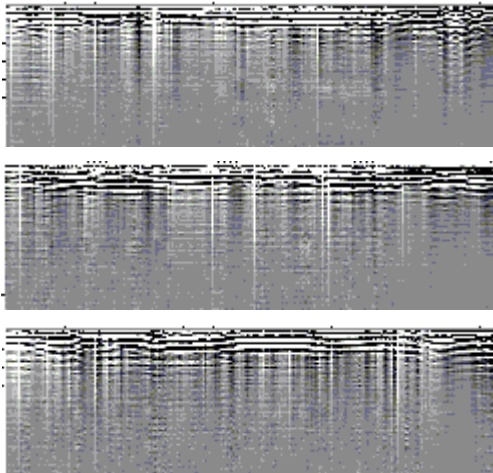
South Nave Aisle at 10 amplitude



North Nave Aisle at 1 amplitude



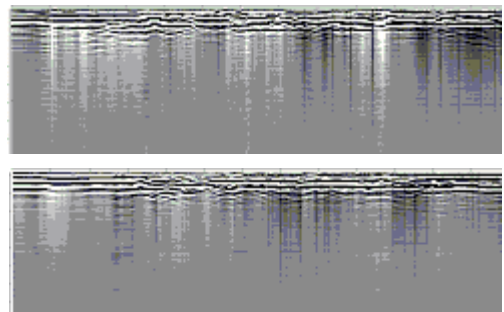
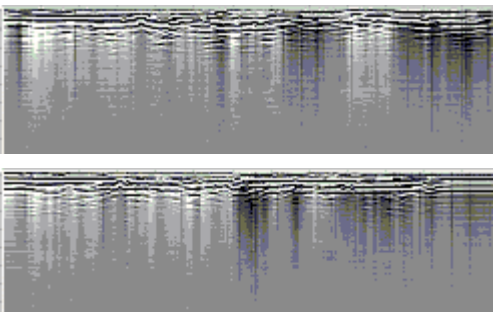
North Nave Aisle at 10 amplitude



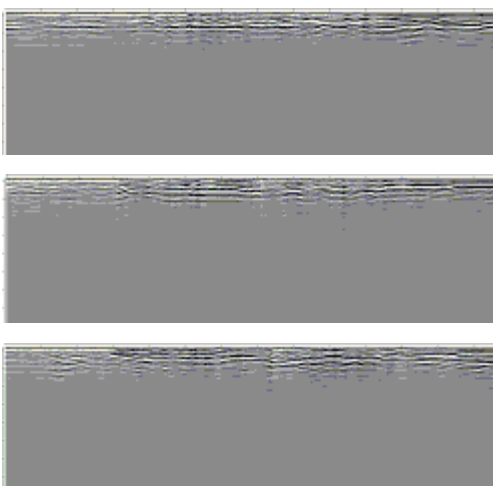
South Choir Aisle at 1 amplitude



South Choir Aisle at 10 amplitude

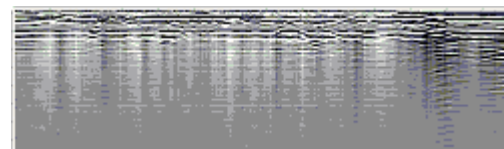
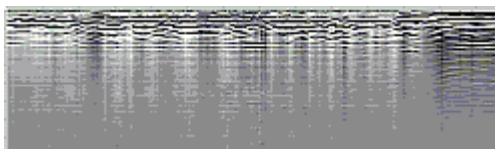
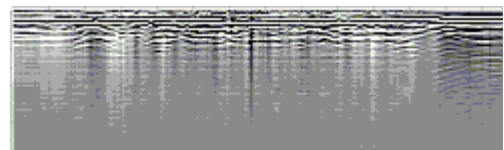
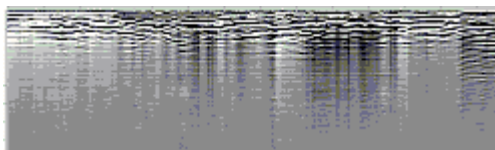
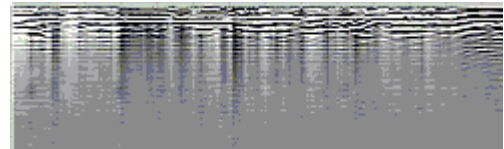
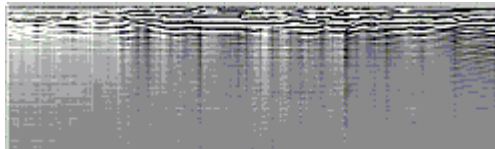
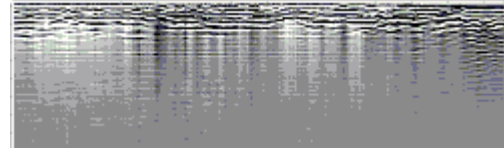
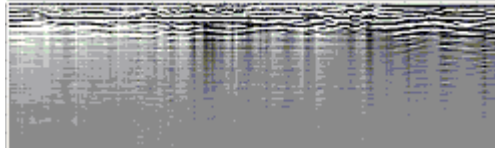


Transept at 1 amplitude

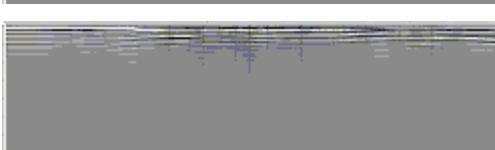
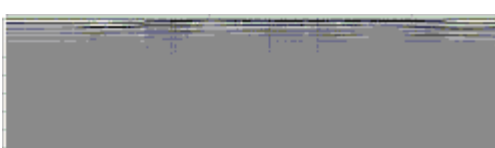
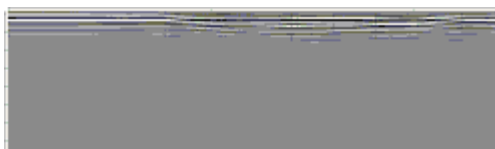




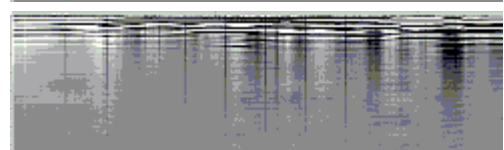
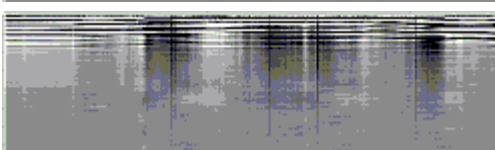
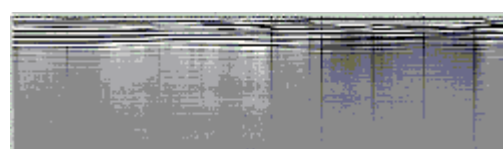
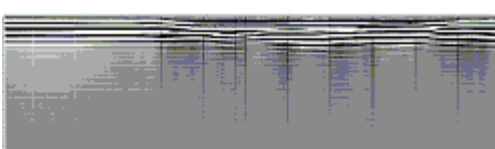
Transept at 10 amplitude

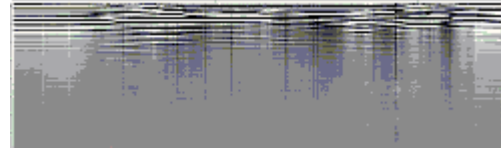
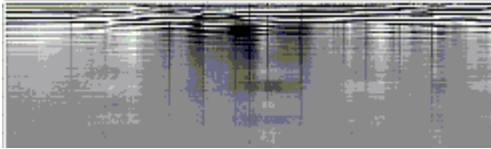


St Andrew's Chapel at 1 amplitude



St Andrew's Chapel at 10 amplitude





### Appendix C: DES

LOCAL AUTHORITY:	Stirling Council
PROJECT TITLE/SITE NAME:	The Church of the Holy Rude, Stirling
PROJECT CODE:	3871
PARISH:	Stirling
NAME OF CONTRIBUTOR(S):	Bob Will & Christine Rennie
NAME OF ORGANISATION:	GUARD Archaeology Ltd
TYPE(S) OF PROJECT:	Archaeological geophysical survey and trial trenching
NMRS NO(S):	NS79SE 39
SITE/MONUMENT TYPE(S):	Medieval parish church
SIGNIFICANT FINDS:	NONE
NGR (2 letters, 6 figures)	NS 79206 93710
START DATE (this season)	27 <sup>h</sup> March 2015
END DATE (this season)	28 <sup>th</sup> March 2015
PREVIOUS WORK (incl. DES ref.)	--
MAIN (NARRATIVE) DESCRIPTION: (May include information from other fields)	Geophysical surveys consisting of resistivity and GPR along with limited trial trenching were carried out in and around the Church of the Holy Rude in Stirling with the help of local volunteers. The geophysical surveys recorded two linear features at the exterior of the church, four potential burials within the church and what appear to be three voids in the south choir aisle. The trial trench excavation on the south side of the church uncovered the possible remains of a side chapel in trench 1 and a possible burial vault in trench 2 along with a range of artefacts that included medieval pottery and window lead.
PROPOSED FUTURE WORK:	Unknown
SPONSOR OR FUNDING BODY:	Friends of Holy Rude
CAPTION(S) FOR ILLUSTRS:	--
ADDRESS OF MAIN CONTRIBUTOR:	GUARD Archaeology Ltd, 52 Elderpark Workspace, 100 Elderpark Street, Glasgow, G51 3TRG
EMAIL ADDRESS:	Bob.Will@guard-archaeology.co.uk
ARCHIVE LOCATION (intended/deposited)	NMRS



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**Fax: 0141 445 3222**

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