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SUNDERLAND CITY COUNCIL

ST. PETER'S CHURCH, MONKWEARMOUTH, SUNDERLAND, TYNE AND WEAR

WATCHING BRIEF REPORT

March 2015

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DATE ISSUED:	March 2015
JOB NUMBER:	**CP11089/15**
SITE CODE:	**SPS-B**
PLANNING APP REF.:	**14/01527/LAP**
OASIS REFERENCE:	**Wardella2-206680**
GRID REFERENCE:	**NZ 40167 57783**
REPORT NUMBER:	**RPT-001**

SUNDERLAND CITY COUNCIL

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MARCH 2015

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SUMMARY

Wardell Armstrong Archaeology (WAA) was commissioned by Sunderland City Council to undertake an archaeological watching brief at St. Peter's Church, Sunderland, Tyne and Wear (NGR NZ 40167 57783). This work follows a planning application for the landscaping of the area around St. Peter's Church (Planning Ref. 14/01527/LAP). The work was required as the site lies within St. Peters Anglo-Saxon Monastery that is a Scheduled Ancient Monument (SM 32066, HA 1017222). Sunderland City Council granted planning consent for the development, on the condition an archaeological watching brief be undertaken during all groundworks for the landscape enhancements around the church grounds.

The archaeological watching brief was undertaken over nineteen days, the 5th December 2014 and from the 21st January to 13th February 2015. The watching brief monitored the excavation of 20 tree pits and one bush pit on the northeast, east and southern sides and the re-grading of ground on the northern side of the church. Eighteen of the tree pits were devoid of any archaeological features and only various ballast and demolition layers were observed in each one. Tree pit 1 and the bush pit both contained, in section, wall remains, probably associated with 19th century buildings that formed the former Hallgarth Square.

Importantly, the remains of 12 inhumations, 23 burial pits, 4 spreads and a brick structure associated with the 19th century cemetery were observed under the topsoil to the north of the church. The majority of the human remains observed were re-deposited in pits to the north of the church, the original graves having been disturbed by past activity at the site. The in-situ graves identified were left undisturbed wherever possible. Post-excavation analysis of the human remains revealed a minimum number of 202 individuals, 156 of which were adults and 44 of which were non-adults. Copper staining from shroud pins was a common occurrence in the human bone assemblage. Funerary and domestic artefacts were recovered with the human bone. The human skeletal remains are likely to be of 19th century date.

Any future invasive work would impact on archaeological remains and human burials, therefore any further construction work on the site should be subject to a programme of archaeological monitoring.

ACKNOWLEDGEMENTS

Wardell Armstrong Archaeology thank Ian Parkin, Senior Project Manager of Sunderland City Council, for commissioning the project, and for all assistance throughout the work. WAA also thank Jennifer Morrison, Tyne and Wear Archaeology Officer, for all her assistance throughout the project.

WAA also thank Ian Irving, BCE Northern Ltd and all the groundworks staff for their help and assistance during the project.

The archaeological watching brief was undertaken by Mike McElligott assisted by Sean Johnson, Charles Rickaby, Megan Stoakley and Adrian Bailey. The report was written by Mike McElligott and the drawings were produced by Adrian Bailey. The human remains were analysed by Megan Stoakley, WAA Finds Officer.

The report was edited by Richard Newman, Post Excavation Manager for WAA and the project was managed by Martin Railton, Senior Project Manager for WAA.

1 INTRODUCTION

1.1 Circumstances of the Project

1.1.1 In January 2015, Wardell Armstrong Archaeology (WAA) was invited by Sunderland City Council, to maintain an archaeological watching brief at St. Peter's Church, Monkwearmouth, Sunderland, Tyne and Wear (NGR NZ 40167 57783; Figure 1). The archaeological watching brief was to be maintained during groundworks associated with landscape enhancements to the grounds around the church including new pedestrian entrances, footpaths, floodlighting and planting. The site (an Anglo-Saxon Monastery) is a scheduled monument (NHL 1017222) and the church is a grade 1 listed building (NHL 1217958). The site formed part of the withdrawn 2012 World Heritage Site nomination for the paired monasteries of Monkwearmouth and Jarrow. It is therefore considered that the groundworks for the landscaping and construction may disturb post-medieval human remains and buried archaeological remains. As a result, Jennifer Morrison, Tyne and Wear Archaeology Officer requested that all groundworks be subject to a programme of archaeological observation and investigation. This is in line with government advice as set out in Section 12 of the National Planning Policy Framework (NPPF 2012).

1.1.2 All groundworks associated with the development had to be carried out under full archaeological supervision and all stages of the archaeological work were undertaken following approved standard and guidance (CIfA 2014) and were consistent with the specification provided by Jennifer Morrison, Tyne & Wear Specialist Conservation Team.

1.1.3 This report outlines the monitoring works undertaken on-site, the subsequent programme of post-fieldwork analysis, and the results of this scheme of archaeological works.

2 METHODOLOGY

2.1 Specification

2.1.1 A specification was provided by Jennifer Morrison, Tyne and Wear Archaeology Officer, Newcastle City Council, after which Wardell Armstrong Archaeology was commissioned by the client to undertake the work. The specification was adhered to in full, and the work was consistent with the Chartered Institute for Archaeologists (CIfA) standard and guidance for Archaeological Watching Briefs (2014).

2.2 The Watching Brief

2.2.1 The works involved a structured watching brief to observe, record and excavate any archaeological deposits from the development site. A watching brief is a formal programme of observation and investigation conducted during any operation carried out for non-archaeological reasons, on a specified area or site on land, inter-tidal zone or underwater, where there is a possibility that archaeological deposits may be disturbed or destroyed (CIfA 2014).

2.2.2 The main objectives of the watching brief were to monitor all groundworks associated with the landscape enhancements around the church that included the re-grading of ground on the northern side of the church and opening of 19 tree pits and one bush pit around the whole eastern side of the church.

2.3 The Archive

2.3.1 A full professional archive has been compiled in accordance with the specification, and according to the Archaeological Archives Forum recommendations (Brown 2011). The archive will be deposited at Tyne and Wear Museum, with copies of the report sent to the County Historic Environment Record at Newcastle, Tyne and Wear, where viewing will be available upon request. The archive can be accessed under the unique project identifier **WAA15, SPS-B, CP 11089/15**.

2.3.2 Wardell Armstrong Archaeology and Newcastle City Council, support the **O**nline **A**cces**S** to the **I**ndex of Archaeological Investigation**S** (**OASIS**) project. This project aims to provide an on-line index and access to the extensive and expanding body of grey literature, created as a result of developer-funded archaeological work. As a result, details of the results of this project will be made available by WAA, as a part of this national project. The unique OASIS identification number for this archive comprises **wardella2-206680**.

3 BACKGROUND

3.1 Location and Geological Context

3.1.1 St. Peters Church is situated in Monkwearmouth, in the northern outskirts of the city of Sunderland and is located at the eastern limits of the Metropolitan County of Tyne and Wear. The site lies on the north bank of the river Wear and is at a height of approximately 14m aOD. The site is within a heavily urbanised area with the University of Sunderland to the south, the National Glassworks to the south east and residential buildings to the north and west. St. Peters Church is also bounded by the A183 to the north and by St. Peter's Way to the south, west and east (Figure 1).

3.1.2 The underlying solid geology of the area consists of Roker Formation – Dolostone sedimentary bedrock formed during the Permian Period (251 – 271 million years ago). The site is underlain by superficial glaciofluvial deposits of Devensian sand and gravel formed in the Quaternary Period (up to 2 million years ago) (BGS 2001).

3.2 Historical Background

3.2.1 *Introduction:* this historical background is compiled mostly from secondary sources, and is intended only as a brief summary of historical developments specific to the study area.

3.2.2 *Prehistoric*: Large quantities of worked flints recovered in Monkwearmouth indicate long term Mesolithic occupation (Turner *et al*. 2013, 81). Late prehistoric sites in the area are not common (*ibid*; 81) and there is no previous evidence of prehistoric activity within the site boundaries.

3.2.3 *Roman:* Althoughno Romano – British settlement has been located near to Wearmouth, two Roman coins were associated with the earlier Anglo – Saxon cemetery levels, with Samian and colour coated wares also recovered (Cramp 2005, 24). Possible Romano – British worked stone was also re-used in the fabric of the Monastery (*ibid*). No other evidence of Roman activity has been recorded within the site boundaries.

3.2.4 *Medieval:* The construction of the monastery at Jarrow and Monkwearmouth was begun in 674, with Monkwearmouth the earlier of the two sites. The construction of the Monastery at Jarrow began at a later date of 682 AD, with a church dedicated to Paul the Apostle started in 684 AD and finished a year later in 685 AD (Cramp 1969). The Monastery at Monkwearmouth was abandoned in the 9th century A.D. (Richards 1991, 97), with an attempt to re – build the church in the 11th century AD, which

continued to function as a cell of Durham until the dissolution in 1540 AD (Barker 2003, 6).

3.2.5 *Post-medieval and Modern:* Industrialization greatly affected the study area and led to its absorption into Sunderland by 1897. Previous to this, three distinct parishes of Monkwearmouth, Bishopwearmouth and Sunderland existed, with Sunderland made a separate Parish, independent of Bishopwearmouth in 1719 due to a surge in the population (Burnett 1834). During this period, and following the dissolution of the Monastery in 1540, the parts of the monastic building were converted into Monkwearmouth Hall, which was occupied as a rectory until it burnt down in 1790. A single small building survived, and was incorporated into the later Hallgarth Square (Barker 2003, 7). The square, situated to the south of St. Peters Church church was constructed at the start of the 19th century (*ibid*), at a time when Monkwearmouth was described as containing ballast hills (Burnett 1834, 63), a result of the growth of Sunderland dock with collieries such as Hetton colliery in 1822 having direct haulage lines which ran to the dock (Atkinson 1974, 42). It was also noted in 1834 that Monkwearmouth had "improved the ballast mounds" and that building permissions were liberalised which resulted in the erecting of "several excellent buildings" (Burnett 1834, 64). Hallgarth square was demolished at the start of the 1960's (Cramp 1969, 21), and the remains were covered by a grass lawn.

3.3 Previous Work

3.3.1 St. Peters Church remained un-excavated until excavations in the late 1950's and during the 1960's conducted by Professor Cramp (Cramp 1969, 21). These excavations were situated to the south of the church and proved the existence and location of the Anglo – Saxon church and of extensive Norman replanning (Cramp 1969 & 2005 & Webster & Cherry 1972). An Anglo – Saxon cemetery was interpreted as broadly contemporary with the earliest phase of church at the site, with later burials cutting the remains of early mortared flooring associated with the Anglo – Saxon church (Webster & Cherry 1972, 150). The work also produced evidence of later rebuilding and evidence of the continual occupation of the site into the post – medieval period (Cramp 2005)

3.3.2 A geophysical survey was undertaken in 2003, as part of a Masters thesis for Durham University. The geophysics was conducted on the grounds surrounding the church. The survey revealed several features which were highlighted as being possible

archaeological features, notably a rectangular structure to the south of the site (Barker 2003), which was later shown to be modern.

3.3.3 An archaeological evaluation was undertaken by WAA in October 2013 and involved the excavation of eight trenches (Churchill 2013). The trenches were located to target key locations to the depths required by the landscaping scheme. Trenches on the northern side identified burial pits containing disarticulated human remains and dumped worked stone, deposited when the cemetery was no longer used in the latter half of the 20th century. One trench on the eastern side contained a post-medieval crypt and on the southern side, remains of 19th century walls were observed and interpreted as part of the buildings that formed Hallgarth Square. A possible earlier wall foundation and a reinforced modern structure were also observed. Disturbed human remains that may be contemporary with the Anglo-Saxon burials identified within Cramp's excavations in the 1960's and were noted and left insitu.Some of these disarticulated remains appeared to have been moved during the construction of an Anglo-Saxon sandstone foundation.

4 ARCHAEOLOGICAL WATCHG BRIEF

4.1 Introduction

4.1.1 The watching brief monitoring was undertaken in three parts over 20 days, on the 5th December 2014, the 21st January to the 13th February and the 27th of February 2015. The first part involved the excavation of a service trench and topsoil strip to the south of the vicarage for the memorial garden. The second part involved the opening of the tree and bush pits and then the removal of topsoil and the re-grading of ground on the northern side of the church.All excavations were done using a mini-digger and an 8-ton tracked excavator with a toothless bucket (Figure 2).

4.2 Results

4.2.1 The area of ground to the north of church, measured approximately 1172m^2 was topsoil stripped and the ballast layers below were re-graded as part of the landscape enhancements (Figure 4). The topsoil (**1000**) was *c.*0.3m thick throughout the area and it was a black/dark brown sandy clay soil. The features were cut into two ballast layers that were visible across the east and central sections of the stripped area. The upper ballast layer (**1010**)/(**1037**) was a loose light yellow sand with black patches and contained occasional small stone. The lower ballast layer (**1011**)/(**1038**) was a loose mid orange brown sand gravel that contained frequent stone, flint and occasional shells. On the western side, the upper ballast layer (**1035**) was a loose mid orangey yellow sandy gravel. Burial pits and inhumations were observed under the topsoil and will be briefly described below. For a detailed analysis of the human remains, see Section 5.

4.2.2 In the northeast edge of the stripped area there was a cluster of seven shallow burial pits and a spread that contained disarticulated human remains (Figures 4 & 5). The seven pits, [**1008**]/SK**1007**, [**1047**]/SK**1030**, [**1046**]/SK**1045**, [**1041**]/SK**1031**, [**1042**]/SK**1033**, [**1040**]/SK**1032** and [**1036**]/SK**1034** were all cut into the two uppermost ballast layers (**1010**) and (**1011**). They were sub-oval shaped except for two of the larger ones, [**1036**] and [**1042**] that were sub-rectangular. The pits measured from 0.4m – 1.8m by 0.24m – 0.84m by 0.11 – 0.48m and had sharp, moderately steep to steep sloping sides with mostly flat bases with rounded base for [**1046**] and [**1047**]. The fills of the pits (**1106**) appeared to be almost identical and consisted of was a loose blackish dark brown sandy gravel topsoil mix that contained frequent stone and pieces of flint. Pieces of CBM, occasional pieces of glass and a single piece of clay pipe were recovered from the fills. The fills appeared to be a mix

of the topsoil and ballast layers. Pit [**1036**] had a second upper layer (**1039**) that was a loose mid grey sandy clay gravel that contained frequent stone, flint and occasional CBM and measured 0.6m by 0.55m by 0.48m.

4.2.3 The fills covered disarticulated human remains in all seven of the pits. The remains were highly concentrated in all of them expect for [**1036**] as the bones were spread throughout the fills. The prominent elements present in the pits were craniums and long bones that appeared to be both arms and legs with femurs, tibias, fibulas, ulnas, radiuses and humeriindentified. Some smaller elements, such as ribs and vertebrae were also identified. Pit [**1008**] appeared to have almost a whole individual dumped in it (Plate 1). The cranium, mandible, pelvis along with the arm and legs bones, though these appeared to have been crushed as most were broken. Ribs, vertebrae and carpals, metacarpals, tarsals and metatarsals were identified also, along with some phalanges. There was a spread, 1.21m by 0.7m, of topsoil that covered pit [**1049**] and it contained some human remains, (**1048**) scattered throughout it. It was a mix of long bones, some pieces of femurs were identified and some smaller elements, mostly ribs were lifted.

Plate 1: SK1007 in burial pit [1008], looking north

4.2.4 Pit [**1049**] was located in the southern end of the northern pit cluster, with burial pits [**1042**] to the west and [**1040**] to the east (Figures 4 & 5). It was sub-oval shaped with sharp, steep sloping sides and a flat base that measured 1.14m by 0.55m by 0.2m. The fill (**1095**) was a loose dark brown sandy clay gravel that contained frequent

stone and pieces of flint. The fill surround the base of a tombstone that had been lift in situ after the rest of it had been broken off and removed. It was aligned roughly north-south and measured 1.03m by 0.1m by 0.25m (Plate 2).

Plate 2: Pit [1049] (middle) showing the tombstone base and burial pit [1040] (foreground) and [1042] (background), looking west.

4.2.5 There was a second burial pit cluster that was located in the south central section of the stripped area (Figures 4 & 5). It consisted of pits [**1065**]/SK**1066**, [**1067**]/SK**1068** and [**1084**]/SK**1085** (Plates 3, 4 & 10) and were cut into ballast layer (**1011**) on the slope down to the kerb. The three pits were sub-oval shaped with flat bases. The sides of [**1067**] only, were visible and were moderately sharp steep sloping. The south side was cut by a modern trench. The pits measured 0.36m – 0.82m by 0.32m – 0.48m by 0.2m. The fills (**1107**) were similar and consisted of a loose blackish dark brown sandy gravel topsoil/ballast mix that contained frequent stone and pieces of flint. Disarticulated human remains were observed in each pit with a single cranium identified in each one which appeared to have been placed in last, sitting on top of various bones that had been dumped in. Pieces of femurs and other long bones along with pelvic bones and ribs were identified. Pit [**1084**] truncated most of burial

SK1087, leaving only the tibias, fibulas, tarsals, metatarsals and phalanges of both the right and left legs.

Plate 3: SK1066 in burial pit [1065], looking northwest

Plate 4: SK1068 in burial pit [1067], looking northwest

4.2.6 The third burial pit cluster was located in the western side of the stripped area (Figures 4 & 5). It consisted of pits [**1027**]/SK**1029**, [**1043**]/SK**1050** and [**1025**]/SK**1021** and were cut into ballast layer (**1035**). Two of the pits were rectangular shaped and the third was sub-oval shaped. The three pits had sharp, vertical sloping sides with flattish, uneven bases and measured 1.44m – 1.78m by 0.7m – 0.86m by 0.45m –

0.5m. The fills (**1108**) were similar and consisted of a loose dark brown/grey sandy clay topsoil/ballast mix that contained moderate small stone and flint. There was an upper layer (**1044**) at the southwest end of pit [**1043**] that consisted of large rounded stones and pebbles that had a large stone slab placed on top that may have been a fragment of a tombstone. It measured 0.67m by 0.64m by 0.4m. There was disarticulated human bone throughout the fills of the pits. Several craniums were initially visible in [**1027**] and [**1025**] (Plates 5 & 6) along with predominantly long bones that consisted of femurs, tibias, fibulas, humeri, radiuses, ulnas and pelvic bones also. Smaller bones such as ribs, vertebrae were found lower done in the fills along with more craniums. There was a spread of disarticulated human bone SK1023 that consisted of fragments of a femur, pelvic and cranium and was located to the south of pit [**1025**]. It was in layer (**1024**) that was a loose dark greyish brown sandy clay that contained occasional small stone and measured 0.94m by 0.69.

Plate 5: SK1021 in burial pit [1025], looking west

Plate 6: SK1029 in burial pit [1027], looking north

4.2.7 There were two isolated burial pits. The first, [**1004**] was located on the east side of the stripped area, to the north of the church (Figure 4). It measured 0.9m by 0.52m by 0.23m and was irregularly shaped with sharp, steep sloping sides and a flat base. It was cut into upper ballast layers (**1010**) and (**1011**). The fill (**1005**) was a mix of topsoil and ballast and was a loose dark brown sandy clay / light yellow grey sandy gravel that contained frequent flint pieces along with one piece of CBM and a clay pipe fragment. The fill covered disarticulated human bones SK**1006** (Plate 7). These consisted of two craniums that had been placed in the base of the pit, one upright and looking south and the other, upside-down looking north. Long boneswere placed across the top of the craniums that included several femurs, tibias, fibulas, ulnas, radius and humerus, before being backfilled. The second [**1012**] was located to the west of [1004] and to the south of the northern burial pit cluster. It was sub-oval shaped with sharp, near vertical sloping sides and a flat base that measured 2.3m by 1.01m by 0.5m. The fill (**1013**) was a loose blackish dark grey sandy silty clay that contained frequent stone, pebbles and flint. It covered a large amount of disarticulated human bone SK**1014**(Plate 8). Initially the remains of four craniums were identified along with an assortment of predominantly long bones including femurs, tibias, fibulas and humeri. There were also two pelvic bones, a clavicle and several ribs.

Plate 7: SK1006 in burial pit [1004], looking north

4.2.8 Grave cut [**1081**] was located on the west side of the area, to the northwest of the northwest corner of the church (Figure 4). It was sub-rectangular shaped with a flat base that measured 2.1m by 0.6m. The sides were not visible. The fill (**1080**) was a loose mid grey sandy clay gravel that contained occasional flint and stone. The burial SK**1079** (Plate 9) had been truncated so the lower half was missing but it was laid in the supine position. The upper half was mostly covered by the remains of a coffin plate, but the pelvic bones, though damaged were visible and the tops of both arms and the lower right arm. The cranium and mandible were visible and were the only remains lifted as the rest of the burial was low enough not to be disturbed by the landscaping works. The cranium appeared to be resting a section of coffin lid from burial SK**1096** that it had collapsed down on top of. Fragments of the coffin sides were visible but were in very poor condition. The grave cut [**1103**] of SK**1096** was visible as were fragmented remains of the coffin sides also. The two burials were covered over with pink/grey ballast before the topsoil was re-laid.

Plate 8: SK1014 in burial pit [1012], looking west

Plate 9: SK1079, looking west

4.2.9 Grave cut [**1091**] was located on the west side of the stripped area and to the west of the church. It was sub-rectangular shaped and only partially visible (Figure 4). It

measured 0.62m by 0.3m and had a flat base. The fill (**1092**) was a loose mid grey sandy clay gravel that contained moderate stone. It covered burial SK**1090** that was only partially exposed and also had been cut by burial SK**1087** along its southern side which had removed the right leg. The left femur was visible in section but only the lower left leg – the radius, ulna, patella along with the tarsals and metatarsals were lifted (Plate 10). The burial appeared to be that of a juvenile and from the position of the leg, it was laid in the supine position.

4.2.10 Grave cut [**1088**] was located on the west side of the stripped area and to the west of the church (Figure 4). It was sub-rectangular shaped that measured 0.58m by 0.3m. It had a flat base but the sides were not visible. The fill (**1089**) was a loose mid grey sandy clay gravel that contained moderate stone and flint. It had been truncated by a later burial pit that appeared to have removed most of the remains except for the lower legs (Plate 10). The east end of the grave had been cut by a modern cable trench that removed the phalanges and some of the metatarsals. The burial SK**1087**appeared to have been laid in the supine position and consisted of the right and left tibia and fibula and the tarsals and some metatarsals. Some of the right carpals but were not lifted as they were back far enough from the kerb not to be disturbed.

Plate 10: SK(1090) and SK(1087)

4.2.11 Grave cut [**1081**] was located on the west side of the stripped area and to the west of the church (Figure 4). It was sub-rectangular shaped that measured 2.1m by 0.6m that had a flat base but the sides were not visible as it was cut into the topsoil. The fill (**1083**) was a loose mid grey sandy clay gravel that contained moderate stone, flint and occasional CBM and a single piece of clay pipe. Burial SK**1082** was aligned east northeast-west southwest and was in the supine position (Plate 11). The coffin lid/plate was stuck to the ribs, vertebrae and both scapulas. Sections of the coffin sides survived though in a very poor condition along the eastern end. The lower left arm had been placed under the left pelvic bone. The lower end of the right femur had moved inwards across to the lower end of the left femur. The left foot pointed to the east while the right foot pointed towards southeast. The cranium and the mandible had been partially damaged by the digger bucket during the removal of the topsoil.

Plate 11: Burial SK1082, looking west-southwest

4.2.12 Grave cut [**1104**] was located on the west side of the stripped area, to the west of the church and to the southeast of burial SK**1082** (Figure 4). It was sub-rectangular shaped that measured 2.2m by 0.6m that had a flat base but the sides were not visible as it was cut into the topsoil. The fill (**1020**) was a loose mid grey sandy clay gravel that contained moderate stone and flint. Burial SK**1019** was aligned roughly

east northeast-west southwest and was in the supine position (Plate 12). The cranium had moved slightly to the left with the mandible also and still in place. The lower right arm was under the right pelvic bone and the lower left arm and hand rest on the left pelvic bone. The right arm, pelvis and femur were missing and appeared to have been removed when a trench was opened to place the existing kerb stones.

4.2.13 Grave cut [**1069**] was located on the west side of the stripped area, to the west of the church and to the southeast of burial SK**1019** (Figure 4). It was sub-rectangular shaped that measured 0.68m by 0.32m that had a flat base but the northern side was not visible as it was cut into the topsoil and the southern side was cut away by a modern trench. The fill (**1125**) was a loose darkish mid brown sandy clay gravel that contained moderate stone and flint. Only the left scapula, humerus, ulna and radius along with two left ribs remained of burial SK**1063.** The position of bones suggested that it was aligned roughly east northeast-west southwest and was in the supine position (Plate 13). Burial SK**1064** was a neonatal burial located to the north of SK1063 and may be associated with it.

Plate 12: Burial SK1019, looking west-southwest

4.2.14 Grave cut [**1126**] was located to the north of burial SK**1063** (Figure 4). A section of its base was visible along the southern side. The burial was not excavated and was left

preserved in-situ. It measured 0.26m by 0.19m that probably was sub-rectangular. The fill (**1127**) was a loose darkish mid brown sandy clay gravel that contained moderate stone and flint. Burial SK**1064** was only partially visible and some disturbed bones were lifted. It appeared to have been aligned roughly east northeast-west southwest and was in the supine position (Plate 13).

4.2.15 Burials SK**1056**, SK**1059** and SK**1061** located near the centre of the stripped area to the north of the church and SK**1096** and SK**1093** located to the northwest of the church (Figure 4) were not excavated as they were low enough in the ballast not to be disturbed by the landscaping works. Their positions were recorded and they were covered over before the topsoil was re-laid. The coffin of SK**1056** was partially visible and from the size of SK**1059**, to the south of SK**1056** and SK**1061** to the southeast, these were two juvenile/neonatal burials.

Plate 13: Burials SK1063 and SK1064, looking northwest

Plate 14: Structure {1017}, looking southeast

4.2.16 Structure {**1017**} was located to the northwest of burials SK**1079** and SK**1096** and the church (Figure 4) (Plate 14). The construction cut [**1128**] had vertical sides that measured 2.31m by 1.7m by 1.2m but its maximum depth was unclear as it was was deeper than the new level of the ground. It was cut into ballast layer (**1035**) that was a loose mid orange yellow sandy gravel. The structure was rectangular shaped, aligned northeast-southwest and consisted of red bricks lain in a stretcher style, bonded with grey lime mortar. The bricks were placed up against the edge of the cut. The structure appeared to have been emptied and was backfilled by (**1018**) that was a loose greyish brown silty sand ballast. The structure appeared to be the foundations of a tomb similar to the existing Hudson monument that was located 40m to the west (Figure 2).

4.2.17 There were two topsoil spreads in the centre of the stripped area, SK**1015** to the north and SK**1016** to the south that measured 0.53m by 0.45m by 0.08m and 0.43m by 0.37m by 0.2m respectively (Figure 4). The spreads contained disarticulated human that included two craniums, tarsals and metatarsals.

4.2.18 A total of 20 tree pits and one bush pit were opened of which six were to the north, six and the bush pit to the east, three to the southeast, four to the south and one to the northwest (Figure 2). All pits measured 2m by 2m and were excavated to a depth of 1m with exception of tree pits 1 – 4, which were 1.2m deep. Tree pits 14 – 19 were located in the northern side of the site and were sealed by c.0.3m of topsoil

(**1000**) that consisted of a black/dark brown sandy clay soil. Tree pits 1 – 4, 9, 12 – 13 and bush pit 1 were located on the eastern side and tree pits 5 – 8 and 10 – 11 on the southern side were sealed by 0.17m – 0.44m of topsoil (**1002**) that consisted of loose darkish mid grey brown sandy clay.

4.2.19 Within tree pits 14 – 17 and 19 various deposits were observed that were made up of alternating demolition and ballast layers with some clay an bedding deposits. The demolition layers consisted of black silty clay mixed with concrete, stone, CBM along with pieces of glass, metal and pottery that ranged in thickness from between 0.09m to 0.24m. The ballast layers were a sand gravel mix that ranged in colour from grey, yellow, orange to pink and contained stone, flint pieces and occasional CBM and varied from 0.18m to 0.5m in thickness. The layers in tree pit 18 differed from the other five pits as below the topsoil six bands of tarmac were observed with bedding layers in between some them.

4.2.20 On the eastern side, tree pits 2, 3, 9, 12 and 13 were mostly made of demolition layers that consisted of black silty clay mixed with concrete, stone, CBM along with pieces of glass, metal and pottery that ranged in thickness from between 0.19m to 1m. Light orange, brown and pinkish grey ballast layers were observed near the bases of some trenches with tree pits 1 and 9 containing a single demolition layer. On the southern side of tree pit 1, visible in section was the remains of sandstone wall {**1101**} (Figure 6) that appeared to be part of a cellar from the terraced houses that previously stood along this part of the site. Five to six courses of sandstone blocks were visible with painted render still stuck to the eastern end of it. Its extent and overall height were unknown. In bush pit 1, remains of a brick wall {**1111**} (Figure 6) were visible in section on the southern side of the pit. The bricks were lain in stretcher style and there were five courses of which the lowest course rested on concrete layer {**1113**} and a section of the third course that rested on concrete layer {**1112**}. It may have been the remains of steps.

4.2.21 On the southern side tree pits 5 – 8, 10 and 11 consisted of upper upper demolition layers that consisted of black silty clay mixed with concrete, stone, CBM along with pieces of glass, metal and pottery that ranged in thickness from between 0.08m to 0.43m. Sand gravel ballast layers were in the lower parts of the pits and ranged from light grey brown to mid orange in colour and 0.18m to 0.5m thick. A cut [**1129**] for a modern stone culvert was partially visible on the northern side of tree pit 11 that measured 0.76m wide by 0.65m deep. It was backfilled with a mid-brown sand

gravel (**1130**) and it covered {**1131**} that consisted of concrete slabs. It was not excavated.

4.2.22 On 5th December 2014, two small areas were monitored to the south of the Vicarage (Figure 3). The excavation of a service trench was monitored as well as a topsoil / turf strip for a memorial garden. Deposit (**1002**) comprised topsoil, a loose dark grey-brown sandy clay to a depth of 0.00m – 0.08m. Deposit (**1003**) comprised a concrete base, possibly for a greenhouse or similar structure. Beneath topsoil (**1002**) comprised a leveling deposit (**1001**) consisting of loose mid to dark grey-brown sandy clay measuring a depth of c.0.45m. Context (**1002**) comprised made ground deposited after the demolition of earlier buildings.

4.2.23 Tree pit 20 [**1132**] was located to the northwest of the church and measured 2m x 2m by 0.8m depth (Figure 2). Cut [**1132**] contained two ballast layers (**1133**) and (**1134**) which were identical to ballast deposits (**1121**) and (**1122**) within Tree pit 15. Deposit (**1134**) was overlain by topsoil (**1000**).

5 HUMAN REMAINS

5.1 Human Remains Analysis

5.1.1 The archaeological watching brief uncovered twenty-three burial pits and four spreads with disarticulated human and faunal remains as well as twelve inhumations. Excavation techniques were conducted by hand. No sieving was carried out on-site. The vast majority of the human remains were re-deposited in pits to the north of the church, the original graves having been disturbed from previous activity at the site. The human remains were lifted and are currently in storage at St Peter's Church awaiting re-burial.

5.1.2 The preservation of the skeletal remains was very good,probably because the soils were of either neutral or alkali pH (Bello *et al* 2005, 37). The assemblage comprised largely disarticulated skeletal elements, although twelve inhumations were recorded.

5.1.3 The aim of this report is to establish biological profiles for the individuals recovered from the archaeological watching brief. A rapid onsite skeletal assessment was performed and methods used in the post-excavation analysis are described in detail below. The human remains were recorded according to standards by Brickley& McKinley (2004) and by standards for recording and coding commingled or incomplete remains (Buikstra&Ubelaker 1994, 9). Details of the results are held in the archive.

5.2 Methods

5.2.1 *Erosion.*The degree of erosion to the bone was recorded using Brickley& McKinley's (2004, 16, Figure 7.1 - 7) grading system.

5.2.2 *Age Determination.* The determination of age in adult skeletons can be established using a number of methodologies, including sternal rib-end morphology (Işcan*et al* 1986), cranial suture closure (Perizonius 1984), auricular surface morphology (Lovejoy *et al* 1985), pubic symphysial morphology (McKern& Stewart 1957, Brooks &Suchey 1990, Todd 1920) and dental attrition (Brothwell 1981, 72). The determination of age in non-adult skeletal remains can be determined via limb bone metric analysis, dental eruption stages and epiphyseal fusion stages using standards published in Scheuer& Black (2004, 2000) and Schaefer *et al* (2009).

5.2.3 All of the above methods were used in the determination of age.

5.2.4 *Sex Determination.* For sex determination of adult skeletons, the pelvis and skull are primarily examined as these skeletal elements are the most sexually dimorphic between the sexes (White &Folkens 2000, 362). If the cranium and pelves are present, sexually dimorphic cranial and pelvic traits in adults can be scored using various reference sources, including standards from Buikstra&Ubelaker (1994), Brothwell (1981), Ubelaker (1989), Mays (1998) and Bass (1987; 1995). Where appropriate, the determination of sex via the examination of the trochlea (distal humerus) was used (Rogers 1999).

5.2.5 All of the above methods were used to establish the biological sex of the individuals.

5.2.6 *Metric & Non-Metric Recording.* Cranial and post-cranial measurements (Howells 1973) (Bass 1987, 1985), cranial non-metric traits (Berry & Berry 1967; Brothwell 1981) and post-cranial non-metric traits (Finnegan 1978; Brothwell 1981, 90-95) were taken where appropriate. Limb bone measurements were taken where appropriate. Stature regression equations for heights were used where appropriate and equations from Trotter &Gleser (1958) and Trotter (1970) (In: Ubelaker 1989, 61) were used.

5.2.7 Where possible, muscle marker attachment sites were observed and scored using Hawkey and Merbs (1995, 326).

5.2.8 Dental conditions such as calculus and hypoplastic lines were noted and recorded using van Beek (1983) and Brothwell (1981). Pathologies were observed and recorded using Brothwell (1981) and Roberts & Manchester (2010).

5.3 **Results**

5.3.1 *Preservation.* The overall preservation of the human bone was in very good condition. Using the scoring system from Brickley& McKinley (2004, 16), the human bone recovered from the watching brief scored between 1 and 2, lower scores being indicative of a lesser degree of erosion to the cortical bone surface and also post-depositional damage.

5.3.2 *Minimum No of Individuals.* Preliminary analysis of the human remains recovered from the watching brief at St Peter's Church, Sunderland, indicates that a minimum number of 202 individuals are represented within the assemblage. A total of 156 individuals are adults and 46 individuals represent non-adults. The full inventory of anatomical skeletal elements is available in the archive.

5.3.3 *Age Determination.*The vast majority of the adult assemblage comprised middle-aged and older adults. The remains of younger adults (20-35 years) were recovered from pits SK(**1021**), SK(**1029**) and SK(**1085**). SK(**1082**) comprised a young female adult aged 30-34 years.

5.3.4 For the 46 non-adult individuals, age ranges included children (3-12 years), infants (birth – 3 years) and fetal remains. There was a higher proportion of pre-natal and post-natal fetal remains within the assemblage. The human remains are likely of post-medieval or Victorian date and given the poor sanitary conditions and post-natal care during this period, it is not surprising that there is a higher proportion of fetal remains. Measurements taken from one fetal skeleton SK(**1064**) revealed an age of roughly 36-38 weeks at death. This may have been a result of a premature birth, stillbirth or a post-partum infection.

5.3.5 *Sex Determination.* The determination of sex in adult skeletal remains was largely determined through crania and femora; there was a low number of pelvic bones in the assemblage, probably as a consequence of the fragility of the bone and post-depositional damage. It was possible to determine the sex of one individual SK(**1082**) by examination of the pelvis. Sex determination of non-adult skeletal remains was not conducted.

5.3.6 Analysis of the intact crania revealed a total number of 20 female adults and 35 male adults. Skeletal features that were examined and graded included the supraorbital torus, glabella, degree of slope on frontal bone, nuchal crest and size of mastoid process. If the mandible was present, gonial flaring and the mental eminence were also examined.

5.3.7 The maximum diameter of the proximal femoral head and the maximum femoral length (Section 5.3.10) can be tentatively used in the determination of sex using standards published by Bass (1987, 219). In this instance, measurements were taken to supplement data. A total of 101 proximal femoral heads were available for measurement. The range of measurements for femoral heads from male individuals comprised 44-54mm in diameter and 38-43mm for female adults.

5.3.8 *Ancestry*. Preliminary examination of the crania revealed largely Caucasoid traits. All of the crania exhibited receding malar bones, narrow nasal apertures, narrow and triangular palates as well as a more curved maxilla-malar suture (Ubelaker 1989, 119-120). According to Ubelaker (Ibid), metopism is more common in Caucasoid

populations. Only one cranium exhibited a complete metopic suture, comprising a young female adult from SK(**1021**).

5.3.9 *Cranial Metrics*. It was not possible to obtain any cranial measurements for this assemblage.

5.3.10 *Post-cranial Metrics*. Many of the limb bones were intact so numerous limb bone and proximal head measurements could be taken to provide data on stature and for use in the determination of sex (Table 1). Calculations were conducted only for individuals with an assigned sex. Equation G was used for Caucasoid female individuals and equation B was used for Caucasoid males (Ubelaker 1989, 61).

Context	Element	No L	No R	Meas (Lgth) mm F & ?F	Stature F	Meas (Lgth) mm M & ?M	Stature M
SK(1014)	Fem	16	18	430	160.31		
				419	157.59		
				414	156.97		
SK(1019)	Fem	1	0			525	186.36
SK(1021)	Fem	50	54	435	161.54	465	172.08
				413	156.11	469	173.03
						490	178.03
SK(1029)	Fem	37	25	404	153.88		
				435	161.54		
SK(1033)	Fem			430	160.31		
				413	156.11		
SK(1082)	Fem	1	1	432	160.80		

Table 1: Measurements and stature for male, female & unknown individuals

5.3.11 The height range for male and female adults in this sample comprised 172.08cm-186.36cm (5"7 to 6"1) and 153.88cm-161.54cm (5" to 5"3) respectively.

5.3.12 *Cranial Non-Metric Traits.* A mandibular torus was observed in the mandible of a male individual aged between 40-45 years from SK(**1019**). Supraorbital foramen, zygomatico-facial foramen and multiple infraorbital foramina were commonly observed. Sagittal ossicles were observed on three crania.

5.3.13 *Post-cranial Non-Metric Traits.* Medial squatting facets were observed on the distal tibiae recovered from u/s, SK(**1019**) and SK(**1031**). Squatting facets can be an indication of repeated occupational activities such as squatting or kneeling.

5.3.14 *Skeletal Pathologies.* Healed fractures were observed on a right adult humerus (u/s), a left ulna and tibia from SK(**1021**) and a right-sided 5th metacarpal recovered from

SK(**1063**). Bony spurs indicative of a soft tissue injury were observed on a right distal tibia from SK(**1031**).

5.3.15 *Degenerative Joint Disease (DJD).* Signs of osteoarthritis and osteophytic lipping were a frequent occurrence in the assemblage and were largely visible in the thoracic and lumbar vertebrae and limb bone epiphyses. Eburnation (a polished articular surface caused by DJD) was observed on several femora. DISH (Diffuse Idiopathic Skeletal Hyperostosis), a condition which has a tendency to produce excessive amounts of bone at joint margins and entheses, was observed on several lumbar vertebrae from an unstratified deposit and from SK(**1029**) (Ortner 2003, 558).

5.3.16 *Metabolic Disease.*Signs of metabolic disease were surprisingly low in this assemblage. Signs of osteopenia, possibly caused by osteoporosis, were observed in a right-sided humerus from SK(**1021**) (Ortner 2003, 410). Cribriaorbitalia, orbital lesions caused by iron-deficiency anaemia, was observed in a middle-aged male adult from SK(**1029**) (Roberts & Manchester 2010, 234).

5.3.17 *Dental Pathology*. Dental conditions and pathologies were a common occurrence in the assemblage and conditions such as periodontal (gum) disease, ante-mortem tooth loss, caries (cavities) and dental calculus (mineralised plaque or tartar) were observed in most teeth. Heavy dental attrition was observed on dentition from middle-aged and older adults.

5.3.18 *Soft Tissue/Hair.* Human hair was observed on two crania, that of a young adult female from SK(**1021**) and from an adult female cranium from SK(**1014**) (Plates 15).

Plate 15: Hair and copper staining on cranium from SK(1014)

5.3.19 *Other Observations*. Copper staining was observed on 23 crania and on a right-sided oscoxae from SK(**1082**), a female adult aged 30-34 years. The copper staining originated from shroud pins and the staining was largely observed on the parietals, although green patches were observed on frontals, zygomas and temporals. A shroud pin (SF 1) was recovered from burial SK(**1082**). A fragment of cloth, likely from a shroud, was observed on a crania from SK(**1021**) (Plate 16). Copper staining was observed on adult males and females as well as children and babies (Plate 17).

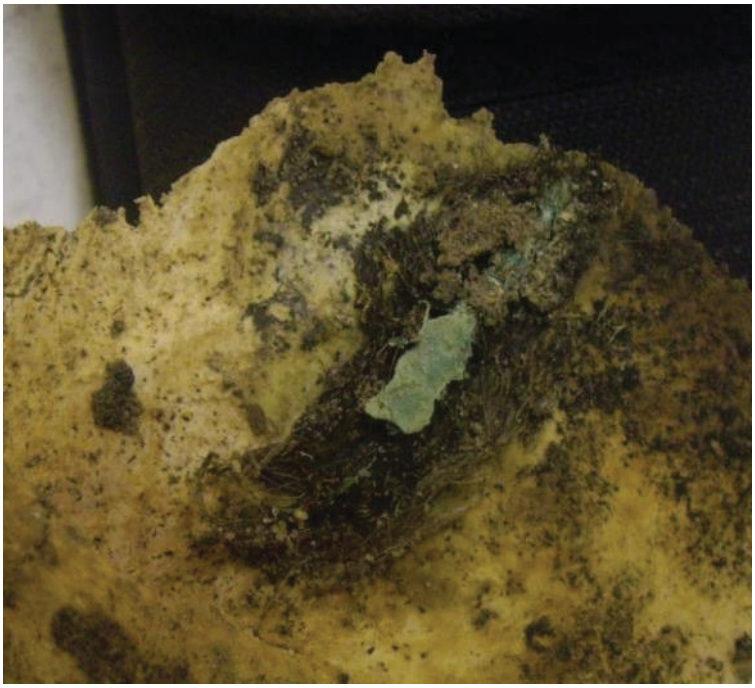

Plate 16: Shroud pin, shroud cloth fragment and hair from SK(1021)

Plate 17: Copper staining on neonatal cranial fragment SK(1063)

5.3.20 *Date of the assemblage.* It is likely that the human remains are of 19th century date.

5.3.21 *Associated Finds.* Artefacts recovered during the watching brief relate to funerary and domestic activities. Coffin nails and coffin fittings were recovered from virtually

all deposits. Tombstone fragments, a lead coffin plate and fragments of a leather shoe were recovered from SK(**1044**).

5.3.22 Oyster shell and animal bone were also recovered during the archaeological watching brief. Detailed analysis of the bones and species identification were not conducted, although the rapid assessment revealed that cow, pig, sheep and dog were present in the human bone assemblage.

6 CONCLISIONS

6.1 Conclusions

6.1.1 The archaeological watching brief monitored the excavation of 20 tree pits and one bush pit on the northeast, east and southern sides and the re-grading of ground on the northern side of the church. Eighteen of the tree pits were devoid of any archaeological features and only various ballast and demolition layers were observed in each one. Tree pit 1 and the bush pit both contained, in section, wall remains, probably associated with 19th century buildings that formed the former Hallgarth Square.

6.1.2 The remains of 12 inhumations, 23 burial pits, four spreads and a brick structure associated with the 19th century cemetery were observed under the topsoil to the north of the church. The majority of the human remains observed were re-deposited in pits, the original graves having been disturbed by past activity at the site. The in-situ graves identified were left undisturbed wherever possible.

6.1.3 Post-excavation analysis of the human remains revealed a minimum number of 202 individuals, 156 of which were adults and 44 of which were non-adults. Copper staining from shroud pins was a common occurrence in the human bone assemblage. Funerary and domestic artefacts were recovered with the human bone. The human remains are likely to be of 19th century date.

6.1.4 Any future invasive work would impact on archaeological remains and human burials, therefore any further construction work on the site should be subject to a programme of archaeological monitoring.

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APPENDIX 1: CONTACT TABLE

Context Number	Context Type	Description
(1000)	Deposit	Topsoil (northern side of site)
(1001)	Deposit	Demolition Layer
(1002)	Deposit	Topsoil (eastern side of site)
{1003}	Structure	Concrete slab
[1004]	Cut	Burial pit containing SK1006
(1005)	Deposit	Fill of [1004]
(1006)	Skeleton	Disarticulated human bone
(1007)	Skeleton	Disarticulated human bone
[1008]	Cut	Burial pit containing SK1007
(1009)	Deposit	Fill of [1008]
(1010)	Deposit	Upper ballast layer
(1011)	Deposit	Lower ballast layer
[1012]	Cut	Burial pit containing SK1014
(1013)	Deposit	Fill of [1012]
(1014)	Skeleton	Disarticulated human bone
(1015)	Skeleton	Disarticulated human bone
(1016)	Skeleton	Disarticulated human bone
{1017}	Structure	Brick built tomb foundations
(1018)	Deposit	Ballast backfill within {1017}
(1019)	Skeleton	Inhumation
(1020)	Deposit	Fill covering SK1019
(1021)	Skeleton	Disarticulated human bone
(1022)	Deposit	Fill of [1025]
(1023)	Skeleton	Disarticulated human bone
(1024)	Deposit	Spread containing SK1023
[1025]	Cut	Burial pit
(1026)	Skeleton	Disarticulated human bone
[1027]	Cut	Burial pit
(1028)	Deposit	Fill of [1027]
(1029)	Skeleton	Disarticulated human bone
(1030)	Skeleton	Disarticulated human bone
(1031)	Skeleton	Disarticulated human bone
(1032)	Skeleton	Disarticulated human bone
(1033)	Skeleton	Disarticulated human bone
(1034)	Skeleton	Disarticulated human bone
(1035)	Deposit	Ballast layer
[1036]	Cut	Burial pit containing SK1034
(1037)	Deposit	Upper ballast layer = (1010)
(1038)	Deposit	Lower ballast layer = (1011)
(1039)	Deposit	Upper fill of burial pit [1036]
[1040]	Cut	Burial pit containing SK1032
[1041]	Cut	Burial pit containing SK1031
[1042]	Cut	Burial pit containing SK1033
[1043]	Cut	Burial pit containing SK1050
(1044)	Deposit	Fill of [1043]
(1045)	Skeleton	Disarticulated human bone
[1046]	Cut	Burial pit containing SK1045
[1047]	Cut	Burial pit containing SK1030
(1048)	Skeleton	Disarticulated human bone

Context Number	Context Type	Description
[1049]	Cut	Burial pit containing SK1048
(1050)	Skeleton	Disarticulated human bone
(1051)	Deposit	Stone fill in pit [1043]
(1052)	Skeleton	Disarticulated human bone
(1053)	Skeleton	Disarticulated human bone
(1054)	Skeleton	Disarticulated human bone
(1055)	Skeleton	Disarticulated human bone
[1056]	Cut	Grave cut containing SK1058
(1057)	Deposit	Fill of [1056]
(1058)	Skeleton	Inhumation
[1059]	Cut	Grave cut (not excavated)
(1060)	Deposit	Fill of [1059]
[1061]	Cut	Grave cut (not excavated)
(1062)	Deposit	Fill of [1061]
(1063)	Skeleton	Inhumation remains
(1064)	Skeleton	Inhumation remains
[1065]	Cut	Burial pit containing SK1066
(1066)	Skeleton	Disarticulated human bone
[1067]	Cut	Burial pit containing SK1068
(1068)	Skeleton	Disarticulated human bone
[1069]	Cut	Grave cut of SK1063
[1070]	Cut	Burial pit containing SK1071 (partially excavated)
(1071)	Skeleton	Disarticulated human bone
[1072]	Cut	Burial pit containing SK1073 (not excavated)
(1073)	Skeleton	Disarticulated human bone
[1074]	Cut	Burial pit containing SK1075 (not excavated)
(1075)	Skeleton	Disarticulated human bone
[1076]	Cut	Burial pit containing SK1077 (not excavated)
(1077)	Skeleton	Disarticulated human bone
[1078]	Cut	Grave cut containing SK1079
(1079)	Skeleton	Inhumation
(1080)	Deposit	Fill of [1078]
[1081]	Cut	Grave cut containing SK1082
(1082)	Skeleton	Inhumation
(1083)	Deposit	Fill of [1081]
[1084]	Cut	Burial pit containing SK1085
(1085)	Deposit	Disarticulated human bone
(1086)	Deposit	Fill of [1084]
(1087)	Skeleton	Inhumation
[1088]	Cut	Grave cut containing SK1087
(1089)	Deposit	Fill of [1088]
(1090)	Skeleton	Juvenile inhumation
[1091]	Cut	Grave cut containing SK1090
(1092)	Deposit	Fill of [1091]
(1093)	Skeleton	Inhumation
[1094]	Cut	Grave cut containing SK1093
(1095)	Deposit	Fill of [1049]
(1096)	Skeleton	Inhumation
(1097)	Deposit	Fill of [1047]
(1098)	Deposit	Fill of [1041]
(1099)	Deposit	Fill of [1040]

Context Number	Context Type	Description
(1100)	Deposit	Fill of [1042]
(1101)	Deposit	Fill of [1036]
(1102)	Deposit	Fill of [1046]
[1103]	Cut	Grave cut containing SK1096
(1104)	Deposit	Fill of [1065]
(1105)	Deposit	Fill of [1067]
(1106)	Group#	Fills of northern pit cluster
(1107)	Group#	Fills of southern pit cluster
(1108)	Group#	Fills of western pit cluster
(1109)	Deposit	Demolition layer – Tree pit 1
{1110}	Structure	Sandstone wall – Tree pit 1
{1111}	Structure	Brick wall – Bush pit 1
(1112)	Deposit	Concrete layer – Bush pit 1
(1113)	Deposit	Lower concrete layer – Bush pit 1
(1114)	Deposit	Ballast layer – Tree pit 7
(1115)	Deposit	Demolition layer – Tree pit 7
(1116)	Deposit	Demolition layer – Tree pit 7
(1117)	Deposit	Dark brown sandy clay layer – Tree pit 7
(1118)	Deposit	Ballast layer – Tree pit 7
(1119)	Deposit	Black silty clay – Tree pit 15
(1120)	Deposit	Yellow sand bedding layer – Tree pit 15
(1121)	Deposit	Ballast layer – Tree pit 15
(1122)	Deposit	Ballast layer – Tree pit 15
(1123)	Deposit	White mortar and stone layer – Tree pit 15
(1124)	Deposit	Ballast layer – Tree pit 15
(1125)	Deposit	Fill of [1069]
[1126]	Cut	Grave cut containing SK1064
(1127)	Deposit	Fill of [1126]
[1128]	Cut	Construction cut of structure {1017}
[1129]	Cut	Cut of modern culvert
(1130)	Deposit	Backfill of [1129]
{1131}	Structure	Concrete culvert
[1132]	Cut	Cut of Tree pit 20
(1133)	Deposit	Demolition / ballast layer – Tree pit 20
(1134)	Deposit	Demolition / ballast layer – Tree pit 20

Table 4: List of Contexts issued during Watching Brief

APPENDIX 2: FIGURES

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STOKE-ON-TRENT
Sir Henry Doulton House
Forge Lane
Etruria
Stoke-on-Trent
ST1 5BD
Tel: +44 (0)845 111 7777

CARDIFF
22 Windsor Place
Cardiff
CF10 3BY
Tel: +44 (0)29 2072 9191

EDINBURGH
Suite 2/3, Great Michael House
14 Links Place
Edinburgh
EH6 7EZ
Tel: +44 (0)131 555 3311

GREATER MANCHESTER
2 The Avenue
Leigh
Greater Manchester
WN7 1ES
Tel: +44 (0)1942 260101

LONDON
Third Floor
46 Chancery Lane
London
WC2A 1JE
Tel: +44 (0)20 7242 3243

NEWCASTLE UPON TYNE
City Quadrant
11 Waterloo Square
Newcastle upon Tyne
NE1 4DP
Tel: +44 (0)191 232 0943

PENRYN
Tremough Innovation Centre
Tremough Campus
Penryn
Cornwall
TR10 9TA
Tel: +44 (0)1872 560738

SHEFFIELD
Unit 5
Newton Business Centre
Newton Chambers Road
Thorncliffe Park
Chapeltown
Sheffield
S35 2PH
Tel: +44 (0)114 245 6244

TRURO
Wheal Jane
Baldhu
Truro
Cornwall
TR3 6EH
Tel: +44 (0)1872 560738

WEST BROMWICH
Thynne Court
Thynne Street
West Bromwich
West Midlands
B70 6PH
Tel: +44 (0)121 580 0909

International offices:

ALMATY
29/6 Satpaev Avenue
Rakhat Palace Hotel
Office Tower, 7th Floor
Almaty
050040
Kazakhstan
Tel : +7-727-3341310

MOSCOW
Suite 2, Block 10,
Letnikovskaya St.
Moscow, Russia
115114
Tel: +7(495) 980 07 67

Wardell Armstrong Archaeology:

CUMBRIA
Cocklakes Yard
Carlisle
Cumbria
CA4 0BQ
Tel: +44 (0)1228 564820

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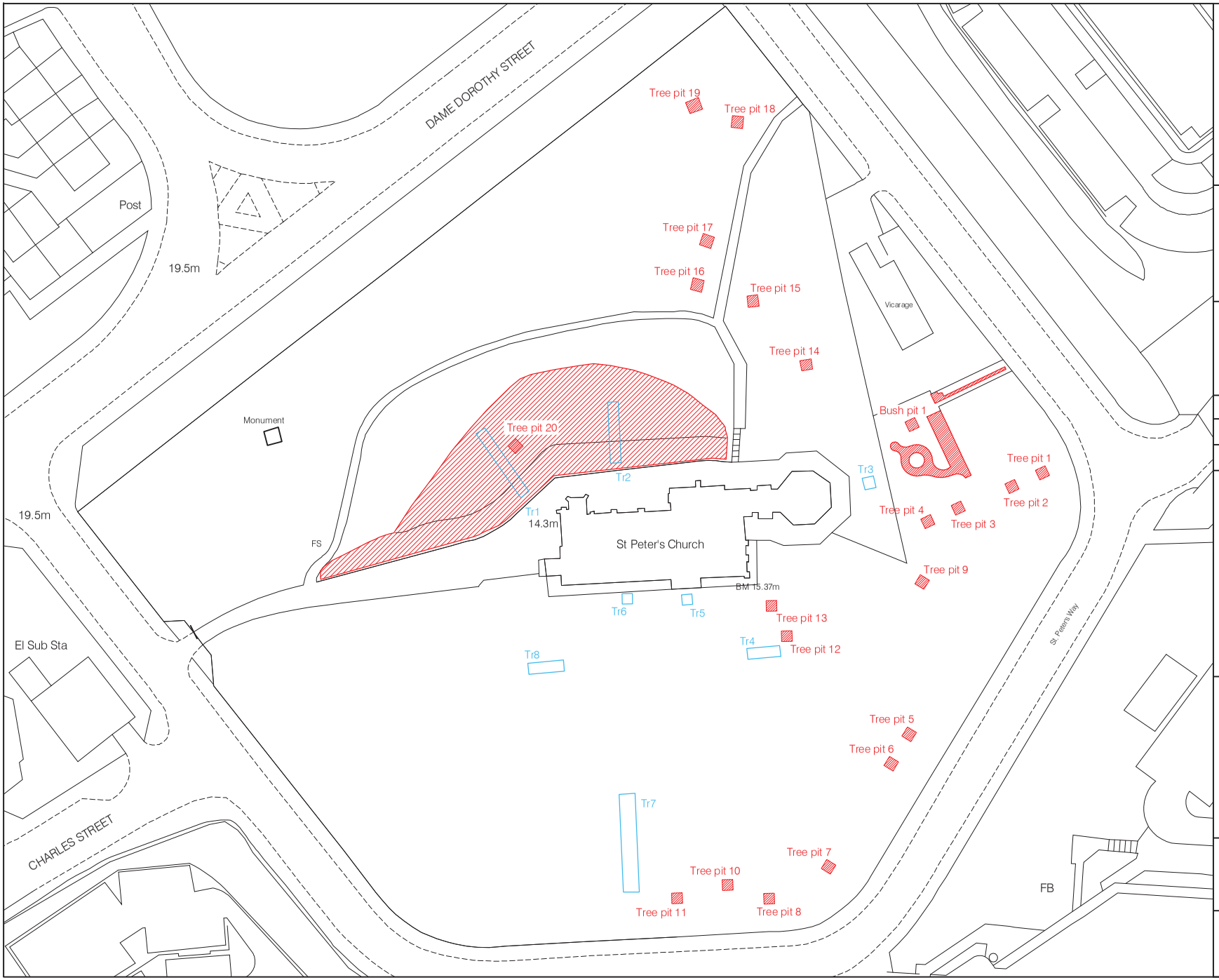
wardell armstrong archaeology Wardell Armstrong Archaeology 2015	PROJECT: St. Peter's Church, Sunderland, Tyne & Wear SCALE: 1:25,000 at A4 REPORT No: CP11089 CLIENT: Sunderland City Council DRAWN BY: AB DATE: February 2015 FIGURE: 1	KEY: Site location

Figure 1: Site location.



wardell armstrong archaeology

Wardell Armstrong Archaeology 2015

PROJECT:

St. Peter's Church, Sunderland, Tyne & Wear

CLIENT:

Sunderland City Council

SCALE: 1:1,000 at A4

DRAWN BY: AB

DATE: February 2015

KEY:

Areas of watching brief

Previous evaluation trenches

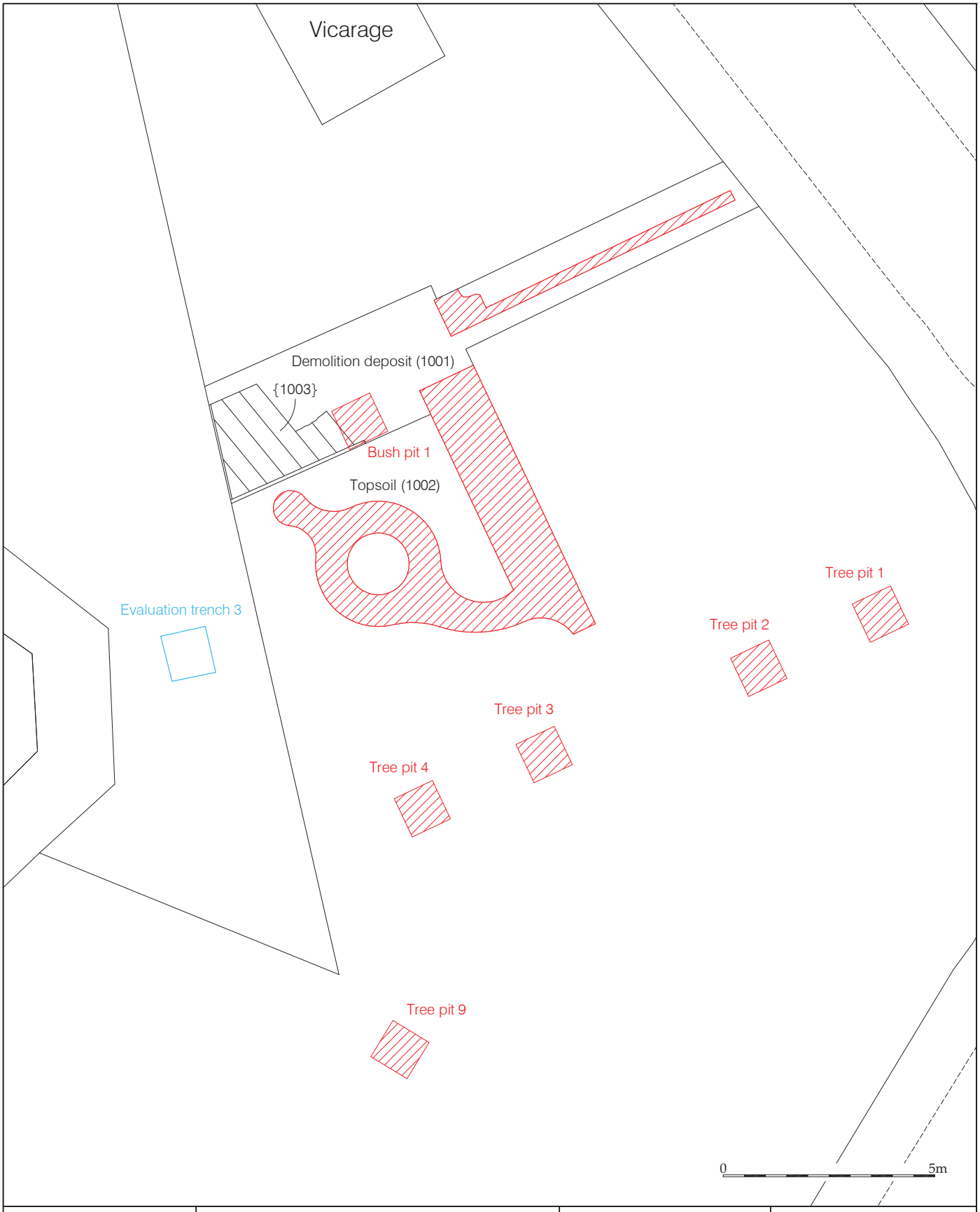
REPORT No:

CP11089

FIGURE:

2

Figure 2: Location of archaeological watching brief.



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Wardell Armstrong Archaeology 2015

PROJECT:	St. Peter's Church, Sunderland, Tyne & Wear
SCALE:	1:250 at A4
REPORT No:	CP11089
CLIENT:	Sunderland City Council
DRAWN BY:	AB
DATE:	February 2015
FIGURE:	3

KEY:

Area of watching brief

Previous evaluation trench

Figure 3: Memorial garden watching brief area.

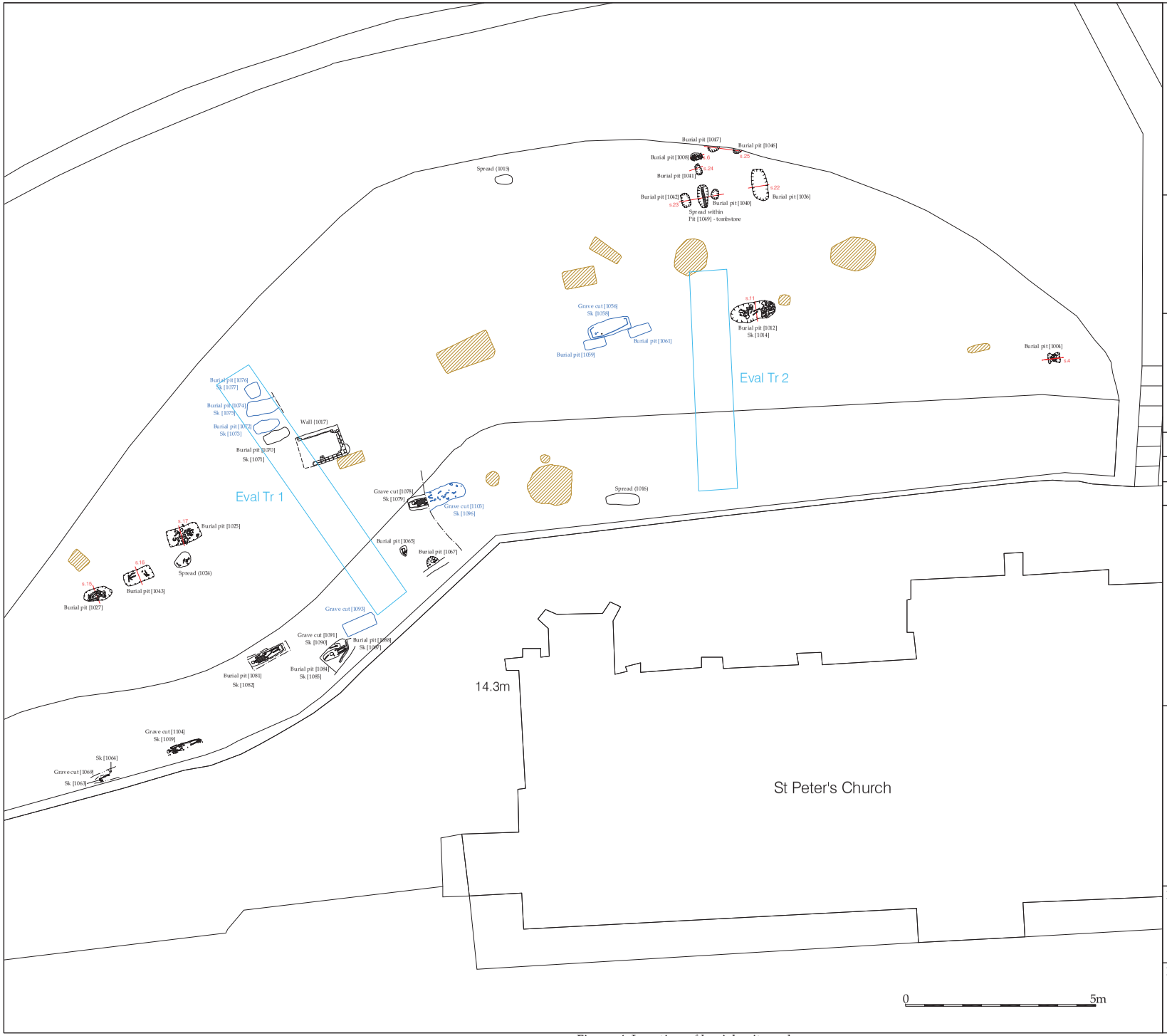

Figure 4: Location of burials pits and graves.

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Wardell Armstrong Archaeology 2015

PROJECT:

St. Peter's Church, Sunderland, Tyne & Wear

CLIENT:

Sunderland City Council

SCALE: 1:200 at A3

DRAWN BY: AB

DATE: February 2015

KEY:

Possible burial pits

Burials not removed

Section locations

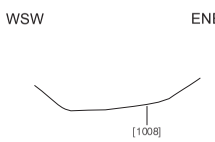
REPORT No:

CP11089

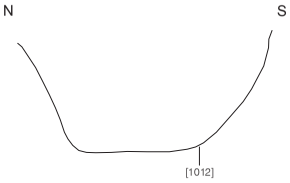
FIGURE:

4

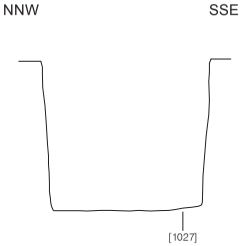
Section 4. Profile across burial pit [1004].



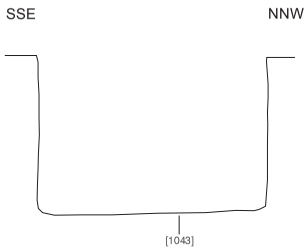
Section 6. Profile across burial pit [1008].



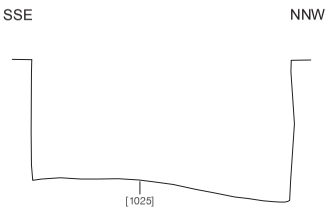
Section 11. Profile across grave cut [1012].



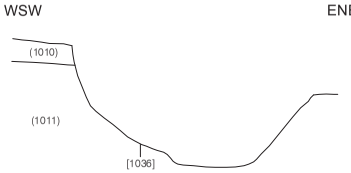
Section 15. Profile across burial pit [1027].



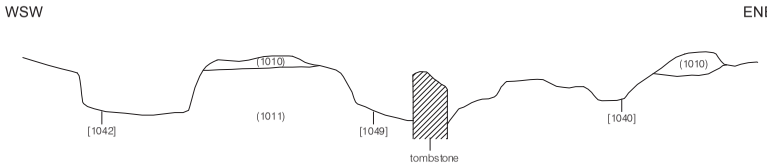
Section 16. Profile across burial pit [1043].



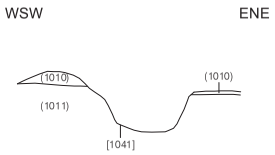
Section 17. Profile of burial pit [1025].



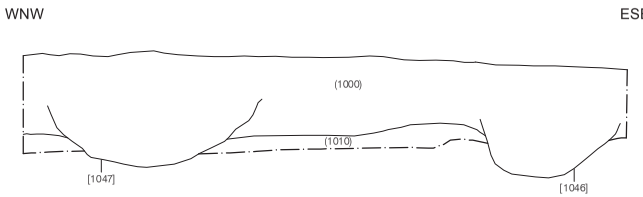
Section 22. Profile of burial pit [1036].



Section 23. Profile across burial pits [1040], [1042] and [1049].



Section 24. Profile of burial pit [1041].



Section 25. South-west facing section across burial pits [1046] and [1047].

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PROJECT:

St. Peter's Church, Sunderland, Tyne & Wear

CLIENT:

Sunderland City Council

SCALE: 1:25 at A4

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KEY:

(101) Context numbers

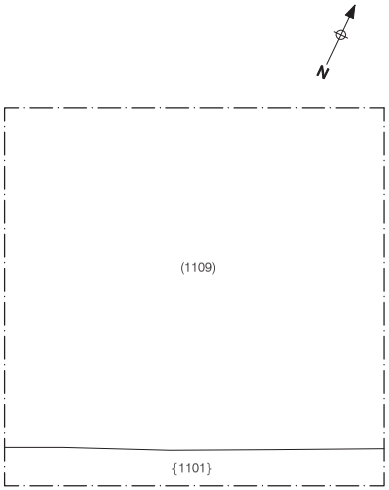
REPORT No:

CP11089

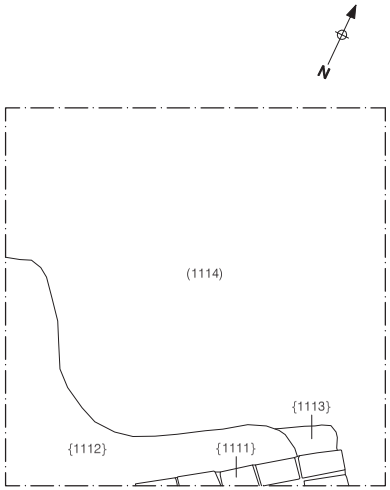
FIGURE:

5

Figure 5: Profiles of burial pits and graves.



Tree Pit 1.



Bush Pit 1.

0 2m

Wardell Armstrong Archaeology 2015

PROJECT:

St. Peter's Church, Sunderland, Tyne & Wear

CLIENT:

Sunderland City Council

SCALE: 1:40 at A4

DRAWN BY: AB

DATE: February 2015

KEY:

(101) Context numbers

REPORT No:

CP11089

FIGURE:

6

Figure 6: Plan of Tree Pit 1 and Bush Pit 1.