
EXCAVATIONS AT GOVAN OLD PARISH CHURCH 1994



175

Trial archaeological excavations at Govan Old Parish Church sponsored by the Mid-Clyde River Valleys Project and Glasgow City Council, carried out by

Glasgow University Archaeological Research Division

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Cover photograph: Trenches A and B under excavation. View looking north into churchyard (copyright Joehari Lee).

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GOVAN OLD PARISH
CHURCH 1994

by

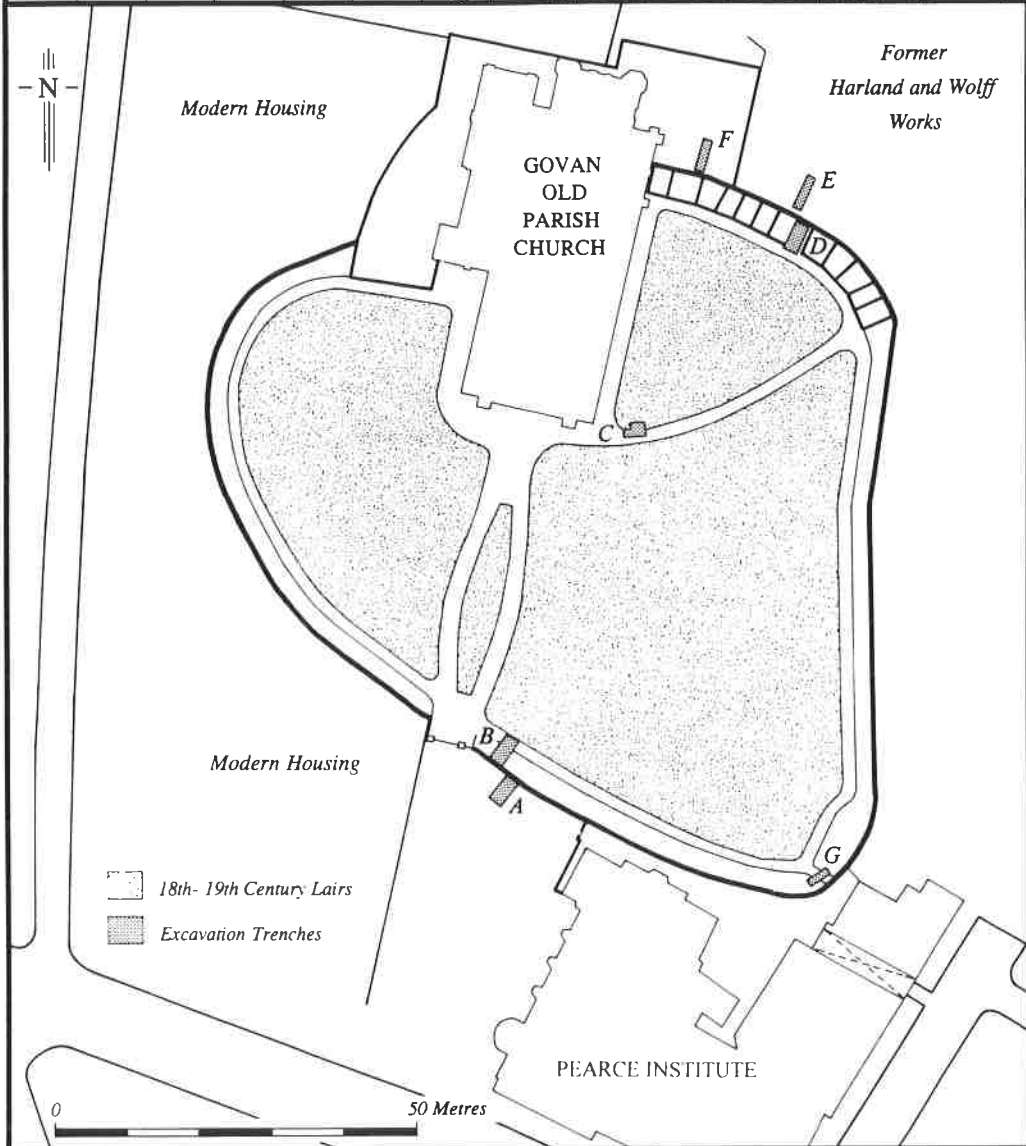
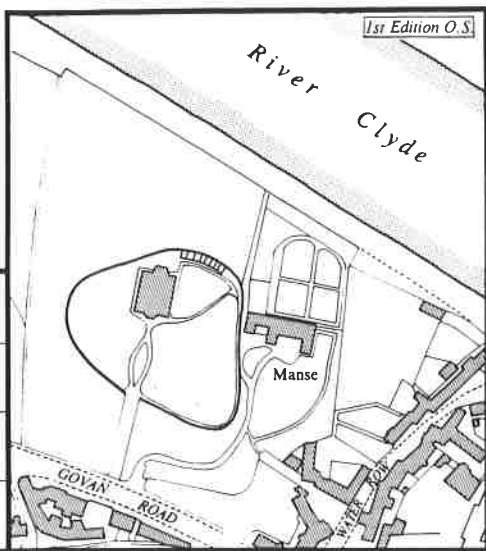
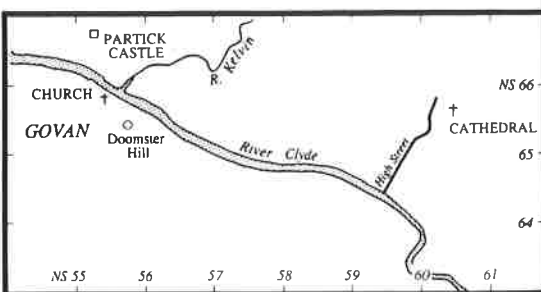
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1995

GLASGOW UNIVERSITY ARCHAEOLOGICAL RESEARCH DIVISION
Glasgow

— G.U.A.R.D. 175 —

GOVAN OLD PARISH CHURCH EXCAVATIONS 1994.



Summary

A programme of trial excavation was undertaken to investigate the archaeological potential of Govan Old parish church which is thought to date back to the early medieval period. Glasgow District Council provided funding for the project and GUARD conducted trial excavations at the site in August 1994. In particular the excavations sought to establish whether medieval archaeological deposits within the churchyard had survived later burial activity and building works. Trenches were located to explore both the boundary of the churchyard and the interior where the early church was likely to be located. The excavations produced evidence of a boundary ditch and bank, a possible workshop area, and the stone foundations which may belong to an early church.

1 Introduction

*Figure 1 (facing):
Location map.*

Govan Old parish church (NGR NS 5534 6590) is located close to and south of the River Clyde in the parish of Govan in the Southwest of the City of Glasgow. It has long been thought to represent a religious establishment of great antiquity (Radford 1966). The church is adjacent to the Clyde opposite the mouth of the Kelvin and is set back from the principal roads of modern Govan. As early as 1654 it is shown as a substantial ecclesiastical establishment in *Bleau's Atlas*. The curvilinear form of the churchyard has also been regarded as evidence for the antiquity of the site, despite the fact that it does not define the classic circle of many early Christian church boundaries. The present church was built to Rowan Anderson's design in 1884–8 replacing an earlier short lived church (built 1826), which itself replaced a medieval, perhaps Romanesque, church demolished in 1762 (McKinstry 1992). Because of the orientation of the 1826 church and the concentration of burial lairs the Rowan Anderson church is oriented north-south and projects beyond the churchyard to the north.

The principal reason for believing that the site was established in the early medieval is the large and unusual

collection of stone sculpture housed within the church. Although the significance of the stones has been recognised since the mid-19th century, they are only now beginning to receive the attention that they merit. A series of detailed discussions about the stones and their context are available in *Govan and its Early Medieval Sculpture* (Ritchie 1994), so there is no need to review that subject here. With respect to dating it can be said on stylistic grounds that the earliest stones are cross-slabs likely to date to the end of the ninth century, however the bulk of the stones consists of several styles of grave markers which dates to the tenth and eleventh centuries. The most spectacular of the stones is the sarcophagus which may have served as a reliquary. In spite of the wealth of information provided by the stones, the precise origins of the church are unclear. The historical background to the site meagre though it is has been examined by Alan Macquarrie (1990). It is well known that prior to the twelfth century there are no historical notices of Govan, but the dedication to St. Constantine has frequently been taken as evidence of early medieval origins. Unfortunately critical review of the traditions regarding the dedication to St. Constantine shows that they are too confused to provide a secure historical date.

1.1 Aims

One of the clearest points to emerge from the recent flurry of scholarly activity was that substantial further progress would require archaeological investigations. The trial excavations reported on here were intended to provide the basis for future investigations. The specific archaeological aims of the 1994 season were to establish:

1. Whether the remains of an earlier church survived in the churchyard.
2. Do the boundaries of the present church yard represent the original foundation?
3. Have medieval archaeological structures and deposits survived the numerous burials of the eighteenth and nineteenth centuries?

We arrived at Govan with a second set of aims, which

were more concerned with drawing attention to the stones and promoting recognition that Govan Old represented the religious establishment for which there is evidence in Glasgow. In publicity terms we set out to:

1. Involve members of the local community in the excavations.
2. Make the site open and accessible to the public during the course of the excavations so that those who were interested could follow the progress of the work.
3. Present the results of the excavations at a public 'Open Day' at the end of the dig.

1.2 Methodology

Prior to the excavation a geophysical survey (measuring soil electrical resistivity) was undertaken in an attempt to locate buried features such as wall foundations. The intention was that this information would be used to locate the trenches. Unfortunately the results of the survey proved inconclusive. This can in part be attributed to the many obstacles within the churchyard in the form of grave markers, paved paths and trees, but the main reason for the failure of the geophysical survey was the great accumulation of soil as a consequence of the intense use of the cemetery in the 18th and 19th centuries.

To maximise the amount of time spent excavating archaeological significant levels a machine was used wherever appropriate. In Trenches A and B the topsoil and overburden were removed mechanically, Trenches E and F were completely machine excavated and Trenches C, D and G were dug completely by hand. Apart from Trench G all of the trenches were excavated completely to the natural subsoil. All archaeological features were fully examined and recorded using a combination of written descriptions, measured drawings and photography. In addition the excavation was documented by a professional photographer (Joehari Lee) and by a professional video team (Life's Rich Tapestry).

During the course of the excavation visits by interested members of the community were common and informal

tours were given during the course of each day. The final Saturday of the excavation was designated as an Open Day when visitors were encouraged to come and view the excavations and finds as well as the sculptured stones. It is estimated that between 2000-3000 people attended the event.

1.3 Trench locations

Seven trenches (labelled A - G) were opened during the course of the excavation.

Trench A was located outside the existing churchyard wall close to the present entrance where the wall is low and carries a fence. The area is presently grassed, but earlier this century had been landscaped and turned into a garden. Trench B was located over the wall inside the churchyard and offset to Trench A to avoid undermining the wall, while allowing a continuous profile of the internal and external deposits to be made. Both trenches measured 2 x 4m, although Trench A had to be stepped in a metre, because of the depth of material used during the landscaping, giving the trench a full size of 4 x 5m.

Trenches A and B were intended to investigate whether the curving line of the modern churchyard wall follows the original boundary, which was expected to be defined by an earthen bank and ditch. It was thought that the ditch, if present, would represent one of the best locations for the survival of early medieval deposits and artefacts.

Trench C was located adjacent to the south-east corner of the church under the present path leading eastwards towards the site of the manse. This narrow trench (3 x 1m) was intended to locate traces of the earlier churches and evaluate their degree of preservation. The trench was located under the path in order to avoid having to excavate relatively modern burials. The path appears on Kyle's churchyard plan of 1809 (Willsher 1992), which suggested that no burials would have taken place here in recent times. During the course of the excavations the trench was expanded to examine the deeply stratified features.

Trench D was located against the northern churchyard

wall east of the church. As with trenches A and B it was hoped to establish if the wall marked the original boundary of the churchyard and whether a boundary ditch survived. Because there is a row of mid-19th century burial lairs set against the wall, it was necessary to excavate through one of these to reach earlier archaeological deposits. The family lair of the Menteiths of Westbank (see section 4.7) was selected because of the legibility of the memorial stone and because it was believed that there were no longer any members of the family in the area.

Trenches E and F were located outside of the northern stretch of the wall facing the river. Trench E was offset to Trench D to provide a continuous section without undermining the wall. The ground level is considerably lower on the north side of the wall, the area shows considerable evidence of industrial activity and is presently used as an informal rubbish tip. Trench F was opened to the west of Trench E closer over towards the present church. In addition to searching for the ditch, it was hoped to locate the original riverbank and gain some insight into the pre-modern topography and signs of earlier activity.

Trench G was an located in the south-east corner of the churchyard where the walls comes to a slight point. Kyle's 1809 map shows a small gate at this point which opens onto a lane leading to Water Row. This lane is preserved in an arched passageway through the Pearce Institute. The trench was intended to test whether this was the original gate into the church yard prior to the laying out of approach from Govan Road and was looking either for evidence of a paved road or foundations of a gatehouse.

2 The excavations

2.1 Trench A

Turf was removed by hand prior to machine stripping of the topsoil to reveal a layer of dumped cinder and ash (002). This layer was over 1 m deep and raised the ground level outside the churchyard to the top of the wall making it level with the inside of the churchyard. This landscaping was probably part of the programme of

GOVAN OLD PARISH CHURCH EXCAVATIONS 1994.

Section through trenches A and B

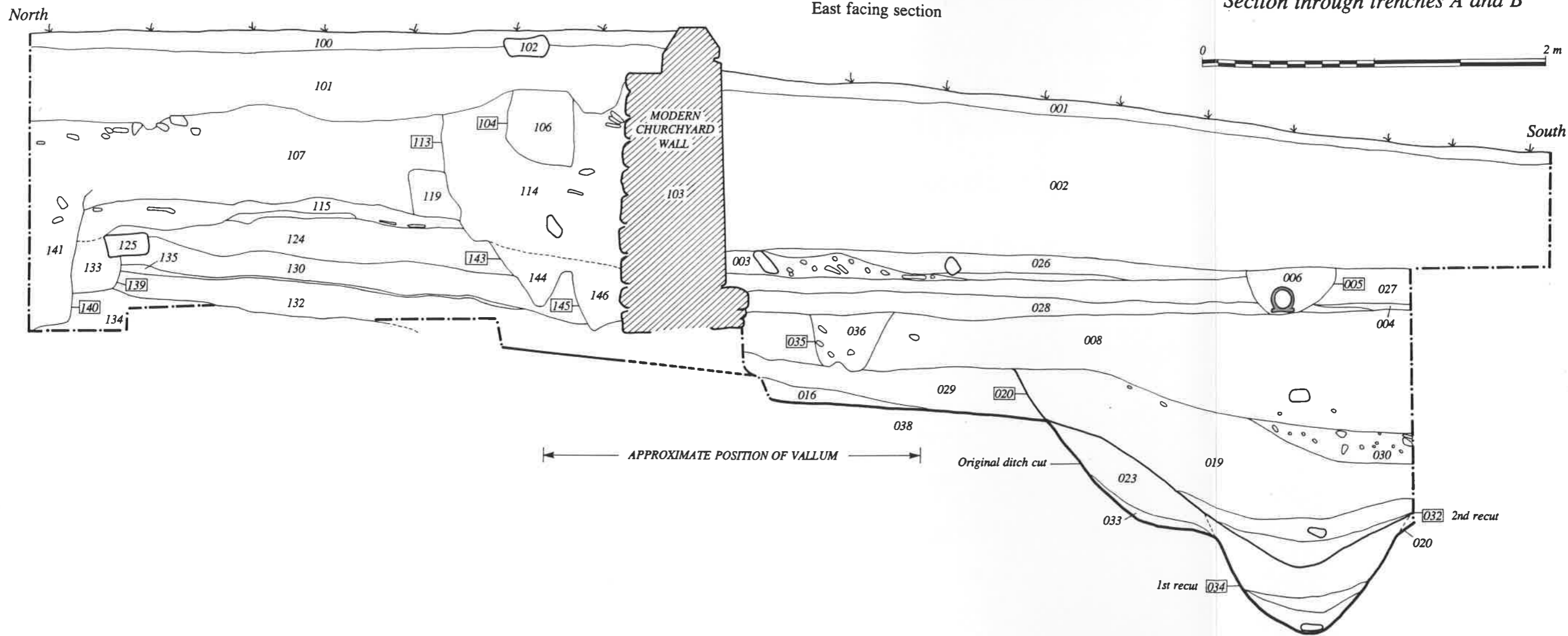


— Trench B —

West facing section

— Trench A —

East facing section





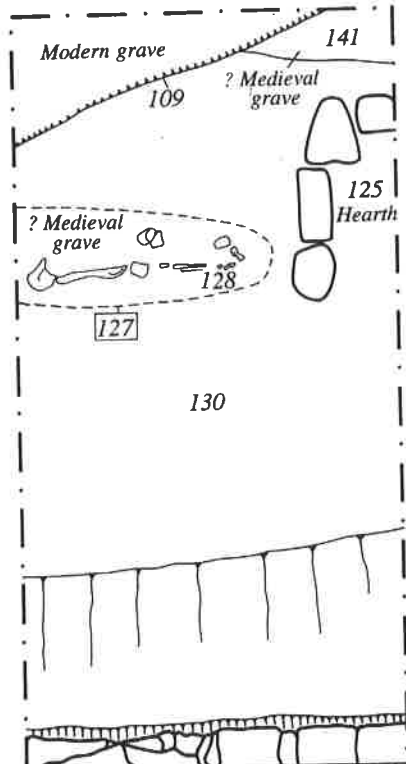
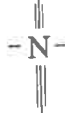
Photograph 1: Trench A, the vallum under excavation

Figure 2 (facing): Trenches A and B with composite north-south section

landscaping and planting conducted under the direction of Rev. MacLeod during the 1930s when the approach from Govan road was turned into a garden and the replica cross was erected. The original ground level below was marked by a layer of silt (026) the top of which corresponded with the base of the well-pointed masonry of the churchyard wall. The silt overlay a layer of mixed red sandstone rubble (003), and a silt layer (028) which sealed a number of 19th century features including rubbish pits (009, 017), postholes (014, 036), a dog burial

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Plans of trenches A and B.



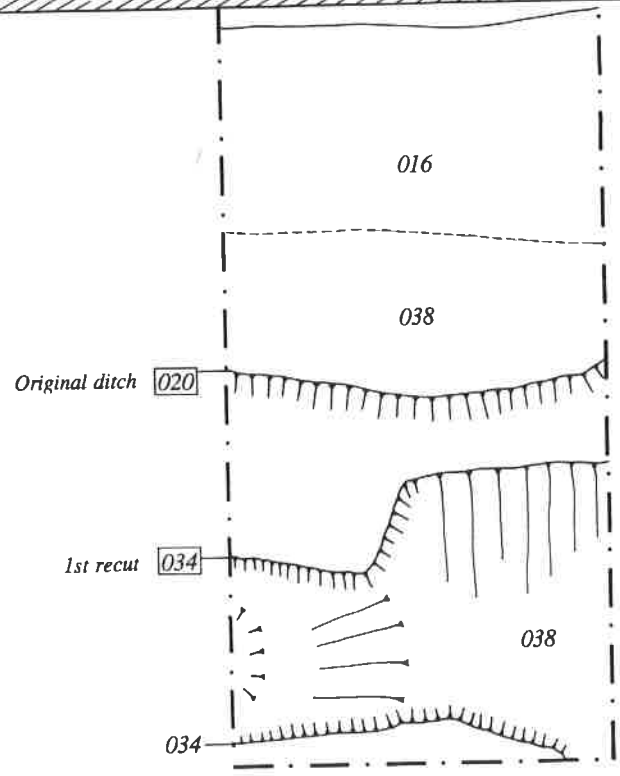
— Trench B —

Medieval industrial level and later burials

103

— Trench A —

Fully excavated



(012) and a square pit containing a large rectangular sandstone block (0.74 x 0.41 x 0.37m) propped up on two granite setts (011). The block had been carefully set within the pit so that its surface was level with the old ground surface, but we can only guess at its purpose. It cut and is therefore later than one of the 19th century rubbish pits. Situated in the north-west corner is a localised deposit of dark reddish grey sandy silt (037) which was cut by posthole (035). All of these features probably date to a period prior to the erection of the Pearce Institute when the area was the back garden of a now demolished cottage. Clearly prior to landscaping the churchyard stood proud of the surrounding area and had a raised appearance.

*Figure 3 (facing): Plan of
Trenches A and B*

These modern features were all cut through a layer of orange brown silty clay (008) which covered most of the trench. This sealed a small spread of mottled orange-brown silty clay which was situated in the north-west of the trench (021). A layer of firmly compacted homogeneous, orange brown silty clay covering the north end of the trench seems to represent natural clays which have gradually been discoloured and 'weathered' through root and worm action (029). This layer merged without a clear break into a clean pale yellow/grey riverine clay (016), which seemed to represent the undisturbed natural clay. The clays cap a coarse textured glacial orange/yellow sand with some clay banding (038) and a layer of iron pan lies between the clay layer (016) and the natural sands. Moving south from the churchyard wall the weathered clay layer (029) became thicker as the unweathered clay gradually petered out about 1.2 m south of the wall. The weathered clay (029) was abruptly cut away about 1.4 m south of the wall by a large ditch (020), which apparently runs parallel to the existing churchyard wall.

The ditch was redug on at least two occasions, which has altered its shape. In its original form it seems to have been wide (perhaps 3 m judging from the centre point of the first recut) and relatively shallow (perhaps 1 m deep, if the weathered clay approximates the old ground surface), possibly with a flat bottom. The exact form of the original ditch has been obliterated by later recuts, the



first of which (034) deepened the ditch to 1.9m below the surface of the weathered clay, but was narrower and more steep sided. The second recut (032) partially obliterates the first, but is shallower with a wide V-shaped profile which maybe closer to the original dimensions of the original ditch. In plan the ditch edges appear irregular and widen to the east. Overall the recuts do not appear to be consistent in their dimensions. The fills of all phases of the ditches are similar and consist of homogenous reddish to orange brown clays and silts (019, 022 - 025, 030, 031, 039). Very few stones are present in the fills with only the upper fill (030) of the second recut containing an appreciable quantity of small rounded pebbles. The lowest fill (033) of the first cut (020), is a reddish brown sand which appears to have eroded from the edge of the cut.

There was little evidence for the presence of a bank made from the upcast of the ditch, although such a bank was probably an integral part of the boundary defined by

Photograph 2: Trench A, section of the ditch as excavated showing the changes in profile caused by redigging of the ditch on three separate occasions

the ditch. The absence of a bank may be explained partially by the degree to which the ditch has silted up, but the repeated construction and replacement of the churchyard wall (see Trench B) is probably most responsible for obscuring its presence. The unweathered clay (016) noted above may indicate the approximate location of a bank, which has protected the underlying clay from disturbance and contamination by roots and worms that has led to the changes in colour and texture of the weathered clay.

Apart from the modern objects in the rubbish pits, very few finds were recovered from the trench. The most significant finds from the ditch were some fragments of worked shale from the eroded fill of the first ditch (023), which is similar to shale fragments recovered from Trench B that are thought to be of an early medieval date (see below Finds). The only other finds come from less secure contexts. The upper fill (019) of the final ditch contained two sherds of medieval pottery (14th-15th century). Post-medieval pottery was also recovered from rubbish pit fill (007) and from a clay spread (021), none of which helps to date the digging of the ditch. No material suitable for radiocarbon or other scientific dating methods was found.

The significance of the ditch cannot be underestimated. The position of the boundary at this point seems to have changed little throughout this time and is it clearly was the precursor to the existing boundary of the churchyard, which may reasonably be thought to occupy the site of the bank for much of its circumference. The presence of the worked shale strongly suggests that it represents the boundary of the original Christian settlement and we are probably entitled to use the Latin term for a monastic wall, *vallum*, to describe it.

2.2 Trench B

Trench B was located offset to Trench A, inside the churchyard. The trench crossed the line of the path that runs parallel to the wall and is in an area that appeared clear of recent grave disturbance. The turf and slabs of the path were removed by hand prior to machine stripping of the trench. An insubstantial line of stones (102),



probably the border to a flower bed ran parallel to the present wall. Modern build up of organic loam (101) immediately below the topsoil was removed by machine down to a deep orange silty clay layer (107), which contained pockets of clay and sand. Immediately below the stone line(102), and separated from it by the modern build up (101), was the remains of a robbed out wall which had been mortar bonded (106). The silty clay layer (107) extended over much of the trench. To the north the limit of undisturbed deposits was defined by a recent

Photograph 3: Trench B, the lower half of the poorly preserved ? medieval burial (128) with the stone setting of the hearth (125) in the foreground

(18th-19th century) grave (109) which was not excavated. To the south the layer (107) was cut by a linear trench (113) running parallel to the church yard wall, which contained a line of stones (118) pressed against the edge of the cut. The fill of the ditch (113) was in turn cut by the construction trench (147) of the present wall (103), which was built hard up against the vertical edge. This steep cut (113) seems to represent the construction trench for an earlier churchyard wall. Its depth suggest that it served as revetting for the raised churchyard, as indeed did the present wall prior to the raising of the external ground level.

The deep clay silt layer (107) sealed a succession of patchy layers of soot, burnt orange clay and charcoal (111, 115, 116, 123) and a concentrated patch of ash (112), which produced fragments of coal, shale, burnt bone, cinder and small amounts of slag. No concentration of burnt material or clear sign of a hearth was visible in these layers. The stratigraphy was unclear but at the extreme north end of the trench the deep silty clay layer appears to have been cut by a grave (140), which contained a poorly preserved skeleton (142) without a coffin, which may be medieval in date. A third burial (127) was present in the trench, which was apparently sealed by the layers of burnt material (115, etc.) and the trampled surface (123). The skeleton (128) was in a similarly poor condition to (142) and is also likely to be medieval.

Beneath the layers of burnt material was a layer of orange brown silty sand (124) containing some slag and large pieces of charcoal, reaching sizes of up to 3cm in diameter. This layer overlay a small stone hearth (125) formed by an L-shaped setting of four roughly faced, fire reddened stones. The hearth sealed a small pit (139) which contained large pieces of charcoal and fragments of burnt clay within a matrix of medium orange silt. The stone hearth had been built into a layer of orange/brown silt (130) which also contained substantial chunks of charcoal and small amounts of slag. This overlay a thin layer (2cm) of brown silty clay (135), containing large charcoal and ash patches, the ash occurring in dense concentrations. A much disturbed burial, or deposit of disarticulated bones (136) was contained in this layer.

Immediately north of the present wall, and cut by its construction cut and by cut 113 are two postholes (143, 146). These are both filled with a compact brown silty clay containing charcoal flecks. These two postholes may represent a palisade trench on the upcast mound, or part of a timber structure built at the back of the *vallum*.

A thin layer of ashy deposits overlay a compact layer of clean pinky orange, very fine textured silty clay (132), which lay immediately over the natural glacial sands (134), the equivalent sand (038) seen in Trench A. All the lower deposits (132, 134 and 135) slope slightly to the south and by projecting the line of the of the surfaces of the silty clay (132) it can be seen to correspond to the surface of the basal clay (029) in Trench A.

Collectively these featureless deposits and the rude hearth may be seen as representing an industrial area or workshop at the back of the *vallum*. The slags recovered, though very insubstantial, suggest that a smithy may have been located in the general area. Worked shale was also recovered, including a rough out for a shale ring from layer 124/131. Although no definite structural evidence was forthcoming in the small area excavated it seems likely that some sort of workshop existed in the general area. Medieval pottery was recovered from the fills of construction trench 113.

2.3 Trench C

Trench C was intended to establish the presence, or otherwise of any earlier churches than those historically recorded. It was located underneath the pathway running from the south-east corner of the present church on a line with the south wall.

The entire trench was hand excavated. Initially the trench measured 3 x 1m, the width of the trench dictated by the width of the path. It was hoped to avoid recent grave disturbance by staying within the path line. However once archaeological deposits were encountered the trench was expanded to 2m for the eastern 2m of its length in order to better understand the buried features.

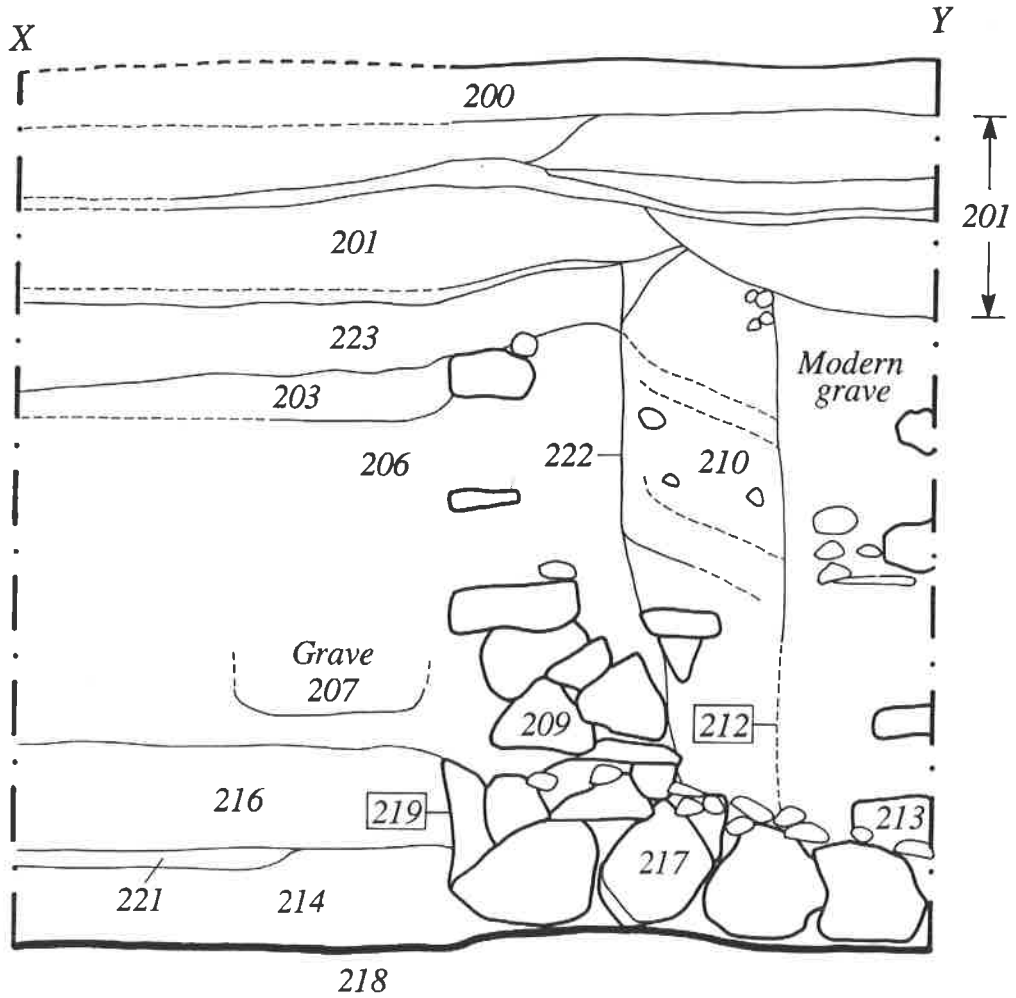
The initial layers encountered all related to various surfaces to the path which extended to a depth of 0.3m,

*Figure 4 (facing): Trench C,
east facing section*

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Trench C (East facing section)





(201). The path layers sealed a grave cut (212) containing a coffin (213) situated in the north-west corner of the trench, which was not excavated. This path deposits also sealed and the grave cut into a vertical sided trench (222) filled with loose stone rubble and mortar in a sandy matrix (210). This probably represents the robbed out foundations of a sizeable wall, possibly those of the first post-medieval church which was demolished in 1826 (Davidson Kelly 1994, 12, Radford 1966, 173). This robber trench (222) in turn through a layer of probable made up ground (223), which seals tow closely related layers of demolition rubble (202, 203). These spreads of building material (consisting of blond sandstone, mortar and slates) represent the demolition of a masonry building possibly a church. The demolition rubble overlay a deep layer of undifferentiated heavy clay (206) at the base of which was a burial (207). No grave cut for this burial was observed, but it was clear that the burial was not contained in a coffin. Its presence underneath the pathway, the advanced state of decomposition of the bones

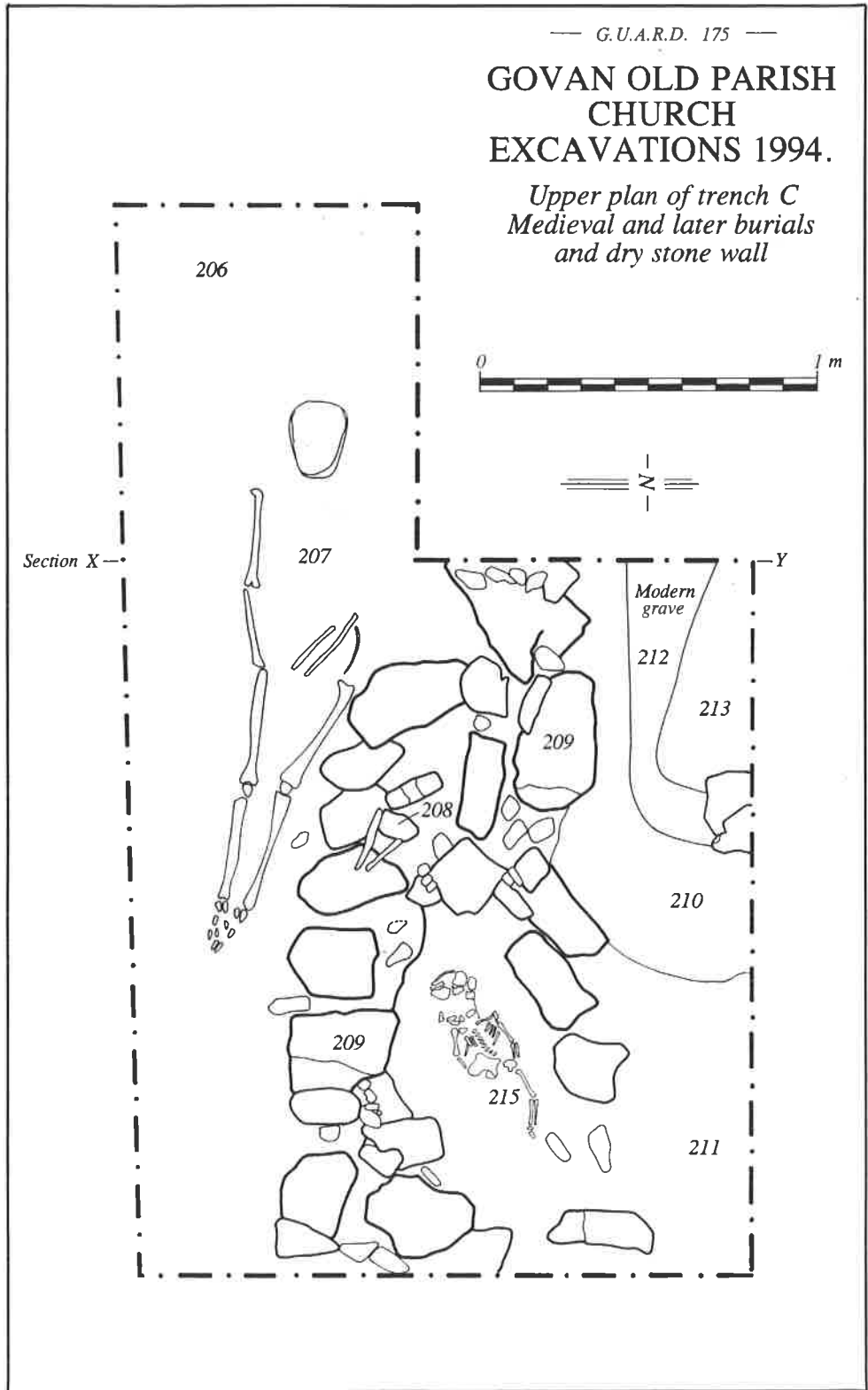
Photograph 4: Trench C, post-medieval infant burial 215 under excavation (copyright Joehari Lee)

Figure 5 (facing): Trench C, upper plan

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*Upper plan of trench C
Medieval and later burials
and dry stone wall*





and the absence of a coffin suggest a medieval date. A second, disturbed burial (208) was also contained within this layer. No grave cut or coffin were observed and the bones were in similarly poorly state of preservation as 207. The third burial excavated in this trench was that of an infant (215), whose grave cut was also not observed. The infant was on a different orientation from the first skeleton (207), the bone was relatively well preserved, a few straight pins (for fastening the shroud) were found amongst the bones and it lies just beyond the edge of the

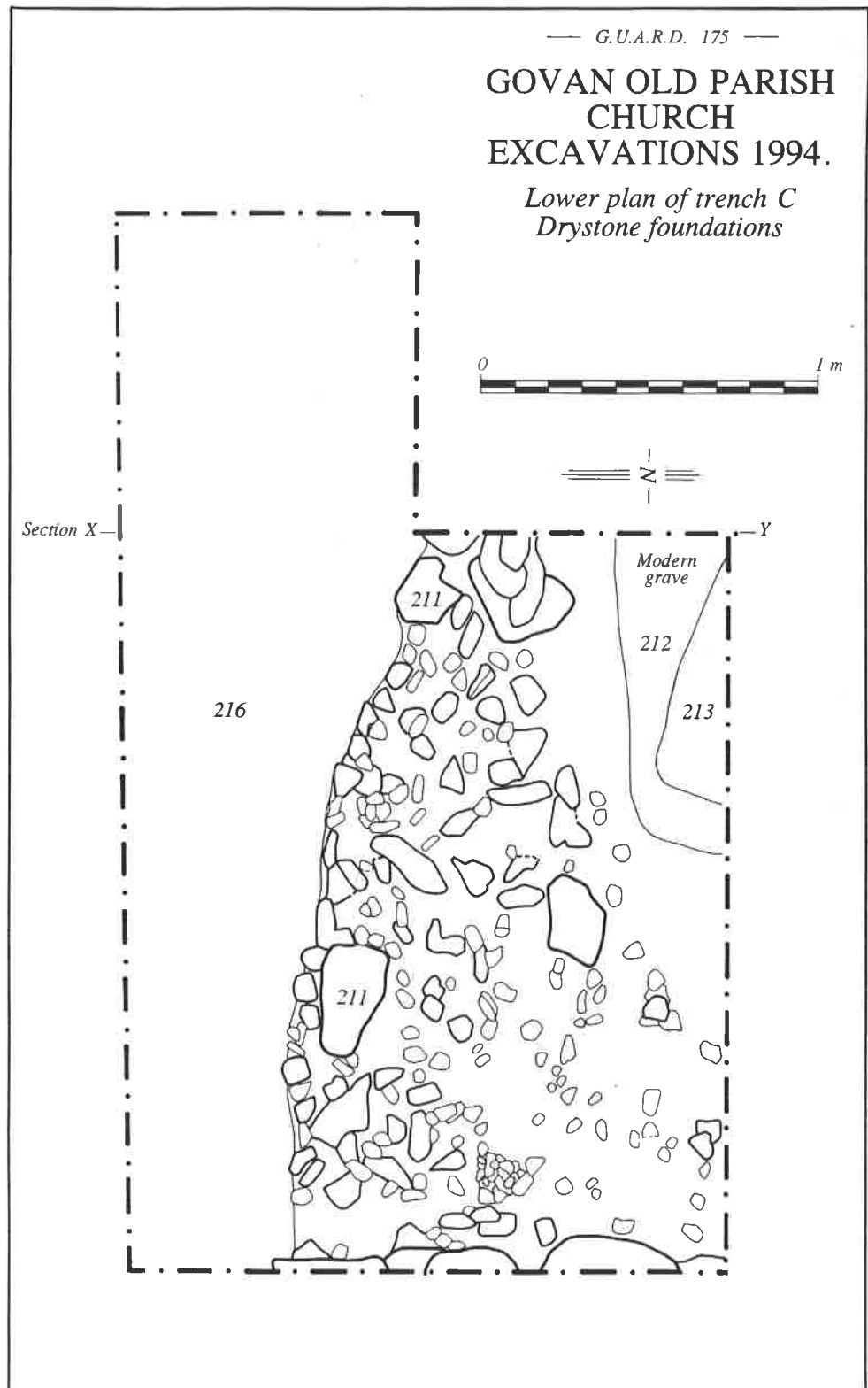
Photograph 5: Trench C, the ? medieval burial (207) with no evidence of a coffin

Figure 6 (facing): Trench C, lower plan

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*Lower plan of trench C
Drystone foundations*





path, so it seems likely that this represents a post-medieval burial.

The infant burial cut into and partially removed a rough sandstone wall (209), which was sealed by the deep clay layer (206). The wall was built from a mixture of dressed sandstone blocks and roughly hewn boulders and no mortar was visible either on or among the stones suggesting a drystone build. In addition to the infant burial it had been slightly disturbed by robbed foundation trench (222) and the unexcavated modern grave

Photograph 6: Trench C, the tightly packed surface of the dry-stone foundations (211)

(212). This wall can never have stood much more than 1 m high and is probably best thought of as a dyke. It would appear that the adult burial (207) shares the same orientation and respects it.

This dyke (209) was built directly on top of a level surface of hard packed crushed sandstone (211), which was the top surface of a substantial dry-stone foundation wall. The crushed sandstone had been fitted into the joints and gaps between large rounded, undressed boulders (217) set in a trench with almost vertical-sided, flat-bottomed trench (219). The stones were tightly packed into the trench and there was no sign of mortar or other bonding material. The orientation of the foundation wall, like the dyke above, was east-west approximately on line with the south wall of the modern church. The north side of this foundation wall was beyond the excavation area, so the full width is unknown but it is over 1 m wide. On the limited evidence available from the small trench it would seem that this represents the stone foundations for a timber building.

The construction trench for the foundation wall (211) cut through a layer of grey clay with lenses of sand and brown clay (216). This overlay a thin layer of iron pan (221) which in turn sealed a layer of orange sand possibly representing disturbed or redeposited natural (214). This sealed a compact deposit of crushed coal (220) which lay directly over the natural, orange glacial sands. It is likely that from the iron pan downwards the deposits are natural.

Trench C was located in an area known to have seen a succession of churches and it appears that two or three of them are recorded in the trench. The deep robbed out foundation trench (222) probably relates to the last building to have an orthodox east-west orientation, which was built in 1762 and demolished in 1826, the position of which is well recorded. The thin spread of build debris (203) at a stratigraphically deeper level may well represent the medieval church reported to have been demolished in 1762 (Davidson Kelly 1994, 12). The deepest foundations (211) are the best preserved and contain no mortar. This suggests that they were to support a timber building. It is known that the first cathedral dedicated at Glasgow in

1136 was an elaborate Romanesque structure (Driscoll 1992). It would seem reasonable to suggest that if these are the foundations of a timber church they predate the widespread adoption of mortared masonry church architecture in Scotland which took place in the 12th century. Unfortunately there were few artefacts from this trench, no of which were of any antiquity so there is no evidence to corroborate this suggested date. In such a small trench it is impossible to give a clear indication of the nature and extent of the buildings encountered, but for the moment it does seem reasonable to think that they represent churches.

2.4 Trench D

Trench D was intended to investigate the interior of the presumed northern boundary of the original churchyard. This stretch of the churchyard wall was selected because it seemed one of the least disturbed by the neighbouring shipyards, but digging here required the excavation of a Victorian burial lair. This trench measured 4 x 2m and was also completely hand excavated.

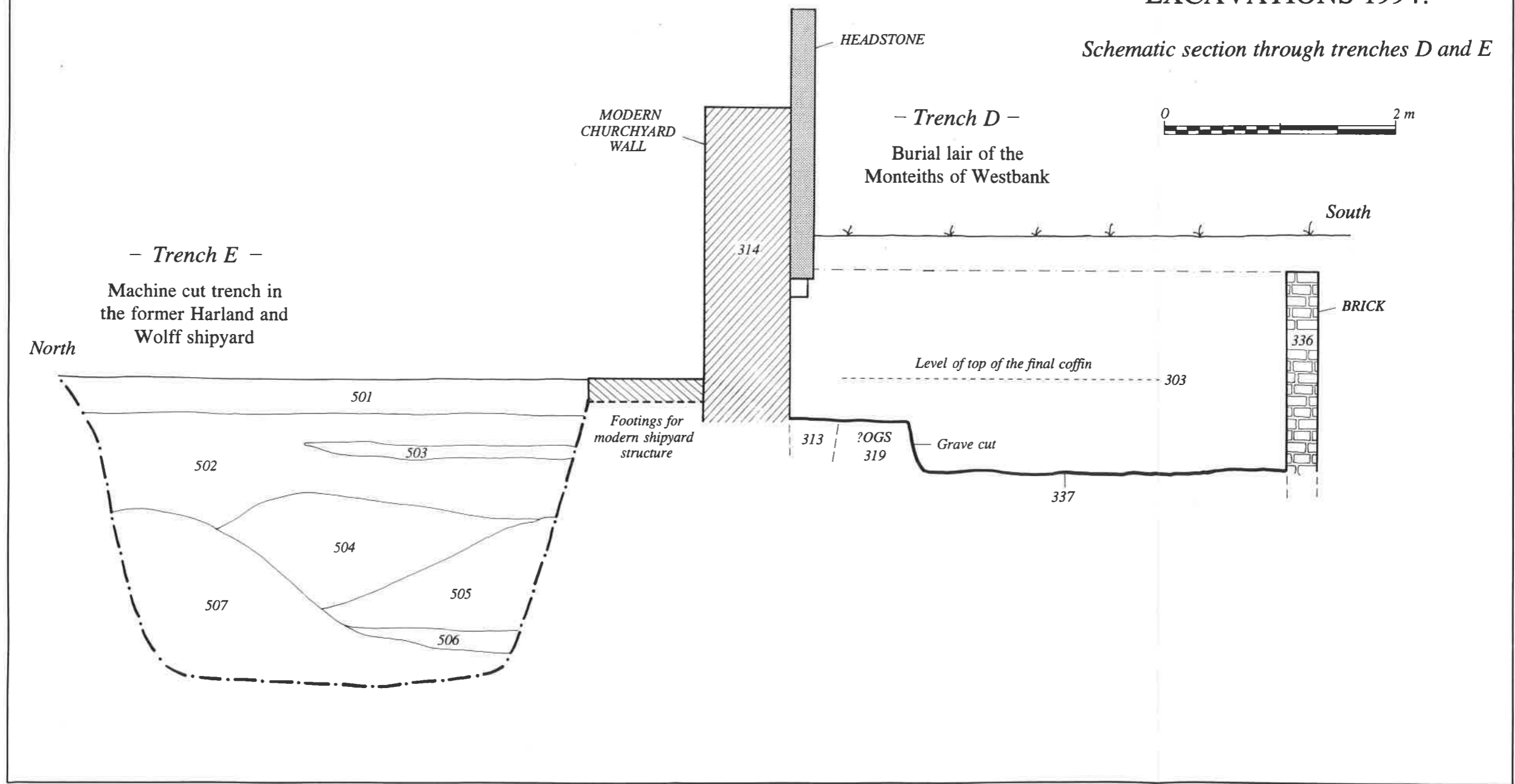
Removal of the turf and topsoil immediately revealed a brick built lair, which had been filled with soil. The layout of the trench allowed the front and western walls of the lair to be exposed and about 80% of the interior. The upper levels of the lair were filled with a mottled orangy brown silty sand (302). No grave cuts were visible in this layer and it was apparently represents the sealing of the vault after its final use.

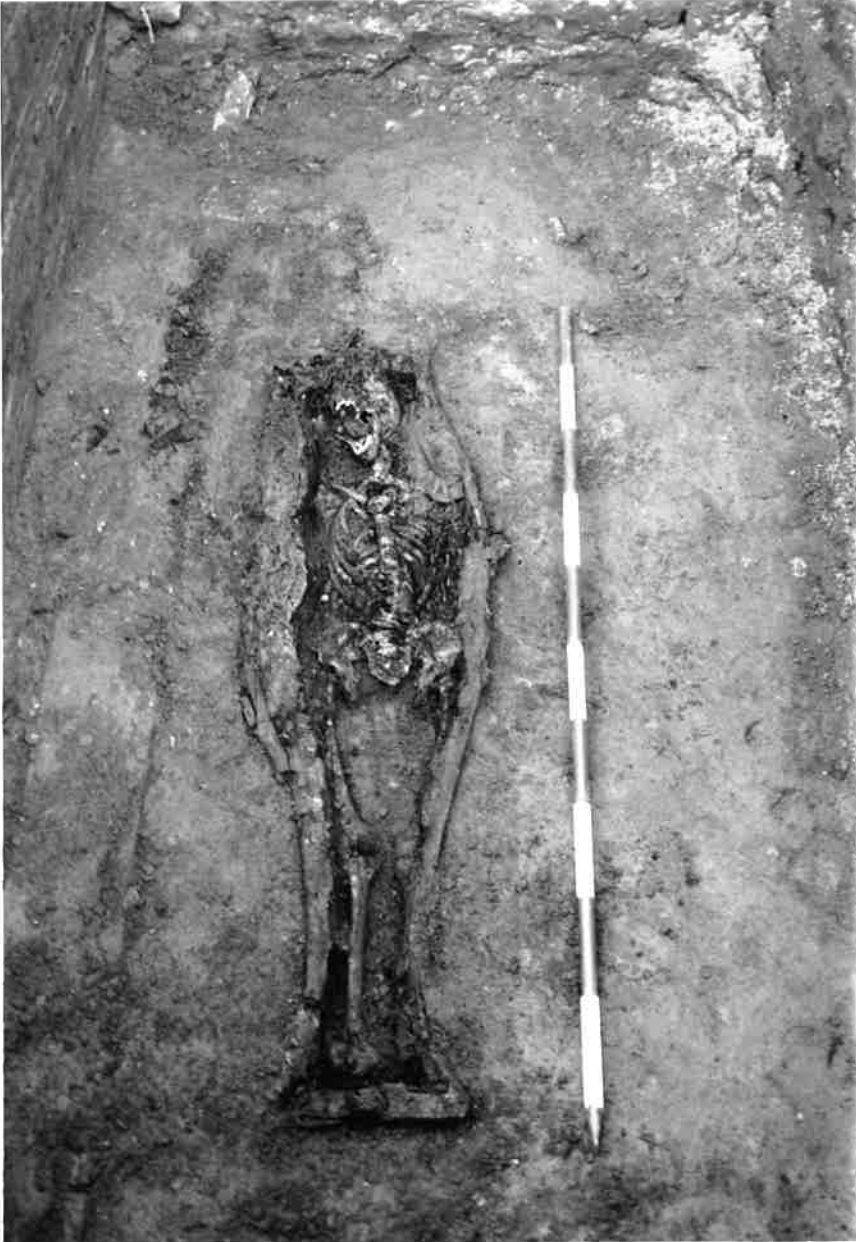
The first coffin (303) encountered was that of the final burial and was situated roughly in the centre of the lair. Its wooden panels were covered with velvet held in place with a pewter trim decorated with a machine pressed pattern. The lid was decorated with two metal plates both of which were heavily corroded. The coffin contained an adult male skeleton (304), for details of the identity and physical characteristics see the Human Remains section below. Directly underneath lay another coffin (306), also of wood with a velvet covering, stamped iron decoration and a border of black lacquered tin pewter. The skeleton inside the coffin was another adult male (305). The At

Figure 7 (facing): Trenches D and E, schematic north-south section

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Schematic section through trenches D and E





this level a grave cut was visible (308), which cut into the compact mottled alluvial sand subsoil (332) and was filled with a grey sandy loam (309). The third coffin (315) encountered was set even deeper into the subsoil on the west side of the lair close in against the walls. The tripartite construction of this coffin distinguished it from the others within the lair. Sandwiched between the thick outer wooden box and an inner lining of compressed paper and wood chips was a layer of lead. This too contained an adult male skeleton (318). The final coffin ex-

*Photograph 7: Trench D,
typical mid-nineteenth century
coffin burial from Monteith
lair, burial 305*

cavated (320) lay at the same level as the second (306) but to the east of it. It was only partially exposed by the trench, so it was intended to leave it unexcavated. Sadly it was vandalised and had to be excavated. This coffin was closer in form to the velvet covered ones, but had a lead lining which helped to preserve the shroud as well as the adult male skeleton (323) it contained.

Once the coffins and the grave fills had been removed, and the areas disturbed by the construction trench (312) of the present churchyard wall and for the brick wall of the lair (325) were taken into account, it became clear that only a very small area (1.34 x 0.6m) of undisturbed ground remained within the lair. This patch of firm mid brown clay (319) may represent an old ground surface of indeterminate date. The possible old ground surface lay directly over the natural sand, a fine, light beige sand with orange mottling seen in the base of the lower graves.

The construction of the burial lair effectively removed all the earlier archaeological deposits immediately within the churchyard. The possible old ground surface is all that remains of any archaeological potential and this is slight. No evidence was forthcoming with respect to the antiquity of the line of the churchyard in this trench.

2.5 Trenches E and F

Trenches E and F were located immediately over the northern wall in waste ground between the church and the river. Trench E was laid out in relation to Trench D to provide a profile across the boundary, F was opened up in order to investigate if the preservation was variable along this stretch of the wall. Both trenches E and F were mechanically excavated to depths which did not allow close investigation in safety. Therefore the stratigraphy in Trench E has been recorded in a schematic manner. The soils that were encountered were largely sand and because of their instability both trenches were immediately backfilled.

Trench E was dug through a series of parallel brick and concrete foundation walls from a demolished shipyard structure (501). These were walls which were built directly onto sand (502), which had evidently been



dumped on the site prior to construction. The considerable quantities of imported soil (502 and 503) have raised the present ground surface approximately 1.2 m above the former ground level. Prior to the levelling, it appears that a large pit or ditch had been cut through the natural sand (507). This does not seem to be particularly old, since its fills (504, 505, 506) contain 19th century rubbish.

Trench F was chosen to see if there were significant differences in the stratigraphy further west, closer to the church and outside the shipyard building. After removal of the modern rubble and overburden, alluvial sands were immediately encountered. There were no significant levelling deposits and no archaeological features were observed. The archaeological potential in this area seems to be minimal.

2.6 Trench G

This trench was located to investigate the possibility that the original entry to the churchyard was located in the

Photograph 8: Trench G under excavation, view from the south-east (Copyright Joehari Lee).

south-east of the churchyard. The trench (3x1m) was begun towards the end of the excavation season and was dug by hand.

After removal of the topsoil, a layer of black clayey silt containing bands of cinders was removed (401) which extended to a depth of 0.2m. This seems to represent material dumped to level up the churchyard. Below this were a number of late 19th or 20th century rubbish pits (404, 406, 408), which cut into a layer of brown sandy silt (409) which was at least 0.8m thick. This sandy silt produced post-medieval finds and also had the appearance of being a levelling deposit. Unfortunately, because time ran out excavations were halted at this stage. The main point of significance is that this area has been levelled up in the relatively recent past. This landscaping may have been done at the time the Pearce Institute was built or earlier. Either would be consistent with the idea of making good a hollow way cause by traffic through the area.

3 Small finds

Although many small finds were recovered during the excavations, there were few which could not be confidently assigned to the last few centuries. The bulk of the material came from the various modern rubbish pits. The coffins and their fittings from the burial lair represent a particularly interesting group of finds in so far as they are rarely recorded in detail or preserved in museum collections. Detailed descriptions of the various coffins were made and samples of the various types and styles of handles and decorative trim were taken and are being conserved. It is hoped that they will be the subject of future study. A catalogue of the pre-modern finds is provided in Appendix 1.

Eighteen sherds of medieval and early modern (16th and 17th century) pottery were recovered from Trenches A, B and C. Most if not all of it was made locally in western or central Scotland. Such small and broken fragments as were recovered from these excavations can only give a general indication of date. Most of the pottery comes from deposits which for a variety of reasons were

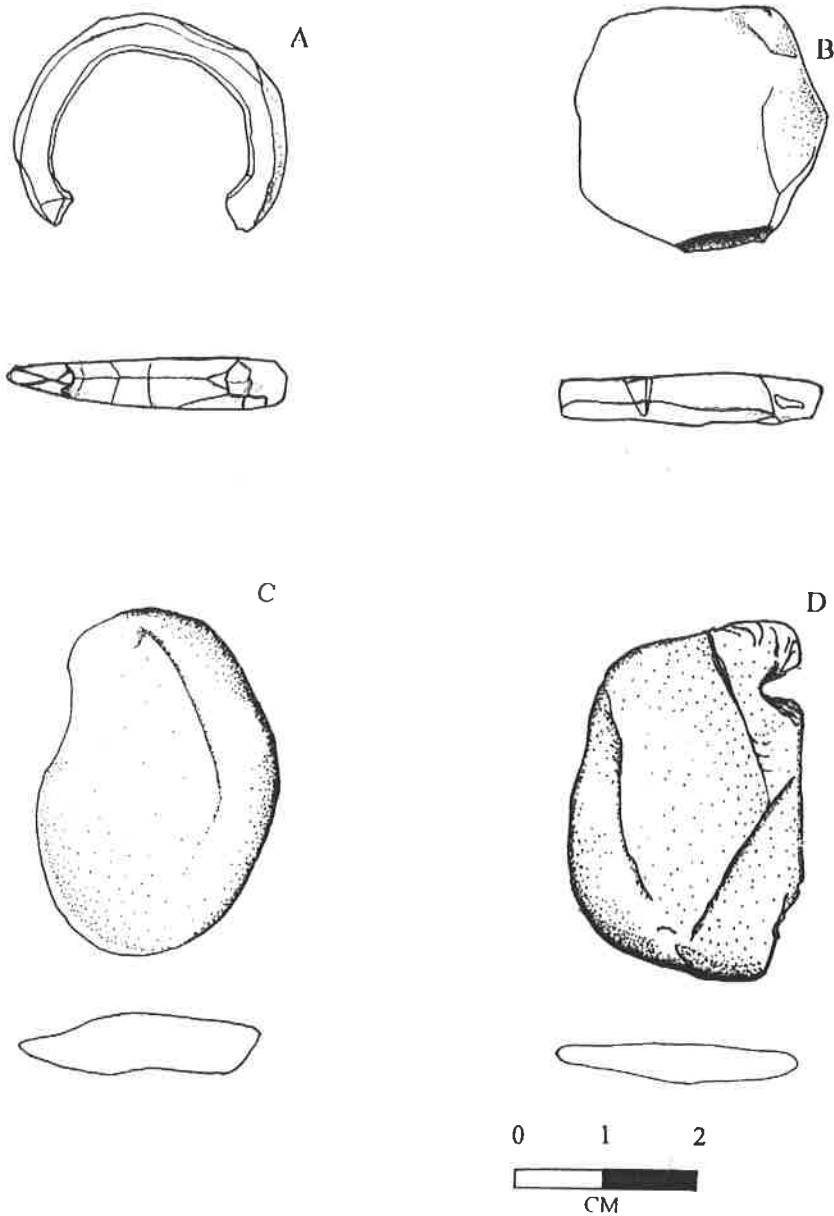


Figure 8: Small finds of oil shale. A - sf 4, B - sf 5, C - sf 7, D - sf 15

already known to be post-medieval in date, but in two instances the pottery has helped to tighten up the chronology (R. Will pers. comm.). In Trench A two sherds of 14th-15th century date were recovered from the infilling (019) of the third phase of ditch, which suggests that by the late middle ages the ditch was no longer being maintained as the boundary. In Trench C six sherds came from the thick undifferentiated deposit (206) which contained the adult burial (207) thought to date from the middle ages. All of the six sherds are likely to have been made in the 14th or 15th centuries. However it is the absence of post-medieval sherds which seems parti-



Photograph 9: Small find 10, worked sand stone, possible fragment of a sculpted cross

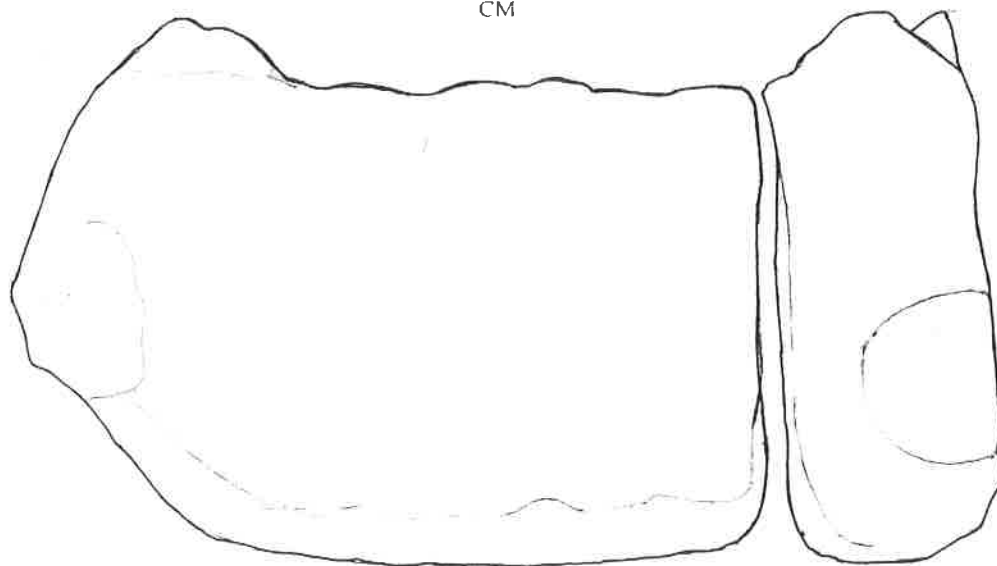


Figure 9: Sandstone fragment, possible sculpted stone

cularly important for regarding the burial (207) as medieval.

Elsewhere the post medieval sherds help to confirm the dating framework. In Trench A the post-medieval sherds come from contexts formed well after the ditch had been

filled in. In Trench B two medieval sherds and one post-medieval sherd were recovered from the deposits immediately behind the churchyard wall (106, 114, 120), which have been periodically disturbed by the construction of various churchyard walls. In Trench C two post-medieval sherds were recovered from the metalling of the pathway (201) and one post-medieval sherd from the construction trench (210) thought to belong to the 18th century church.

Of greater interest are the artefacts from Trenches A and B, which provide evidence for the presence of a workshop or small industrial area. In total eighteen fragments of oil shale were recovered, of which five showed clear signs of having been worked. (See figure 8). Oil shale is a fine grained dark grey-black stone which is easily worked into rings and bracelets and has been used for making objects of personal adornment since the Bronze Age. The quality of the raw material at Govan was not particularly high and it is not clear whether some of the unworked lumps of shale represent rejected raw material or deposits which occur naturally in the subsoil (there are nearby coal measures). Collectively the shale objects look like the debris from a shale workshop. Several of the shale objects appear to have been shaped in preparation for manufacturing small circular objects, but no finished artefacts were found. The only clearly identifiable artefact was a finger ring (131), which apparently broke while being worked and was therefore never finished. The greatest concentration of this material was sealed by the horizon with the rough hearth (125) and ashy deposits (130) which indicates that this shale working was one of the earliest activities on the site following the construction of the boundary ditch. This can be confirmed in two ways. In Trench A two roughly shaped fragments and one lump of shale were found in the silts (023) from the earliest ditch. Secondly the character of the raw material and industrial debris can be readily paralleled on other early medieval sites in Scotland (e.g. Dunadd) (pers. comm. E. Campbell)

Other less well defined evidence for industrial activity was recovered from Trench B. This consisted of occasional small lumps of slag and a piece of furnace

structure (120) and hammer scale, which represents the waste product of small scale iron working and suggests that a smithy was located near by.

There had been some hope of recovering further sculptured stones during the course of the excavations, but no clear cut examples of early medieval carving were recovered. Indeed very little sandstone of the types used for the sculptures was seen. The possible exception was recovered from a position where it had been used as the edging to one of the episodes of churchyard wall building (113). This roughly shaped rectangle of red sandstone comes to a point at one of the short ends (see figure 8) where it has a cup-shaped socket. Only part of the socket remains because the stone has sheared away. Apart from the socket there is no sign of its having been worked, but its general shape would be appropriate for the arm of a composite stone cross.

4 The human remains _____

by Sarah E. King

During the process of the excavations, human remains were uncovered in three of the trenches opened in the churchyard of Govan Old . Excavations in Trench B revealed the very poorly preserved remains of two burials aligned east -west, and some disarticulated bone. These remains are possibly medieval but were too poorly preserved to be analysed and will not be discussed further here. In Trench C the remains of a complete adult burial (possibly medieval) and an infant burial (probably 19th century) were recovered as well as some disarticulated infant bones. These burials were also roughly aligned east-west with the head to the west. Trench D cut through the Monteith family tomb (dating from the mid 1800s) and four complete adult burials were recovered. These skeletons were briefly analysed in the field, before being reburied at the end of the excavations. These burials were aligned north-south as the parish church has been since 1826.

4.1 Preservation

The preservation of all bone analysed was good although the adult burial from Trench C was completely fragmented. In the Monteith family tomb, two of the burials were in unsealed lead coffins. Some of the bones analysed from within these lead lined coffins were soft and easily crushed. In one case (SK 318), the heavy coffin lid had collapsed causing further damage. In all burials within the family tomb, organic remains (e.g. hair and fabric) were well preserved. One individual (SK 304) exhibited relatively long hair and perhaps a beard. A white soft creamy substance was also noted on some of the bones from all burials within the tomb. It is probable that this substance is adipocere, a product of decomposition (hydrolysis and hydrogenation) of the fats in the body (Janaway, 1989).

4.2 Age

Estimating the age at death of a skeleton requires the observation of several different parts of the skeleton. In subadults (less than 18 years), these include observations of dental formation and eruption (Moorrees et al., 1963; Ubelaker, 1989), maximum diaphyseal length of longbones (Sundick, 1978; Ubelaker, 1989) and fusion of epiphyses (Brothwell, 1981; Ubelaker, 1989). In adults (greater than 18 years), skeletons are examined to assess the degree of dental attrition (Brothwell, 1981), cranial suture closure (Meindl and Lovejoy, 1985), degenerative changes to the sternal ends of ribs (Iskan et al., 1984, 1985), pubic symphysis metamorphosis (Todd, 1920; McKern and Stewart, 1957; Gilbert and McKern, 1973; Katz and Suchey, 1985; Suchey et al., 1988) and morphological changes to the ilium auricular surface (Lovejoy et al., 1985).

The accuracy of age estimations are dependent upon the completeness of the skeleton and the number of observations which can be made. However, even when all the above techniques can be applied, adult age estimates can only be predicted within broad categories (Young Adult (18-25 years), Middle Adult (26-45 years), Mature Adult (46+ years)). When none of the above ageing methods can be applied, it is sometimes possible to

assign an age of subadult or adult based on the size of the bones and degree of epiphyseal fusion (fusion of the ends of the bones to the shaft).

Skeleton 207 from Trench C was predicted to be middle adult, the infant skeleton (SK 205) was estimated to be 6 months + 3 months of age, and the disarticulated infant remains were estimated to be newborn to 1 year old. In the Monteith family tomb, SK 304 and SK 305 were assessed to be middle/mature adults, although it appeared that SK 305 may have been slightly older than SK 304. SK 318 was predicted to be a middle adult and SK 323 a mature adult.

4.3 Sex

The skull and pelvis demonstrate the most sexual dimorphism and are the most reliable indicators of sex. However, measurements and observations of other bones such as the clavicle, scapula, sternum, humerus, radius, femur and sacrum are also useful age indicators (Phenice, 1967; Bass, 1987; Brothwell, 1981; Steele and Bramblett, 1988; Ubelaker, 1979; Sutherland and Suchey, 1991; White, 1991). Similar to ageing, sex estimations are most accurate on complete skeletons. Subadults were not sexed due to methodological problems (Saunders, 1992).

The adult burial in Trench C (SK 207) was probably a male based on the above criteria. All the individuals from the Monteith family tomb were found to exhibit very strong male traits, with the possible exception of SK 323, who demonstrated female and male traits almost equally. Despite the ambiguity of SK 323, it is probable that all members of the Monteith family analysed were male.

4.4 Stature

Height estimations were calculated following equations devised by Trotter (1970). Stature could not be estimated for SK 207 due to the fragmented state of the skeleton. The heights of the individuals from the Monteith family varied from 5'3" (SK 323) to 5'9" (SK 304). The other 2 individuals were 5'6" (SK 305) and 5'7" (SK 318).

4.5 Metrics

Cranial and post cranial metrics were taken where possible following descriptions by Bass (1987) and Brothwell (1981). These metrics help to describe the morphological features of the skeleton. Skeleton 304 had a very slender or narrow face with narrow nasal aperture and orbits. Measurements could not be taken of SK 305, although it was observed to be similar morphologically to SK 304. Skeleton 318 was broad or round headed with a narrow face. All 3 of these individuals had narrow features, whereas SK 323 had a wide nasal aperture. It was also noted that SK 304 and 305 had a similar square shaped mandible, and SK 318 and SK 323 had similar pointed, but robust shaped jaws. No cranial measurements could be taken of SK 207.

4.6 Non-metric traits

Cranial non-metric traits were recorded following descriptions from Berry and Berry (1967) and post-cranial traits were recorded following Finnegan (1978). Due to the incompleteness and fragmented state of SK 207, no non-metric traits could be observed on this skeleton. However, in the Monteith family tomb several non-metric traits were consistently represented (listed in the catalogue). These include zygomaticofacial foramen, double inferior articular talar facet, double anterior calcaneal facet and transverse foramen bipartite of the lower cervical vertebrae. Interestingly, certain traits were found to be shared by at least 2 of the individuals, but not consistently the same 2 individuals. For example, SK 318 and SK 323 had mandibular tori, and SK 305 and SK 318 had an ossicle at the parietal notch. Also, SK 305 and SK 323 shared an anomaly of 6 sacral segments, as well as having 5 lumbar vertebrae. SK alone had the anomalous feature of an extra left upper incisor.

It is difficult to assess whether these similarities and difference are due to common genes and common environmental effects. Both factors may be responsible for any relationships observed involving non-metric variation (Saunders, 1989).

4.7 Pathology

The presence of pathological conditions facilitates inferences regarding health, diet and hygiene of individuals or groups of individuals. Any pathological lesions observed on the individuals from Govan were diagnosed with the aid of Hillson (1981) (dental disease) and Ortner and Putschar (1985). No pathological conditions were observed on the infant (SK 205) and adult (SK 207) burials from Trench C. This discussion will solely concern the Montieth family.

Dental disease. All of the Monteith's suffered from at least two types of dental disease. These diseases include calculus (mineralised plaque), caries, abscess and periodontal disease (gum disease). All individuals had calculus and caries. These types of diseases may be related to diet (sticky or sugar rich) and poor oral hygiene. Three of the individuals (SK 304, SK 305 and SK 323) had at least one abscess. All of these lesions were observed at the root of a carious tooth. Caries may expose the pulp chamber of the tooth to infection from mouth bacteria (Hillson, 1981). Only one individual (mature adult) had severe periodontal disease (SK 323).

Spinal joint disease. The eldest Monteith (SK 323) observed suffered from spinal joint disease a condition which is often present in individuals past middle age (Ortner and Putschar, 1985). Both middle/mature adults (SK 304 and SK 305) also demonstrated Schmorl's nodes on a few of the lower thoracic vertebrae. These depressions on the superior and/or inferior surfaces of the vertebral bodies may be due to degenerative and traumatic changes to an intervertebral disc, resulting in herniation and protrusion into the vertebral end-plate (Ortner and Putschar, 1985).

Joint disease. Changes to the joint (lipping and/or porosities and/or eburnation) were observed in 2 of the Montieth family members. A middle/mature adult (304) demonstrated slight changes in the feet, whereas the mature adult (SK 323) had extensive joint changes throughout the body (see catalogue). These changes may be due to a number of inter-related factors including age, genetics and biomechanics of the joint.

Infection. Changes indicative of infection (reactive new

bone formation) were observed on the left tibia , right maxillary sinus and left nasal process of SK 305. The lesions on the tibia and nasal process appeared to be well healed (smooth, lamellar bone) whereas the infection in the right maxillary sinus was active at the time of death (slightly raised, porous new bone). It is not possible to determine what may have caused these lesions. However, it is possible that the infection on the leg may have resulted from traumatic injury.

Other. Small porosities in the right orbit (cribra orbitalia) were observed on the cranium of SK 305. This condition may be associated with a number of different pathological processes, including iron deficiency anaemia.

When the fragmented cranium of SK 323 was observed, hyperostosis frontalis interna was identified. As the name implies, this condition is characterised by thickening and irregularity of the internal surface of the frontal bone. Very little is presented in the literature about this condition, although it is commonly observed in females after menopause (Ortner and Putschar, 1985).

4.8 Discussion of skeletal analysis

Unfortunately, relatively little information could be gleaned from the burials within Trench C. The possible medieval skeleton (SK 207) was a middle adult male, and the possible 19th century infant (SK 215) probably died within the first six months of life. No pathological conditions were observed on these individuals.

Analysis of the skeletons from the Monteith family tomb provided an uncommon opportunity to compare known ages and sexes with those derived from the application of osteological techniques. When the stratigraphic relationships of the burials within the tomb, and the descriptions on the tomb stone, were compared to the age and sex estimations predicted for each skeleton, it was evident that SK 304, a middle/mature adult male, may have been Hugh Monteith - merchant, aged 47. Skeleton 305, also a middle/mature adult male, directly below SK 304, was probably John Monteith - writer, aged 48. In a level below SK 304 at the west end of the tomb, was the

burial of a middle adult male (SK 318), perhaps William Monteith – barrister, aged 34. Finally, in the same level as SK 318, but on the east side of the tomb, was a middle/mature adult ?male (SK 323), who may have been John Monteith (the elder) aged 64. The broad categories predicted by current ageing techniques seemed to compare favourably to the ages stated on the tomb stone.

IN MEMORY OF
JANE CASSELLS
WIFE OF JOHN MONTEITH WRITER GLASGOW
WHO DIED 23 FEBRUARY 1839 AGED 36
JOHN MONTEITH OF WESTBANK
DIED 19 OCTOBER 1842 AGED 64
WILLIAM MONTEITH BARRISTER LONDON
DIED 11 JULY 1846 AGED 34
JOHN MONTEITH WRITER
DIED 20 NOVEMBER 1852 AGED 48
HUGH MONTEITH MERCHANT
DIED 5 JUNE 1854 AGED 47
HELEN THOMSON
WIFE OF JOHN MONTEITH OF WESTBANK
DIED 17 OCTOBER 1855 AGED 76

Based on the chronology of births and deaths, John Monteith seems to be the father of John, William and Hugh. This also provides an interesting opportunity to compare osteological variation within a family group. Morphologically, there were similarities and differences between father and sons. Some common non-metric traits were consistently shared between all individuals, and other traits and anomalies were shared only between two of the individuals (see above). Although it is not possible to conclusively state that these traits are due to genetic factors, they do suggest morphologically similar skeletons. Measurements of the cranium also demonstrated some similarities, at least among the three sons; all appeared to have narrow facial features.

None of these family members, however, shared the same height. The youngest son, William, may have been 5'7", the middle son, Hugh, may have been the tallest at 5'9", and the eldest son, John, may have been approxi-

mately 5'6". The father, John appears to have been a relatively short individual at 5'3".

All individuals suffered from dental disease. The presence of caries and calculus may be suggestive of a diet rich in fermentable carbohydrates and sugars. Other diseases observed, which may be partially a factor of elderly age, were spinal joint disease and extensive arthritis in the mature adult (SK 323). The eldest son, John (SK 305) also suffered from infection before, and at the time of, his death.

5 Conclusions and prospects for future investigations

The excavations of 1994 confirmed that significant archaeological levels have survived at Govan Old. Although this seems to simply confirm the testimony of the early medieval sculptured stones, it should be remembered that the tremendous changes which the parish has seen particularly since the Industrial Revolution made the survival of sensitive and fragile archaeological remains far from certain. With respect to our initial aims we have demonstrated that a substantial ditch, probably with an internal earthen bank, formed the earliest boundary of the churchyard and that its alignment corresponds closely with that of the present churchyard, at least on the southern side. There is every reason to expect that this represents the original boundary of the Christian establishment documented by the carved stones.

We cannot be quite so confident that the foundations seen in Trench C, next to the church, represent those of an early timber church, but such an interpretation would be reasonable. Only further excavation could resolve the issue with certainty. The third aim, to discover whether archaeological deposits and structures have survived the burials of the 18th and 19th century, was also achieved. We now have a reasonable appreciation of where early deposits are likely to survive (and where they have been disturbed). Apart from the site of the family lairs east of the church (Trench D), it would appear that the perimeter of the churchyard has remained free from burials during

the last few centuries. Therefore any structures set against the boundary are likely to have survived. As we have seen this was where some of the workshops were located. With respect to the interior, deeply stratified remains such as the probable medieval burial and the foundations in Trench C, may be expected to survive in some places depending on the intensity of later burial. It is impossible to be more precise about areas of survival, because our knowledge of post-medieval burials activity is imperfect. Nevertheless the results of Trench C are certainly encouraging.

5.1 Public interest

At the outset we also hoped to generate interest in the excavations and in Govan's heritage beyond the academic community. We were conspicuously successful in our public aims. Visitors were present at the excavations continuously, many came to monitor our progress on a daily basis. Moreover we are certain that our presence caused many local residents to recognise the historical importance of Govan for the first time. In many respects, the most satisfying aspect of the excavation was the level of interest expressed at the 'Open Day'. Estimates of the numbers who came to the church to observe archaeologists at work, to tour the excavations, to examine the finds and to view the sculptured stones range between 2,000 – 3,000 over the course of six hours on the final Saturday.

The scale of interest in the excavations surprised all of those involved with the project and only served to remind us that generating public interest in the past only requires that the past be made accessible and intelligible. The academic results were no less important, because they hold out the prospect of recovering the historical context of the nationally significant collection of carved stones.

6 Acknowledgements

We have benefited from the advice and encouragement of a great number of people during the course of this pro-

ject, but some merit particular thanks. The Rev. Tom Davidson Kelly stimulated the project from the earliest stages and provided material support at every step of the way. We have appreciated the ability of the parishioners to overlook the mud and chaos caused by digging holes in their churchyard. Tim Mitchell of the City of Glasgow Planning Department was the other person who encouraged us from the beginning and, more importantly, helped to secure the necessary funds. June Bell of the Town Clerk's Office was no less supportative and coordinated the publicity campaign. We appreciated the genuine enthusiasm in our work expressed by the people of Govan, particularly those who helped on site as volunteers from the Govan Reminiscence Group and beyond. Joehari Lee's patience has been rewarded with a fine set of site photographs (only a few of which are published here). Invaluable specialist advice was provided by Bob Will on the medieval pottery, by Alan Macquarrie on historical matters and by Ewan Campbell on the geology and small finds. Thanks are due to Rob James for conducting the geophysical survey, to Gerry MacArdle for the finds drawings and to the rest of the staff and students who carried out the excavation. A special thanks is due to Lorraine MacEwan for preparing the excavation drawings.

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8 Appendix 1. Catalogue of finds from Govan Old Parish Church 1994

Pottery preliminary identifications by R. Will (12/12/94).

The medieval pottery includes both white and red wares, which were probably being manufactured in central Scotland between the 14th - 15th

centuries. There is one possible imported Dutch sherd. The assemblage is too small to allow more precise identifications or dating.

Trench/context	Sherds	Type and date
A/007	1	Post-medieval
A/019	2	Medieval 14th - 15th Cent
A/021	3	Post-medieval
B/106	1	Medieval 14th - 15th Cent
B/114	1	Medieval 14th - 15th Cent
B/120	1	Post-medieval
C/201	2	Post-medieval
C/206	6	Medieval 14th - 15th Cent
C/210	1	?Medieval 14th - 15th Cent

Small Finds (* = illustrated)

SF No.	Trench/Context	Description and dimensions
1	B	Stone Moulding, fragment of 19th C burial memorial
2	D	Stone Moulding, fragment of 19th C burial memorial
3	D/305	Mother of Pearl Button. Modern.
4*	B/131	Shale, finger-ring, broken during manufacture. diam. 28 mm external and 19 mm internal, 5 mm thick
5*	B/132	Shale, roughly shaped into a hexagonal tablet/disc. 30x28x5 mm
6	A/023	Shale, irregular tablet, signs of working on two edges. 80x45x10 mm
7*	A/023	Shale, roughly shaped disk. 40x30x8 mm
8	C/214	Shale, large unworked block. 230x180x40 mm
9	A	?Stone Moulding, fragment of 19th C burial memorial
10*	B/113	Red Sandstone, possible fragment of sculpted stone.
11	B/134	Unworked shale lump. 46x35x11 mm
12	A/023	Unworked shale lump. 46x35x6 mm
13	B/126	Unworked shale lump. 52x23x12 mm
14	B/120	Unworked shale lump. Two fragments. 65x50x28 & 25x20x5 mm
15*	B/107	Shale, roughly shaped rectangular tablet with a notch cut into one side. 80x50x7 mm, notch 5x9 mm.
16	B/126	Unworked shale lump. Three fragments. 90x80x44 mm, 60x52x14 mm, 30x25x12 mm
17	B/124	Unworked shale lump. Two fragments. 103x91x22 mm & 42x20x19 mm
18	B/126	Unworked shale lump. Two fragments. 82x70x15 mm & 120x50x50 mm

9 Appendix 2. Catalogue of human remains from Govan Old Parish Church 1994

Burials from Trench C:

207 Middle Adult - Male

Archaeology: No coffin remains were found associated with the burial.

Preservation: Bone was in good condition, but completely fragmented.

Inventory: Approx. 40% complete. Frags. of cranium, mandible, R scapula, R humerus, R ulna, radii, innominates, femora, tibiae, fibulae, and vertebrae were present. Some loose teeth, some bones of the hands and feet and patellae were also present.

205 Infant (6 months. \pm 3 months.)

Archaeology: Remains of a wood coffin and shroud pins were associated with burial.

Preservation: Good. Some green staining on bones.

Inventory: Approx. 80% complete. Missing lower R leg, hands and feet.

Disarticulated Bone from Trench C:

Infant remains represented by 3 rib frags, 4 neural arches, 1 occipital frag. 1 ilium frag., 1 complete ilium (width - 37 mm), 1 vert. body, 2 radius frags., 1 L femur frag. and 1 tibia frag.

MNI - 1 (infant approx. NB - 1 yr., Sundick, 1978).

Burials from Trench D (Monteith Family Tomb):

304 Middle/Mature Adult - Male - 175.5 \pm 2.99 cm

Archaeology: Buried in a wood coffin

directly above SK 305, in centre of family tomb.

Preservation: Good. The remains of relatively long hair was present on the cranium. Some hair was also present on the mandible, innominates, sacrum and legs.

Inventory: 100% complete.

Non-metric Traits: Open foramen spinosum (L), maxillary torus (B), zygomaticofacial foramen (B), accessory infraorbital foramen (R), lateral tibial squatting facet (B), double inf. ant. talar facet (B), double ant. calcaneal facet (B), peroneal tubercle (B), double atlas facet (B) and transverse foramen bipartite (R side of C7).

Pathology: Dental disease: calculus, caries and an abscess. Spinal joint disease: Schmorl's nodes (T6-T11). Joint disease: slight marginal lipping of the navicular articular surface (B).

305 Middle/Mature Adult - Male - 168.9 \pm 2.99 cm

Archaeology: Buried in a wood coffin directly below SK 304, in centre of family tomb.

Preservation: Good, with some erosion of bone surfaces. Some preservation of hair was present on cranium.

Inventory: 100% complete.

Non-metric Traits: Ossicle at parietal notch (L), ossicle at asterion (L), post. condylar canal open (R), zygomaticofacial foramen (B), Poirier's facet (B), sternal foramen, double inf. ant. talar facet (B), double ant. calcaneal facet (B), peroneal tubercle (B), posterior atlas bridging (B), transverse foramen bipartite (R side of C6). There were also 6 sacral segments, the first segment had the appearance of a fused lumbar vertebrae, although there were

5 lumbar vert. present.

Pathology: Dental disease: calculus,

caries and an abscess. Spinal joint disease: Schmorl's nodes (T6-T8). L4 appears to be slightly collapsed on L side. Infection: L tibia, R maxillary sinus, L nasal process. Other: cribra orbitalia (R).

318 Middle Adult - Male - 171.6 ± 2.99 cm

Archaeology: Buried in a wood and lead coffin, in level below SK 305, at the west end of the family tomb.

Preservation: Poor (eroded, soft and fragile) to good. Some preservation of hair was present on cranium and legs. Lead coffin lid was collapsed into coffin, causing some damage to the skeleton.

Inventory: Approx. 80% complete. R arm, R scapula, R clavicle, R ribs, vertebrae and patellae were missing.

Non-metric Traits: Ossicle at parietal notch (L*), post. condylar canal open (B), open foramen spinosum (L*), zygomaticofacial foramen (L*), Poirier's facet (B), acromial articular facet (L*), double inf. art. facet (B), double ant. calcaneal facet (B), double atlas facet (B), transverse foramen bipartite (B sides of C5). There was also a region of exposed trabeculae at the superior margins of the femoral heads and mandibular tori in the region of the canines.

L* - trait present on L side, R side is missing for observation.

Dental Anomaly: Extra upper L incisor was present.

Pathology: Dental disease: calculus and caries.

323 Mature Adult - ?Male - 160.3 ± 2.99 cm

Archaeology: Buried in a wood coffin, in level below SK 305 (same level as 318), at the east end of family tomb. Coffin was partially in excavation baulk.

Preservation: Good. Some preservation of hair on cranium.

Inventory: 100% complete. Cranium was fragmented.

Non-metric Traits: Posterior condylar canal open (R*), zygomaticofacial foramen (B), accessory infraorbital foramen (L), Allen's fossa (B), medial tibial squatting facet (R), lateral tibial squatting facet (B), acromial articular facet (B), double inf. ant. talar facet (B), double ant. calcaneal facet (B), peroneal tubercle (L), and double atlas facet (L). There were also 6 sacral segments, the first segment had the appearance of a fused lumbar vertebrae, although there were 5 lumbar vert. present. Mandibular tori were also present in the region of the 1st incisors and 2nd premolars.

Pathology: Dental disease: calculus, periodontal disease, caries and an abscess. Spinal joint disease: slight to severe changes (C1, C2, C5, C6, T2, T4-S1). Schmorl's nodes also present (T8-T10, L4 and L5). Joint disease: Joint changes (slight marginal lipping to eburnation) were observed in the humeri, radii, ulnae, R scapula, clavicles R carpals, fingers, ribs, innominates, R femur, R tibia, R patella, R tarsals and toes.

Other: Internal frontal hyperostosis.