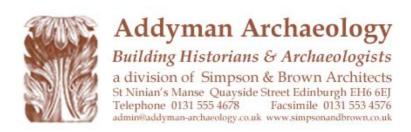
Steeple Church, Dundee

Archaeological Evaluation: May 2011 Data Structure Report

for

Church of Scotland



Steeple Church, City of Dundee

Archaeological Evaluation: May 2011

Data Structure Report

(project AA. 0465)

by Ross Cameron

Edited by Tom Addyman

Contents

Executive Summary

- 1. Introduction
 - i. General
 - ii. Setting
- 2. Historical summary
- 3. Methodology
- 4. Evaluation results
 - i. Trial Pit 2
 - ii. Boiler room
- 5. Finds assessment Human bone (Dave Henderson)
 - i. Material recovered
 - ii. Pathology
- 6. Summary and discussion
- 7. Mitigation and recommendations

Bibliography

Appendices

Appendix A – Context Register

Appendix B – Photographic Register

Appendix C – Drawing Register

Appendix D – Finds Register

The Steeple Church, *City of Dundee*

Archaeological Evaluation: 10th May 2011

Executive Summary

As a division of Simpson and Brown Architects, Addyman Archaeology were contacted to undertake recording and recovery of a significant quantity of human remains encountered during work in the Steeple Church in Dundee. The Church is being renovated with the area of worship re-aligned on a W-E axis. As part of this process, a number of small offices are to be removed and the interior opened up. In advance of this development, two engineering test pits were excavated – it was in the second of these that two articulated skeletons were encountered. In addition to the remains recovered from in and around the test pit, work undertaken previously in the area of the boiler room had revealed a large quantity of human bones. These were collected and the area of the boiler room assessed.

The quantity of human material recovered from the single small trial pit available for inspection and retrieved from the boiler room was significant and requires further mitigation. It is recommended that those inhumations disturbed by the contractors are exhumed in line with Historic Scotland guidelines, whilst a detailed assessment is undertaken of the significant volume of spoil in the boiler room in order to retrieve the disturbed human remains.

Furthermore Addyman Archaeology strongly recommends an archaeological presence is maintained for all future ground-breaking works within the Church.

1. Introduction

i. General

Simpson and Brown Architects were commissioned to undertake renovations of the Steeple Church in the centre of Dundee. This work involves the realignment of the area of worship and the removal of a number of small offices and store rooms that currently lie at the E end of the Nave.

The Steeple Church has a long and complex history and remains a site of historical, architectural and spiritual interest. Founded c.1198, parts of the current edifice date from the 15th century to the present day and archaeological excavations have shown the area around the Church to have contained a medieval cemetery.

Located within a working church, the site has an ecclesiastical exemption from planning legislation.

In advance of the structural works and insertion of new foundations, two trial pits were excavated by contractors. During these excavations a large quantity of human bones were removed from the interior of Trial Pit 2 (see Figure 2) and stored in a plastic bag. As the density of bones increased, excavation was halted and the discovery subsequently reported to the Police and Dundee City Council. The Archaeology Service for Dundee City Council is provided by Rathmell Archaeology Ltd., and Rathmell were informed of the developments (contact Thomas Rees).

As a division of Simpson and Brown Architects, Addyman Archaeology were commissioned to attend site and assess the remains and extent of mitigation required. This preliminary fieldwork was undertaken on the 10th May 2011 and all site works were carried out by Ross Cameron.

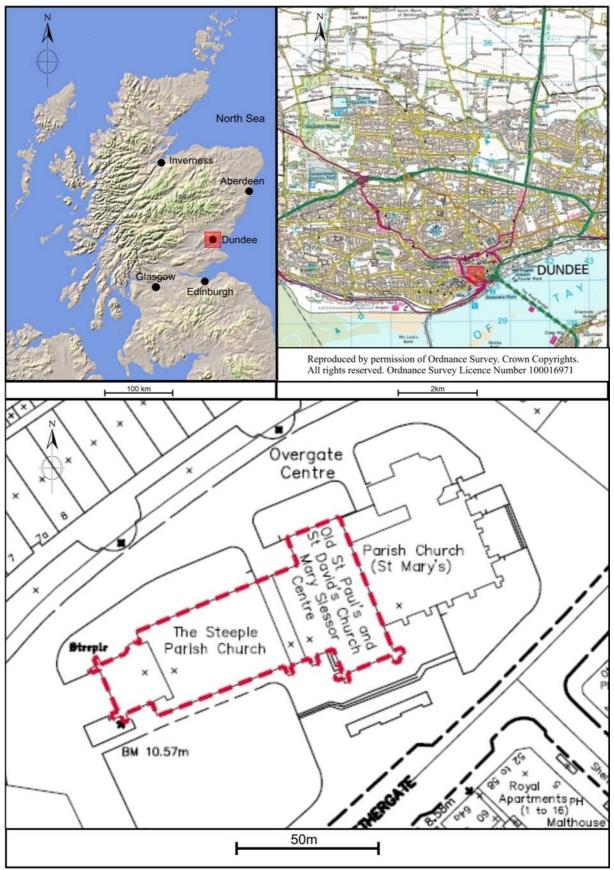
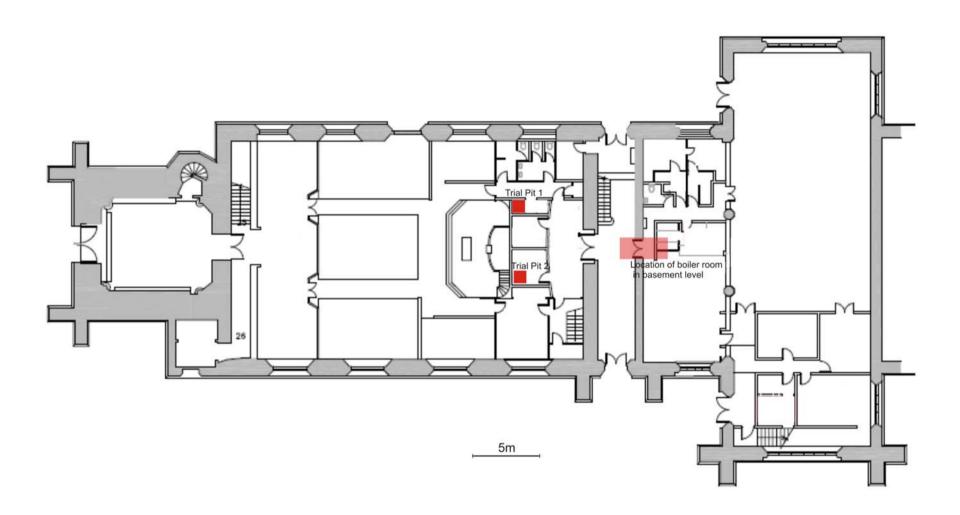


Figure 1: Site Location



ii. Setting

The Steeple Church is located in the heart of historic Dundee, bordered to the S by the Nethergate and to the N by the Overgate Shopping Centre – site of the street known as the Overgate (see Figure 1). The site is centred on NO 40136 30121.

Trial Pit 2 was excavated within a room known in the Church as 'The Counting House' (see Figure 2). This room measures roughly $3m^2$ and is part of a complex of small offices and storerooms constructed in the E end of the Nave at some point in the 1960s.

The Boiler Room lay in the basement of the Church, in a very cramped, dimly lit and confined space between the sleeper walls and foundations of the church.

The underlying bedrock geology is midland valley siluro-devonian mafic intrusion suite-porphyritic microdiorite, with superficial raised marine deposits, devensian clay silt and gravel. Immediately S of the site the superficial geology consists of reclaimed intertidal deposits of silt and clay.¹

2. Historical summary

The geological makeup of the area suggests that the site was initially coastal, with much of the area to the S consisting of reclaimed land.

The Church of St. Mary's was reputedly founded by David, Earl of Huntingdon in 1198 to celebrate his safe arrival in Dundee by sea. None of the physical fabric of this church remains and the history of the early foundation is obscure due to destructive incursions by the English in both the 14th and 16th centuries. The earliest surviving fragment of the medieval church is the magnificent medieval Steeple Tower, dating to around 1462.

Tradition dictates that the area around the Church was never used as a cemetery and that any human remains encountered related to the massacre of the populace by General Monck in 1651. This is known to have taken place in the grounds of St. Mary's. However excavation undertaken from 1992-93 revealed the existence of an extensive graveyard around the S and W of the Church. This was accepted as having come into usage between 1191 and 1450, being replaced by the graveyard known as the Howff in 1564. Despite continued occupation of the site as a place of worship, no burials are likely to have taken place after this date. ²

3. Methodology

With only one day on site, it was important to collate as much information as possible relating to the inhumations as well as gathering and recording the significant quantity of human bones recovered by the Church and contractor deriving from the latter's excavations.

The contractor had gathered a large amount of human bone in a plastic bag and kept it adjacent to the trench. These were initially assessed in order to provide an indication of the number and type of inhumations within the trench, and recorded roughly according to type. There followed a detailed search of the spoil from the Trial Pit, from which a further bag of small – medium bone fragments were recovered. Trial Pit 2 itself was c.0.45m deep, but a void of c.0.40m existed between the ground surface and the timber floorboards. This area too was filled with a spread of spoil and re-deposited

_

¹ http://www.bgs.ac.uk/opengeoscience/

² SUAT City Churches, Dundee – Grey Literature Report

human bone. This material was carefully collated and recorded separately from that in the bag in case it represented surface spreads or depositions from earlier work and had not originated within the Trial Pit. Further human bone was subsequently recorded from the base and loose deposits on the sections of the cut.



Plate 1: Site as left by contractors

All four sections of the pit were carefully cleaned and drawn at a scale of 1:10 – see *Appendix D*. Archaeological deposits noted were recorded on Addyman Archaeology *pro forma* record sheets and to Institute for Archaeologists (IfA) and Addyman Archaeology recording standards.

Work in the boiler room had been undertaken some weeks ago, and the Church had collected a large number of human long bones. These were similarly recorded and a brief search was conducted of a large spoil heap within the boiler room, producing a further quantity of human bones.

In both rooms a detailed photographic record was taken by digital camera.

4. Evaluation results

Trial Pit 1 had previously been excavated and reinstated by the contractor on site. The floorboards had been replaced and a sink reinstated on top precluding any inspection of the interior. The degree of human remains encountered within Trial Pit 2 and the Boiler Room mean that there is a high probability that charnel, if not inhumations could also be located within Trial Pit 1.

i. Trial Pit 2

Trial Pit 2 revealed evidence for at least two disturbed inhumations, with a possible third and a further grave discernable in the NW corner of the trench.

The soil deposits were incredibly firm and dry, proving very difficult to work. The contractors had excavated the pit with a pinch bar, causing a great degree of damage to the bones recovered. Cleaning of the sections showed a number of different contexts to exist, but did not reveal clear grave cuts.

The uppermost deposit (001) was a modern levelling or working surface of fractured grey, angular stones and concrete set within a fine grey silt powder. Within and atop this deposit lay a quantity of

human detritus associated with works in the church. The S end of the trench showed the existence of (002), a much looser deposit of mixed light grey brown gritty sandy silt with frequent small stone inclusions. This lay within [005], a modern intrusion with sharp sides. These are in all likelihood related to the brick sleeper walls and piers nearby and of no real archaeological interest.



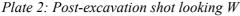




Plate 3: Post-excavation shot looking W – after cleaning and removal of loose bone fragments

(003) is the first significant archaeological deposit encountered, although the frequency of bone and lack of obvious grave cuts make it difficult to discuss this with any certainty. It is clear that an adult inhumation lay roughly W-E across the trench, and the torso was removed by the contractor. The bones visible at the limit of excavation in the trench are clearly a pelvis, sacrum, top of a femur and broken radius – plate 4. The bottom half of this individual stretches E beneath the baulk.



Plate 4: Truncated pelvis in section

(003) also contains a significant degree of other human material, with an older female inhumation located immediately S and above the pelvis described above. It is difficult to ascertain from the section what these remains represent, but the size of the protruding long bones and material recovered from within the plastic bag would indicate a small *in situ* inhumation.

Parts of a human skull (both a fragment of cranium and mandible) are visible within (003) in the S facing section, although it is unclear if these represent charnel or an *in situ* burial (see *plate* 5).



Plate 5: Human skull fragments in S facing section of Trial Pit 2 – note the clear marks made by the pinch bar, breaking the mandible

In the NW corner of the trench, an area of softer material along with a concentration of degraded iron nails and fragments of wood indicates the existence of a further inhumation running roughly W-E in the base of the Trial Pit. The feel of the soil was different and had a more hollow sound to it across the W edge of the trench, suggesting this inhumation perhaps continued along this edge although no obvious differences in the soil was discernable.

This mixed deposit may in actual fact be more than one context, but this could not be stated with any accuracy with the information available. A possible cut [006] was noted in the W facing section, running steeply to the limit of excavation. [006] is taken as the cut for (003) as the material to the S (004) was marginally different in appearance and can plausibly be accepted as undisturbed natural. (004) consisted of very firmly compact light brown clay.

ii. Boiler Room

Prior to the site visit, work had been undertaken in the basement of the Church removing and replacing a boiler. It was noted by the Church that a number of long bones had been recovered in this area and as a result it was decided to investigate and photograph this room, retrieving the bones and any others that may be visible.





Plate 6: Mound of earth in boiler room

Plate 7: Bones recovered by Church staff from boiler room

The boiler room itself is very cramped and claustrophobic with very poor lighting. Immediately upon inspection it became apparent there were a large number of human bones spread atop a large mound of earth at the W end of an area divided by two sleeper walls. These were recorded and a brief search of the mixed spoil heap revealed a further small to large human bones.

5. Finds assessment – Human bone (David Henderson)

A quantity of human bone was disinterred during groundworks at two places within the building. As neither of these disturbances were conducted under archaeological supervision or recording, it is possible to gather only limited information from the remains. The assemblage of skeletal material from the two areas of disturbance may be treated separately; Test Pit 2 and the pipe-run dug within the Boiler Room area are separated by some distance, so it is unlikely that bones from the same individual would be present in both samples.

i. Material Recovered

The Test Pit 2 assemblage is derived from a more constrained area; archaeological recording, carried out after the fact of the groundworks, indicated the possibility that at least two *in situ* inhumations had been partially disinterred, as well as a quantity of non-articulated bone overlying the inhumations in the backfill of the graves. This interpretation is consistent with analysis of the material collected from the Test Pit; a minimum of three adult and one young juvenile (about 10 years old, represented by a partial mandible) were represented in the assemblage. Two partial skulls were recovered: Skull A was substantially complete with a matching mandible, deriving from a young adult male. Parts of matching left and right arms and a left fragment of male pelvis may also derive from this individual.

Skull B was from an older female (probably over 45 years of age), the frontal bone, facial skeleton and mandible were not recovered (parts of a skull still in the side of the Test Pit, seen in photographs, possibly represent this missing material). Some gracile post-cranial bones, deriving from all parts of the skeleton to the knees and with indications of osteoarthritis and osteoporosis, are consistent with deriving from this skeleton.

The Boiler Room assemblage is from a less clearly defined area, and it is unclear to what extent the material derives from *in situ* burials. A minimum of six individuals are represented (based on the number of right femurs recovered). Most of the skeletal material is from the lower parts of the skeleton (pelvis, femurs and tibiae) suggesting that the groundworks have disturbed a row of burials (although the preponderance of these large bones may indicate recovery bias, due to non-archaeological

excavation. At least three sets of matching left and right bones were present, and articulating knees and hips were also represented, further suggesting disturbance of graves. All three partial right pelvises recovered were male adults, along with a left pelvis fragment from an immature individual of indeterminate sex.

ii. Pathology

On an initial quick count of the assemblage, some pathology was noted on the bones. Skull B, the female from Test Pit 2, showed a well healed depressed fracture of the left parietal bone, indicating a severe blow to the top of the head, just left of the midline.

The other bones possibly deriving from this individual, also displayed osteoarthritis at the right elbow and in the spine. Skull A had large abscesses in both the upper and lower jaws at the first molars.

Perhaps of most interest, one individual from the Boiler Room material, represented by two femurs, part of the right tibia and perhaps one of the pelvis bones, showed the short, bowed bone-shafts and normal-sized bone ends typical of achondroplasia, the most common form of congenital dwarfism. Both knees also showed severe arthritic changes, common in the condition.



Plate 8: Achondroplastic femurs, with normal left femur (lacking head) for comparison

6. Summary and discussion

The evidence from the small amount of excavation undertaken within the Church points to a large quantity of inhumations and charnel material surviving beneath the present Church building, this not surprising within a pre-Reformation Scottish church site. The site is an important one historically and excavation undertaken nearby has shown the area to the S of the building to house a medieval cemetery.

Work on this cemetery noted the apparent lack of grave cuts for many of the burials and recorded the existence of a proportionately small number of coffins, apparently much later in the sequence of use.

It is clear from excavations in Trial Pit 2 that one, if not two of the burials present are within coffins. This may indicate either a late place within the chronology of the burials, or indeed higher status inhumations buried nearer to the heart of the historic church.

The bones recovered from the boiler room may represent a number of disturbed skeletons from within the boiler room, although it is equally plausible these bones are re-deposited from earlier work in the Church.

7. Mitigation and recommendations

The discovery of human remains on a site is obviously an important and sensitive issue. Historic Scotland guidelines state:

Where human remains are discovered truncated by excavation i.e. where part of the remains lie outside the excavation trench, in cases where a significant proportion of the remains lie within the trench or the site is threatened with destruction, we would normally expect that the trench would be extended so that the remains can be fully excavated and completely removed.³

Because of ecclesiastical exemption, any work undertaken within the Church can be undertaken free from planning legislation and outwith the jurisdiction of Dundee City Council Archaeology Service and Historic Scotland. However Scots Law protects the disturbance of human remains without permission under the law known as 'Violation of Sepulchures'. Historic Scotland summarise the situation thus:

The essence of the crime is 'the disturbance or attempted disturbance, of human remains without lawful authority, and it is completed when the body is moved from its resting place, however slightly.⁴

No work can be carried out without a Sherriff's Order and in such cases will be undertaken by a qualified professional such as an archaeologist.

All parties are cosignant of church existing above an *in situ* cemetery and any further disturbance of these graves without the specific legal permission and in the correct archaeological conditions will be in continuing violation of Scots Law.

As the torso of the disturbed skeleton had been removed and damaged by the contractor, it is recommended that the rest of this individual be exhumed according to Historic Scotland guidelines. The remainder of the second, smaller skeleton will also be recovered. Care will be taken not to disturb any further inhumations during this process, but this cannot be guaranteed. Further investigation will also be required of the skull fragments visible in the S facing section.

The spoil in the boiler room appears to be charnel-rich and it should be searched and possibly sieved if the quantity of human bone recovered merits this.

The history of the site and the density of human remains recovered indicate that the area beneath the church houses a significant volume of Christian inhumations. It is also possible that unrecorded vaults may exist beneath the current building. It is noted that further foundation work is intended within the church and the installation of a lift is planned. Addyman Archaeology strongly recommends an archaeological presence is maintained for all future ground-breaking works within the Church, and

³ 'The Treatment of Human Remains in Archaeology: Historic Scotland Operational Policy Paper 5', Policy 3.6, Page 14

⁴ *Ibid*, 21

that where significant archaeological levels are identified any further necessary excavation be undertaken under archaeological conditions. Regarding the insertion of the lift, care must be taken by the design team consider all potential disturbances from the planned build on the graves underlying The Steeple Church, clearly this should cover issues of compaction damage as much as physical dislocation of skeletal remains.

Bibliography

Historic Scotland 'The Treatment of Human Remains in Archaeology: Historic Scotland Operational Policy Paper 5'

SUAT City Churches, Dundee – Grey Literature Report

SUAT St. Mary's Church Skeleton Report – Grey Literature Report

Appendix A: Context Register; Dundee Steeple Church – Archaeological Evaluation

Context	Area	Туре	Date	Initial	Description	Comments
001	TP2	Deposit	10/05/11	RC	Fractured grey angular stones and concrete with a fine silty powder	Modern levelling
002	TP2	Deposit	10/05/11	RC	Mixed light grey brown gritty sandy silt with frequent small stone inclusions.	Modern.
003	TP2	Deposit	10/05/11	RC	Grey brown sandy silt	
004	TP2	Deposit	10/05/11	RC	Possible undisturbed natural	
005	TP2	Cut	10/05/11	RC	Cut for (002)	Modern
006	TP2	Cut	10/05/11	RC	Possible cut for (003)	

Appendix B: Photographic Register; Dundee Steeple Church – Archaeological Evaluation

Digital:

Digital.		1	1		_	
Frame	Number	Direction facing	Date	Description	Ву	View
2421	001	W	10/05/11	Pre-excavation shot	RC	L
2422	002	SE	10/05/11	Pre-excavation shot	RC	L
2423	003	-	10/05/11	Pre-excavation shot – collected remains	RC	L
2424	004	V/W	10/05/11	Pre-excavation shot - excavations	RC	L
2425	005	S	10/05/11	Pre-excavation shot	RC	P
2426	006	W	10/05/11	Pre-excavation shot - E facing elevation of trial pit	RC	L
2427	007	S	10/05/11	Pre-excavation shot - N facing elevation of trial pit	RC	L
2428	008	Е	10/05/11	Pre-excavation shot - W facing elevation of trial pit	RC	L
2429	009	N	10/05/11	Pre-excavation shot - S facing elevation of trial pit	RC	P
2430	010	Е	10/05/11	Pre-excavation shot - W facing elevation of trial pit	RC	L
2432	011	N	10/05/11	Pre-excavation shot - S facing elevation of trial pit (E	RC	L
		1	1			

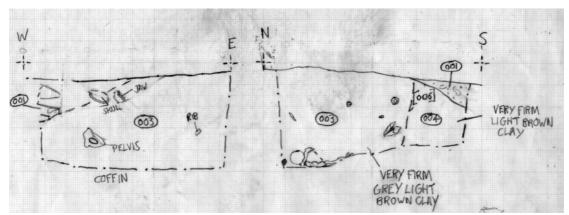
				end)		
2433	012	N	10/05/11	Pre-excavation shot - S facing elevation of trial pit (W end)	RC	L
2434	013	W	10/05/11	Pre-excavation shot - E facing elevation of trial pit	RC	L
2435	014	S	10/05/11	Pre-excavation shot - N facing elevation of trial pit	RC	L
2436	015	S	10/05/11	Pre-excavation shot - N facing elevation of trial pit (E end)	RC	L
2437	016	V/W	10/05/11	Pre-excavation shot	RC	L
2438	017	-	10/05/11	Working shot – charnel retrieved by contractor	RC	L
2439	018	-	10/05/11	Working shot – charnel retrieved by contractor	RC	L
2440	019	NW	10/05/11	Working shot – spoil heap	RC	L
2441	020	W	10/05/11	Working shot – spoil around trial pit (beneath floor)	RC	L
2442	021	W	10/05/11	Working shot – spoil around trial pit (beneath floor)	RC	P
2446	022	W	10/05/11	Working shot – spoil around trial pit (beneath floor)	RC	L
2447	023	W	10/05/11	Working shot – spoil around trial pit (beneath floor)	RC	L
2448	024	S	10/05/11	Working shot – spoil around trial pit (beneath floor)	RC	L
2449	025	Е	10/05/11	Working shot – spoil around trial pit (beneath floor)	RC	L
2450	026	SE	10/05/11	Working shot – excavations	RC	L
2451	027	W	10/05/11	Trial pit – post-cleaning	RC	L
2452	028	V/S	10/05/11	Trial pit – post-cleaning	RC	L
2453	027	W	10/05/11	Trial pit – post-cleaning	RC	L
2455	028	Е	10/05/11	W facing elevation of trial pit post-cleaning (S end)	RC	L
2456	029	Е	10/05/11	W facing elevation of trial pit post-cleaning (N end)	RC	L
2457	030	NE	10/05/11	W facing elevation of trial pit – oblique	RC	L
2458	031	Е	10/05/11	Articulated skeletal remains (legs and pelvis) within W facing elevation		L
2459	032	Е	10/05/11	Articulated skeletal remains (legs and pelvis) within W facing elevation - detail	RC	L
2460	033	Е	10/05/11	Possible articulated skeletal remains with W facing elevation (S end)	RC	L
2461	034	SE	10/05/11	W facing elevation of trial pit – oblique	RC	L
2462	035	N	10/05/11	S facing elevation of trial pit	RC	L
2463	036	N	10/05/11	Area of inhumation in NW of trial pit	RC	L
2464	037	N	10/05/11	Area of inhumation in NW of trial pit (evidence of coffin)	RC	L
2465	038	N	10/05/11	Detail of charnel within S facing elevation	RC	L
2466	039	NW	10/05/11	Detail of charnel within S facing elevation	RC	L
2467	040	W	10/05/11	E facing elevation	RC	L
2469	041	W	10/05/11	E facing elevation - Detail	RC	L
2470	042	S	10/05/11	N facing elevation (E end)	RC	L
2471	043	S	10/05/11	N facing elevation (W end)	RC	L
2472	044	V/S	10/05/11	View of [005/002)	RC	L

2474	0.45	- C	10/05/11	Lo. 1: 0:1:	D.C.	-
2474	045	S	10/05/11	General view of trial pit	RC	L
2475	046	Е	10/05/11	View of boiler room – charnel-rich area	RC	L
2476	047	Е	10/05/11	View of boiler room – charnel-rich area	RC	L
2478	048	-	10/05/11	Charnel collected by Church	RC	L
2479	049	-	10/05/11	View of boiler room – charnel-rich area	RC	L
2480	050	-	10/05/11	View of boiler room – charnel-rich area	RC	L
2482	051	Е	10/05/11	View through foundations	RC	L
2483	052	Е	10/05/11	View through foundations	RC	P
2484	053	-	10/05/11	Bone protruding from spoil in boiler room	RC	L
2485	054	-	10/05/11	Lighting in boiler room	RC	L
2486	055	Е	10/05/11	Boiler room spoil heap	RC	L
2487	056	Е	10/05/11	Boiler room spoil heap	RC	L
2488	057	N	10/05/11	View through foundations	RC	L
2489	058	N	10/05/11	View through foundations	RC	L
2490	059	Е	10/05/11	Detail of articulated skeleton in W facing section of trial pit		L
2491	060	Е	10/05/11	Detail of articulated skeleton in W facing section of trial pit		L
2492	061	Е	10/05/11	Detail of articulated skeleton in W facing section of trial pit	RC	L
2493	062	Е	10/05/11	Detail of articulated skeleton in W facing section of trial pit	RC	L
2494	063	S	10/05/11	Possible charnel (pelvis) in N facing section of trial pit	RC	L
2496	064	S	10/05/11	Possible charnel (pelvis) in N facing section of trial pit	RC	L
2497	065	S	10/05/11	N facing section of trial pit	RC	L
2498	066	S	10/05/11	Detail of skull fragments in N facing section of trial pit	RC	L
2499	067	V/E	10/05/11	General view of trial pit	RC	L
2500	068	W	10/05/11	General view of trial pit	RC	L
2501	069	N	10/05/11	General view of trial pit	RC	L
2502	070	Е	10/05/11	General view of trial pit	RC	L

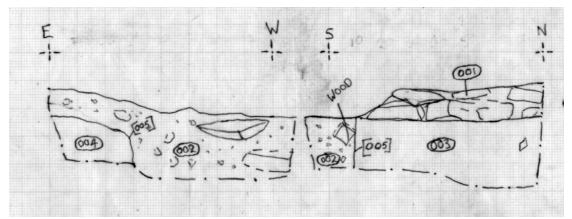
Appendix C: Drawings Register; Dundee Steeple Church – Archaeological Evaluation

Dwg No.	Sheet	Туре	Scale	Description	Date	Drawn by
001	001	Section	1:10	Sections of Trial Pit 2	10/05/11	RC

Appendix D: Field drawings; Dundee Steeple Church – Archaeological Evaluation



Field drawing showing S and W facing sections of Trial Pit 2



Field drawing showing N and E facing sections of Trial Pit 2

Appendix E: Photograph thumbnails; Dundee Steeple Church – Archaeological Evaluation

