

Archaeological Services

Archaeological Monitoring of Groundworks, Cathedral Square Leicester, NGR: SK 583 044 centre

Tim Higgins



ULAS Report No 2014-236 ©2014

Archaeological Monitoring of Groundworks

Cathedral Square

Leicester

NGR: SK 583 044

Tim Higgins

For: The Casey Group

Checked by	
Signed Authley	Date: 15 December 2014
Name: .R.J. Buckley.	

University of Leicester

Archaeological Services University Rd., Leicester, LE1 7RH Tel: (0116) 2522848 Fax: (0116) 2522614

ULAS Report Number 2014-236 A15.2013

CONTENTS

Summary	1
Introduction	1
Site description, topography and geology	2
The Archaeological and Historical Background	3
Aims and Objectives	4
Methodology	
Results	
Conclusions	20
Bibliography	
Acknowledgements	
The Archive	
Appendix 1 Oasis	
Appendix 2 Burial Descriptions	
Appendix 3 Test pits	
Appendix 4 Specification	

FIGURES

Figure 1 Site location Leicester Cathedral Gardens	3
Figure 2 St Martins Cathedral precinct pre-development	
Figure 3 Cathedral Gardens test pits	
Figure 4 Cathedral Gardens location of the brick-lined graves	9
Figure 5 Approximate location and layout of Wyggeston's Hospital	14
Figure 6 Archaeological features associated with Wyggeston's Hospital	17
Figure 7 Plan 1.01 east wall foundation Wyggeston's Hospital	19
Figure 8 Section 1.02 east wall foundations Wyggeston's Hospital	20
Figure 9 Section 2.02 east wall foundations Wyggeston's Hospital	20

Plates

Plate 1 Brick-lined grave 3 containing inhumation SK3	10
Plate 2 Brick-lined grave 5 containing inhumation SK5 Elizabeth Farmer	10
Plate 3 Brick-lined grave 8 with re-interned lead coffin	11
Plate 4 Brick-lined grave 10 Infant burial size	11
Plate 5 Brick-lined grave or vault BLG17	12
Plate 6 BLG17 slate cap removed and revealing brick access steps	12
Plate 7 BLG17 slate cap removed with brick access steps and burials visible	13
Plate 8 BLG17 burials found at the base of the vault	13
Plate 9 Hospital West Wing Foundations north wall (05)	15
Plate 10 Hospital west wall foundations (11)	15
Plate 11 Wyggeston's Hospital east wall foundation	18
Plate 12 Wyggeston's Hospital east wall foundation	18

Archaeological Monitoring of Groundworks, Cathedral Square Leicester

Tim Higgins

Summary

Archaeological monitoring (a 'watching brief') was undertaken by ULAS on behalf of The Casey Group during ground-works associated with the creation of 'Cathedral Square', a new public open space to the south and west of Leicester Cathedral. Attendance at the site was undertaken between November 2013 and June 2014.

As part of this development, various ground-works were undertaken within both the St Martin's Visitor Centre car park and the graveyard of Leicester Cathedral. The former is the site of Wyggeston Hospital, constructed in the early 16th century and demolished in the 19th century. Works here revealed the top of various stone footings indicating the presence of a north-south orientated rectangular masonry structure located directly to the west of the alley known as St Martin's West. It is likely that these are part of the hospital's alms-house and Master's House. Additional truncated stone footings revealed further to the west are thought to represent the north wall of the west wing. Further stripping to the north for new pavements and service trenches revealed a probable well and brick pavement, also believed to part of the hospital complex. The overall shallow depth of the various excavated services within the hospital complex generally only reached a layer of stone rubble thought to be associated with the demolition of the building in the late 19th century. Only a potential internal clay and stone floor surface was partially exposed close to the east wall of the hospital during these works.

In the south-east corner of the car park, a shallow service trench found no remains relating to Saint Ursula's Chapel that lay at the south end of the east range of the hospital. The overall shallow depth of the new services suggests that such remains as may have survived were not reached on this occasion.

Various ground-works for the new gardens continued within the former graveyard of St Martin's. These excavations revealed a total of 19 brick-lined graves or vaults within the churchyard, most of which lay below the formation levels for the new pavement and lawns. Those few coffined burials within vaults which did lie above formation were exhumed and later re-interred elsewhere within the churchyard.

Mostly only charnel and previously disturbed disarticulated human remains were encountered during the majority of excavations within the churchyard. All human remains of this nature were collected and stored within the cathedral and later reinterred within the churchyard.

The archive will be deposited with Leicester Cathedral together with a copy at Leicester City Museum Service, Accession No. A15.2013.

Introduction

This report presents the results of an extended archaeological watching brief during landscaping and repaving works on land located to the south and west of Leicester Cathedral, Leicester, Leicestershire (NGR SK 583044). The ground-works involved reducing the level

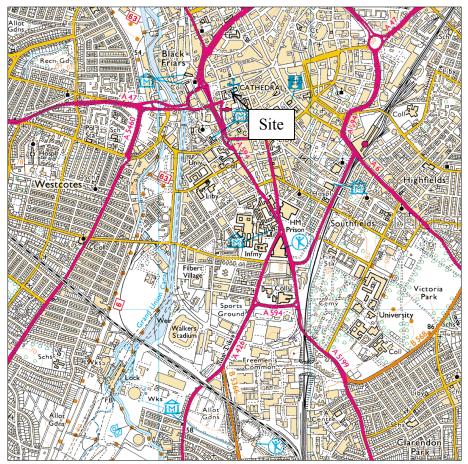
of the existing ground to create a formation level for new pavements and lawns and a water feature immediately south of the cathedral. New service trenches were also excavated.

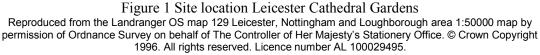
All archaeological work adhered to the Charted Institute for Archaeologist's (CIfA) *Code of Conduct* and *Standard and Guidance for Archaeological Watching Briefs* and followed the design specification approved by the Cathedral Fabric Commission (Appendix 4).

Site description, topography and geology

Leicester Cathedral lies within the historic core of Leicester, bounded by Guildhall Lane to the north and St Martins to the south, with the graveyard on the south side of the church. The eastern and western boundaries of the churchyard are marked respectively by the alleyways St Martins East and West. To the west of the latter is St Martin's Visitor Centre (41 St Martins) with, before the present works, a tarmac carpark. The cathedral gardens scheme comprised landscaping works to both the cathedral churchyard and the car park of 41 St Martins. The former area lies within the precinct of the cathedral, and accordingly is under the jurisdiction of the Dean and Chapter. Although the latter area lies outside this precinct, it was anticipated that the archaeological work would need to be carried out in the same fashion in both areas, under the overall supervision of the Cathedral Archaeologist, reporting to the Dean and Chapter, and with the collaboration with the City Council and the CFCE. After several years of discussion, a proposed layout was arrived at, including lawn and flower beds, and a water feature immediately south of the cathedral.

The Ordnance Survey Geological Survey of Great Britain Sheet 156 indicates that the underlying geology consists of Mercia mudstone, with overlying river sands and gravels. The natural ground lies at 3.34 - 4.70m below the present ground surface of c.61 - 63m OD.





The Archaeological and Historical Background

Previous archaeological fieldwork in the vicinity confirms that the site is located within an area of high archaeological potential, within the heart of Roman and medieval Leicester, with the possibility of remains of Roman, medieval and post-medieval date. Remains which may be of the late Saxon period have also been recorded directly to the north-west of the area.

The parish church of St Martin is likely to have been one of the six Leicester churches mentioned in the Domesday Book of 1086 and is therefore probably a foundation of the late Anglo-Saxon period, perhaps in the late 10th or 11th century. No fabric of this period survives, however, the earliest architectural details being of 12th-century date (Pevsner 1981, 208). The pre-eminent church of the borough throughout the medieval and post-medieval periods, St Martin's was extensively restored in the 19th century by Raphael Brandon when amongst many alterations, the tower and spire were rebuilt (1861-2 and 1867 respectively), and the chancel chapels were rebuilt (1865). In 1927 St Martin's church became Leicester Cathedral. The churchyard of St Martin's was used for burials from at least the 12th century and in the 1970s-80s, many of the gravestones were removed and the area was extensively landscaped. An excavation carried out in the lawns in advance of the works has suggested that the pre-1980 level of the churchyard was only a little higher than the adjacent south path across the churchyard (Dixon 2010). Hence the main archaeological potential in this area was

for burials of the medieval and post-medieval period, although there was also the slight chance that Roman levels might be reached if deep service trenches were to be dug.

The car park of 41 St Martins was the site of Wyggeston (or 'Wigston's') Hospital, founded by the wealthy wool merchant William Wigston in 1513 initially for twelve men, but doubled in size soon afterwards to include twelve women (Bourne 2013, 61). The hospital consisted of a long stone building with buttresses and a crenellated parapet running north-south adjacent to St Martin's West. At the south end of this range was St Ursula's chapel, with a large perpendicular stained glass window looking out onto St Martins. There was also a timberframed range running east-west at the northern end of the site, adjacent to the boundary with the Guildhall together with gardens to the west. The hospital was demolished in 1875 and the site redeveloped as Wyggeston School with a playground on the site of St Ursula's chapel and the north-south range. Traces of the east wall of the latter remained visible near the southeast corner of the former playground and later car park. These were to be incorporated into the gardens scheme, involving landscaping and service trenches which had the potential to reveal evidence for the hospital.

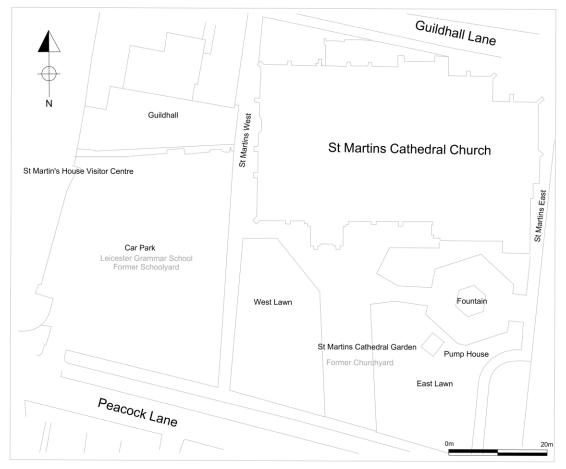


Figure 2 St Martins Cathedral precinct pre-development

Aims and Objectives

Through archaeological attendance and, as appropriate, controlled stripping and investigation the aims of the watching brief were:

To identify the presence/absence of any archaeological deposits.

To describe, record and if possible provide a date range for the stratigraphy.

To produce an archive and report of any results.

Research objectives

At the outset of the project, local and regional academic research objectives were identified from the East Midlands Research Framework (Cooper ed. 2006) and strategy (Knight *et al.* 2012), and also considered in relation to national research aims. Research aims would be reviewed and updated as the work progressed and new information came to light.

It was considered that the following research objectives had the potential to be addressed by the project:

- 1. Urbanism: How did the major towns and smaller market towns of the region develop after the Norman Conquest
- 2. Can we define more closely the industrial and trading activities associated with the towns and the nature and extent of urban influence on the countryside.
- 3. Can we shed further light on the commercial role of fairs, markets, ports and other trading centres? (Knight 2012, para 7.1, 94)
- 4. Can we elucidate further the development of hospitals and colleges? (Knight 201, para 7.5, 3)
- Can we shed further light upon the distribution and development of early churches and chapels and the origins and growth of the parish system (Knight 2012, para 7.5, 4)

Methodology

General

All work followed the Chartered Institute for Archaeologists (CIfA) Code of Conduct (2010) and adhered to their *Standard and Guidance for Archaeological Watching Briefs* (2008). The Leicestershire County Council Guidelines and Procedures for Archaeological work Leicestershire and Rutland (1997) were adhered to. The methodology was set out in the approved Written Scheme of Investigation which also incorporated a health and safety plan and risk assessment.

An accession number was drawn from Leicester City Museum service at the beginning of the fieldwork and used to identify all records and artefacts.

The project involved attendance to monitor any ground-works which had the potential to damage buried archaeological remains.

Cuttings, area clearance and removal of tarmac were the responsibility of the landscape contractor. Ground-works below this point were the under the supervision of the archaeologists, who had full access to the site at points and times agreed with the landscape contractors, in order to excavate (if necessary), any archaeological features affected by the works.

Any artefacts were recovered and the stratigraphy identified was recorded by sketch or drawn sections (as appropriate), photography and written description.

Archaeological deposits were excavated and recorded using standard ULAS procedures.

Spoil was monitored for artefacts.

Human Remains

The area to the south of the cathedral was used for burials for at least 800 years and photographs taken during the 19th century demonstrate a mass of graves marked by stones and tombs extending right up to the wall of the church (Conservation Management Plan). Whilst no detailed records exist for the pre 20th-century graveyard to demonstrate the precise level of former vaults and tabletop tombs, trial holes excavated in advance of the works suggested that the pre-1980 surface of the churchyard was only a little higher than the adjacent south path with graveyard soils and potentially burials just beneath (Dixon 2009). Whilst the redevelopment of the churchyard and carpark of 41 St Martins to create the Cathedral Gardens did not in the main involve deep excavation (apart from service trenches), depending on the depth of the burials, there was always the possibility that some might be disturbed by the works. There was a presumption that a number of medieval and postmedieval graves would be encountered relatively close to the surface of the pre 1980 churchyard given that the more recent habit of deep burial was not universally practised before modern times. In almost every case (since we have no grave records before the removal of the markers) burials would be expected to be anonymous. Within the graveyard soil itself, there was also a strong likelihood for the presence of quantities of disarticulated human bone resulting from previous disturbance of burials.

The plan was for all disarticulated human bone to be carefully collected for reburial elsewhere within the churchyard. Articulated human remains encountered would initially be left in situ, covered and protected, only being exhumed for reburial if it could be shown that they would definitely be affected by the proposed works. Where such exhumation took place, it was undertaken using standard archaeological excavation and recording techniques, the remains then being lifted and placed in a suitable container and stored in the cathedral pending reburial within the churchyard in due course. Excavated human bone remained at all times within the cathedral precinct.

Results

Cathedral Gardens

Prior to the new development, the Cathedral churchyard comprised a central pavement running towards the south entrance flanked to the east and west by raised lawns with shrubs, each surrounded by a low brick and concrete retaining wall. The east lawn area also contained a set of gravestones, which had all been repositioned after the last major graveyard clearance undertaken during landscape work in the 1980s. Located in north-east corner of the gardens was a fountain and associated subterranean concrete pump-house structure. There were also additional pavements that surrounded the Cathedral and its south entrance. All of these various features were to be removed, together with most of the trees and shrubs, as part of the new development. Any underlying layers of made ground that supported the raised lawns, the fountain structure and various pavements would also be removed as part of the general ground reduction undertaken as part of the re-landscaping for the new gardens.

Test pits

Prior to the to the removal of old garden features and the initial ground reduction, six test pits were excavated by hand and machine within the east and west lawns. An additional pit was excavated within a pavement area on the east side of the south porch close to the site of the new pool. Three of the test pits (Test pits 1, 2 and 3) were located on the west lawn and were all excavated by machine to a depth of between 0.70m and 1.50m (Figure 3). A potential undisturbed graveyard level was reached at a depth of 1.30m below the top of pits 1 and 3. Overlying it was a mixed overburden layer between 0.80m and 0.60m thick that comprised greyish-brown silty clay mixed with frequent fragments of stone and brick with the occasional human bone. This layer was thought to be a disturbed graveyard soil associated with the earlier clearances and redeposited as a layer of made ground that supported the raised west lawn. This was sealed by fairly clean dark greyish-brown silty clay topsoil that measured 0.70m to 0.80m deep.

Test pit 2 was also located towards the northern end of the west lawn and was excavated to a depth of 0.70m (Figure 3). An undisturbed brick-lined grave was reached at this depth (BLG 1). This complete coffin-shaped brick structure contained at least one coffined inhumation and was sealed under slate slabs and sealed by a 0.20m deep disturbed graveyard soil that contained occasional human bone. Overlying was a layer of dark greyish-brown silty clay topsoil that measured 0.80m deep.

Hand-excavated Test pits 4 and 5 were located in the east lawn and were excavated to a depth of 0.90m (Figure 3). Both contained a layer of topsoil that comprised dark greyish-brown silty clay which measured 0.90m in depth. The soil was very clean of finds and was thought to be an imported garden soil associated with previous landscaping.

A sixth test pit was excavated where the new water feature was to be installed on the east side of the south porch (Figure 3 and 4). This test pit revealed articulated human burials (SK1 and SK2) at a depth of 0.60m below the current ground/pavement level. They were sealed by a 0.40m deep layer of greyish-brown silty clay overlain by a 0.20m deep layer of sand and gravel that supported the pavement above. These burials were recorded and removed, and stored with the other disarticulated remains, awaiting later re-interment.

Additional Test Pits

Further work undertaken within the fountain area in the north-east corner of the gardens and at the northern end of the west lawn caused two voids to appear. It was decided that two further test pits should be excavated over these voids to determine the reason for soil collapse in these locations.

Test pit 7 was located towards the northern end of the west lawn and excavated over a void that appeared during machine stripping. The test pit was machine-excavated to a maximum depth of 1.55m. The void had a depth of 0.90m and appeared to be empty, the cause perhaps being a decayed coffin within a grave cut. Test pit 8 was also located over a void that appeared under the fountain and was excavated to a depth of 0.70. A second brick-lined grave (BLG2) was found at a depth of 0.20m below the surface and was sealed by slate slabs that had collapsed. It comprised at least three chambers divided by slate slabs. The top capping slates were removed and it was found that the upper chamber which measured 0.60m deep was empty. This brick-lined grave was located 0.60m below the new formation level for the new pavements and so the slate division was replaced over the inhumation and the upper chamber was back filled with pea gravel.

Overall these test pits confirmed that the pre-1980 level of the churchyard was only a little higher than the adjacent south path across the churchyard. It also highlighted the presence of brick-lined graves within the churchyard.

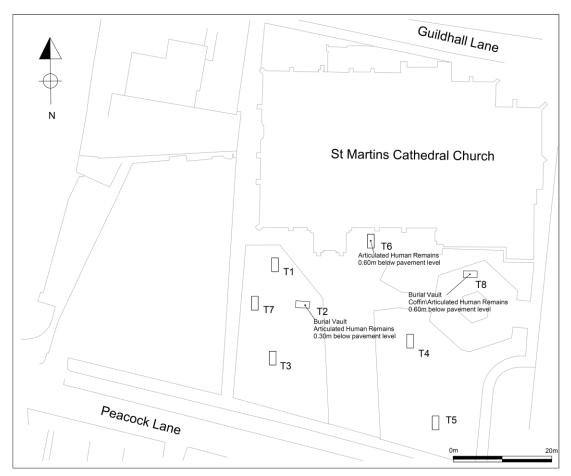
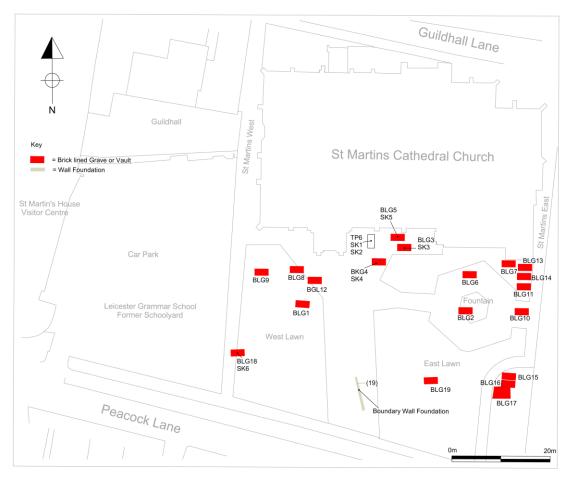


Figure 3 Cathedral Gardens test pits

Ground Reduction and Stripping

Initial stripping within the west lawn removed the topsoil layer that measured between 0.40m and 0.70m. This revealed the disturbed graveyard soil that had previously been cleared which contained the occasional tomb stone, a few truncated charnel pits and some disarticulated remains. The charnel and disarticulated bone were collected and stored with the other human remains, awaiting reinterment within the Cathedral.

One complete brick-lined grave (BLG1) previously seen in Test Pit 2 was re-exposed (Figures 3 and 4). This burial was not removed as it was located within an area designated to be a lawn and at depth of 0.30m. On the east lawn the gravestones were taken down under archaeological supervision and were stacked on pallets for later transport. The topsoil was removed and measured between 0 50m and 0.90m deep. Underlying the garden soil was a layer of made ground that comprised stone and gravel measuring between 0.20m and 0.30m thick was also removed. The fountain located in the north east corner was fully demolished and the subterranean pump house was partly demolished and back filled with stone (Figure 2).



St Martin's Cathedral Location Brick-lined graves and vault

Figure 4 Cathedral Gardens location of the brick-lined graves

The next phase of work comprised the removal of all pavement areas and further general reduction of all ground levels across the whole site within the old Cathedral Gardens area. The removal of pavements on the east side of the south porch revealed three more single coffin-shaped brick-lined graves. Each contained a single inhumation buried in what were now decayed coffins with associated coffin furniture (BLG3 SK3 (Plate 1), BLG4 SK4 and BLG 5 SK5) Figure 4). All three appeared to be constructed as single chambers and were capped with slate slabs, although they may have been partly dismantled and any upper chambers and burials removed during the last grave yard clearance. All three burials were found to be at a level above the proposed formation for the new water feature located on the east side of the south porch. Hence, all three burials were recorded and removed, and stored with the other remains that were awaiting reinterment. Only one of the three burials contained a legible coffin plate BLG5 SK5 (Plate 2) which read 'Elizabeth Farmer Died 26th October 1817 Age 23'.



Plate 1 Brick-lined grave 3 containing inhumation SK3 Plate 2 Brick-lined grave 5 containing inhumation SK5 Elizabeth Farmer

The removal of pavements in the north-east corner of the Cathedral garden close to the Cathedral's Old Song School and Administrative Chapter revealed two more single coffinshaped brick-lined graves (BLG6 and BLG7) (Figure 4). Further work at the northern end of the west lawn revealed three more brick-lined graves (BLG8, BLG9 and BLG12) (Figure 4). Brick-lined grave 8 was located close to the south porch and had no slate capping (Plate 8). The upper chamber contained a collection of charnel bone place on top of a lead coffin. The charnel and disarticulated bone were collected and stored with the other disarticulated remains. Theses burials were located below any new formation level so were resealed with a deposit of pea grit gravel.



Plate 3 Brick-lined grave 8 with reinterned lead coffin Plate 4 Brick-lined grave 10 Infant burial size

Demolition of boundary walls and steps adjacent to St Martin's East Lane

Four additional brick-lined graves were found during the removal of boundary wall foundations adjacent to St Martin's East Lane and close to the Cathedral's Administrative Chapter (BLG10, BLG11, BLG13 and BLG 14) (Figure 4). A brick-lined grave for an infant (BLG10) was found approximately 10m from the Administrative Chapter, adjacent to St Martin's East Lane. This burial measured 1.40m long 0.60m wide and 0.50m deep. The capping slate had been disturbed previously and the single chamber below was empty. This burial was located above the new formation level and was removed by machine. Brick-lined grave 11 was located 5m to the south of the Administrative Chapter. This was only partially revealed and was at a sufficient depth below the new formation levels to remain unaffected by the works. The third burial (BLG13) was located in the north-east corner of the side next to the Administrative Chapter and had been re-used for reinterred charnel which had filled the upper chamber. Part of this grave was above the new formation level so the charnel was removed for later reinterment and top two brick courses were removed. The remaining empty chamber was filled with pea grit. A fourth burial (BLG14) was found 1.00m to the south of BLG13 during excavations for new drain. This comprised a single chamber burial with slate capping partly removed. The chamber contained a single coffin that was located below the service formation level and was therefore carefully sealed under a layer of pea gravel

The next phase of work comprised the removal of the garden wall located in the south-east corner of the Cathedral precinct. The wall was part of the Provost's Lodging and surrounded a garden. The wall was demolished and all paved areas including St Martins East were removed. There was a general reduction of all ground levels across the whole of this area by 0.50m. The removal of pavements on the west side of the Provost's Lodging revealed two single coffin-shaped brick-lined graves (BLG15 and BLG16) and a much larger vault burial chamber (BLG17) (Figure 4). The two brick-lined graves (BLG15 and BLG16) were both capped with slate which had been partially damaged revealing the chambers below. Each contained a single inhumation but they were below the new pavement's formation level and were carefully sealed under a layer of pea grit gravel.

The much larger subterranean burial chamber (BLG 17) could be classified as a vault as it could house a minimum of two coffins side by side and included access steps (Plates 5, 6 7 and 8). The vault's internal dimensions were 2.00m long, 1.30m wide and 2.60m deep. The chamber at the base of the vault appears to be the only one that was used to house burials. They comprised three inhumations buried in what were now decayed coffins. Two of the coffins were adult size while the third which was located in the middle was a child. This was a lead-lined coffin complete with a brass inscription plate which was legible and so enabled identification. The coffin plate inscription read 'William the Son of William and Hannah Ingle was born Feb 8th 1783 died Nov 10th 1787'.

All three burials were found to be at level 1.80m below the formation level for the new tree pit but the top the vault was above this level. This required that all three burials were covered by a sheet of terran and sealed under layer of pea gravel 0.50m thick. The top of the vault was then carefully demolished down to new formation level and was then sealed with layer of stone and rubble.



Plate 5 Brick-lined grave or vault BLG17 Plate 6 BLG17 slate cap removed and revealing brick access steps



Plate 7 BLG17 slate cap removed with brick access steps and burials visible Plate 8 BLG17 burials found at the base of the vault

A final phase of ground-works comprised the excavation of tree pits and new drains across the whole site within the old Cathedral Gardens area. Excavations for a drain in the southwest corner revealed a brick-lined grave (BLG 18) capped with slate which contain at least two chambers. The slate capping was removed and revealed a single inhumation, SK 6, which was recorded and removed (Figure 4). A tree pit excavated towards the south east corner of the site exposed a single chamber burial. The chamber contained a single coffin that was located below the service formation level and was carefully sealed under a layer of pea gravel. Additional stripping and reduction of ground levels revealed a possible boundary wall (19) (Figure 4). These foundations consisted of two lower courses of roughly hewn granite rubble stone and pebbles bonded with pale yellow lime mortar. The stone coursing or bonding pattern was random. A third course thought to be a re-build consisted of more mixed granite stones and large pebbles with occasional tile or brick. This course was bonded with hard gritty pale grey lime mortar. The truncated wall foundations measured 7.5m long, 0.30m deep and between 0.45m and 1.00m in width. The wall was running south-east to north-west from Peacock Lane and the junction with New Street towards south porch entrance. The wall was sitting on grave yard soil and was thought to be the boundary wall for a pavement running towards the south porch. The tile and brick within the wall material and its location would suggest a probable19th-century date.

Wyggeston's Hospital

The St Martin's House, schoolyard, formerly the site of Wyggeston's Hospital

A watching brief continued in the schoolyard located on the east side of St Martin's House, formerly the site of Wyggeston's Hospital (see figures 5 and 6 below). Site visits were undertaken from February 2014 to April 2014 to monitor the ground-works which comprised the clearance of tarmac surfaces and the excavation of service trenches for the new gardens. The machine used for the ground-works was a Kubota Mini 360 degree excavator fitted with a 0.45m wide tooth bucket and ditching buckets. A visual inspection was conducted across the newly stripped areas and excavated service trenches.

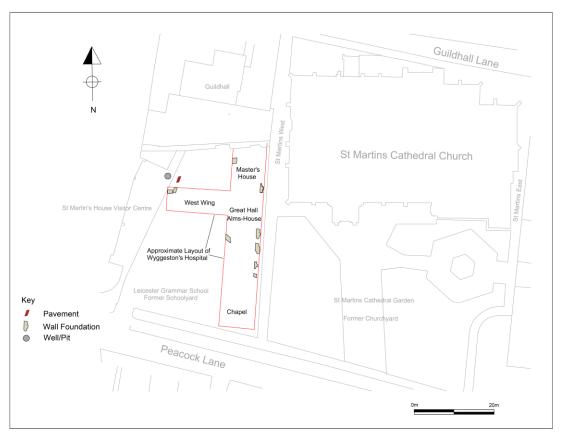


Figure 5 Approximate location and layout of Wyggeston's Hospital

Hospital West Wing extension foundations

The initial excavations were located in the north-east corner of the former schoolyard and comprised stripping tarmac surfaces and underlying stone gravels for the new pavements. There was also various service trenches excavated within this area and they all measured approximately 0.60m wide and had variable depths of between 0.30m and 0.70m. A north-south service trench had revealed stone wall foundation (05) which was found at a depth of 0.70m below the current ground surface, and had a minimum width of 1.50m (Plate 9 and Figure 6). This foundation consisting of roughly hewn granite stones laid in random pattern and bonded with dark yellow lime mortar. The foundation was thought to be part of the north wall of Wyggeston's Hospital west wing. Within the same service trench a possible brick pavement (06) was observed at a depth of 0.75m below the current ground surface. The pavement appeared to be running west to east across the trench and located on the north side of the west wing. All the bricks measured 0.23m x 0.12m x 0.10m and were laid flat in

stretcher pattern but were not bonded. Further excavations within this area exposed another segment of the west wing's north wall which was again located at a depth of 0.70m.

Both the stone wall foundation and brick pavement were sealed by stone rubble layer (04) measuring 0.30m deep. The various service trenches in this area all reached demolition stone rubble layer (04) comprising frequent crushed sandstone and large irregular granite blocks mixed with greyish-brown clay silt. It is thought that this layer is perhaps demolition spread material from Wyggeston's Hospital and was used to raise the ground level. Overlying were layers of clinker (03) and stone gravel (02) measuring up to 0.25m thick, which had been deposited to help raise the ground levels further. Theses deposits all supported a ground surface consisting of tarmac and gravel (01) that measured 0.30m thick.



Plate 9 Hospital West Wing Foundations north wall (05) Plate 10 Hospital west wall foundations (11)

Back-yard well

A circular hole or void **[09]** appeared in the north-west corner of the school yard during the ground works (Figures 5 and 6). The circular hole measured 1.40m in diameter and had a minimum excavated depth of 1.10m. The void had been backfilled with greyish-brown clay silt mixed with pebble and stones **(10)**. Its circular shape would perhaps suggest that it was a former well or pit located in within the back yard of Wyggeston's Hospital and could be pre-modern in date. Previously excavated pits or wells found within the city have been measured up to 4.00m in depth. The pits or wells are generally backfilled with soil and gravels. If any organic material such as timber has been used as part of the backfill, then this will often rot or perish and can create potential voids within the pits. Activity directly over the top of these pits can cause any material suspended directly above voids to collapse.

Hospital west wall foundations

The excavation for the duct runs and the foundations for column bases also clashed with the remains of Wyggeston's Hospital west wall. A total of two service duct trenches and two column base box pits were excavated within this area. The two duct trenches measured 0.80m in width and had a maximum depth of 0.70m. The column base box pits measured 2.50m long, 1.80m wide and 1.20m deep. These excavations revealed wall foundations for Wyggeston's Hospital in the several places. The first was located towards the northern end of

the school yard, which was found at a depth of 0.60m below the current ground surface running north to south (Figure 6). These foundations consisted of roughly hewn granite stone bonded with red clay (20). The foundation measured 1.50m wide and had minimum depth of 0.70m. This wall foundation was found towards the north-east corner of the school yard and is thought to be part of the west wall for the Master's House within the Hospital complex. To the east, a large spread of crushed Dane Hills sandstone (21) was observed and was believed to be a demolition deposit. Towards the centre of the car park, another wall foundation comprised roughly hewn granite stone bonded with red clay (11). A single course of wall was found on top of the foundations and consisted of roughly hewn granite stones bonded with dark yellow lime mortar. These wall foundations were orientated north to south and are thought to be the west wall of the alms house within the hospital complex. Both wall foundations were sealed by a layer of demolition rubble (04) measuring 0.30m thick. Overlying was a layer gravel and tarmac 0.20m deep.

Hospital east wall foundations

Excavations on the east side of the former school yard for lawn area and path which leads to the visitor centre within St Martins have uncovered the remains of Wyggeston's hospital east wall (18) in various locations (Figures 6, and 7). The top of the wall and foundations were found only at a depth of between 0.15m and 0.20m below former ground level. The exposed remnants of wall comprised supporting foundation consisting of roughly hewn granite stone bonded with red clay. The stone coursing or bonding pattern was random and measured 1.10m wide and had minimum depth of 1.00m. On top the remnants of a wall had survived as two courses of random coursed roughly hewn granite stone, bonded with a lime mortar (Plates 11 and 12). The wall and measured 1.00m wide and 0.25m high. Part of potential internal floor surface (17) was exposed on the west side of the wall. The surface comprised small flat stones, slate and occasional tile fragment embedded in greyish brown silty clay.

Both the stone wall foundations were sealed by stone rubble layer (12) between 0.10m and 0.30m deep. This area appeared to have been previously levelled, with a stone rubble layer comprising crushed sand stone and granite and was thought to be remnants demolition material from Wyggeston's Hospital. Overlying were layers of stone gravel and clinker (03) up to 0.25m thick, which had perhaps been deposited to help raise the ground levels.

The east wall foundations had been punctured by various sub-circular tree pits [14] from previous modern landscaping event (Figure 7). These pits which measured 1.60m in diameter and contained pale reddish brown clay silt mixed with charcoal flecks. On the east side the wall was also truncated by the foundation trench for the school yard railings [16] (Figure 7). The foundation measured 1.20m wide, and contained compacted dark greyish brown silty clay mixed with stone rubble which supported a brick and stone plinth foundation (15). Overlying these foundations were modern layers of gravel and a tarmac surface measuring between 0.10m and 0.30m deep.

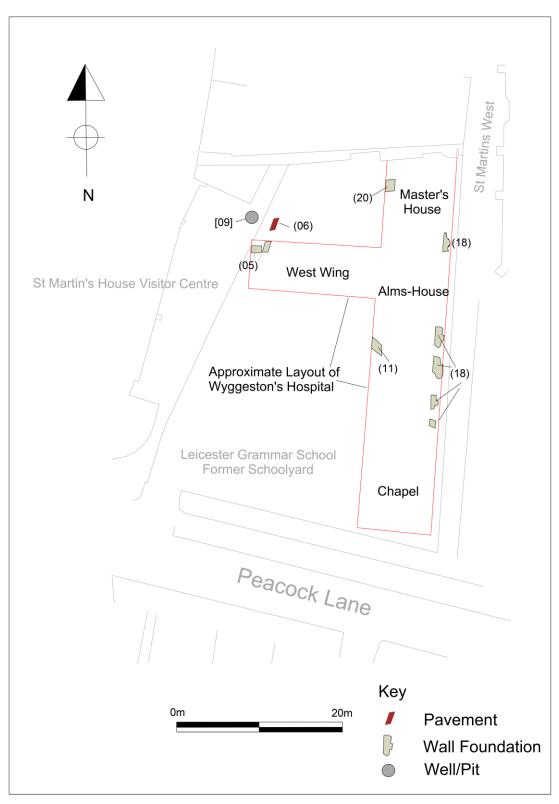


Figure 6 Archaeological features associated with Wyggeston's Hospital



Plate 11 Wyggeston's Hospital east wall foundation Plate 12 Wyggeston's Hospital east wall foundation

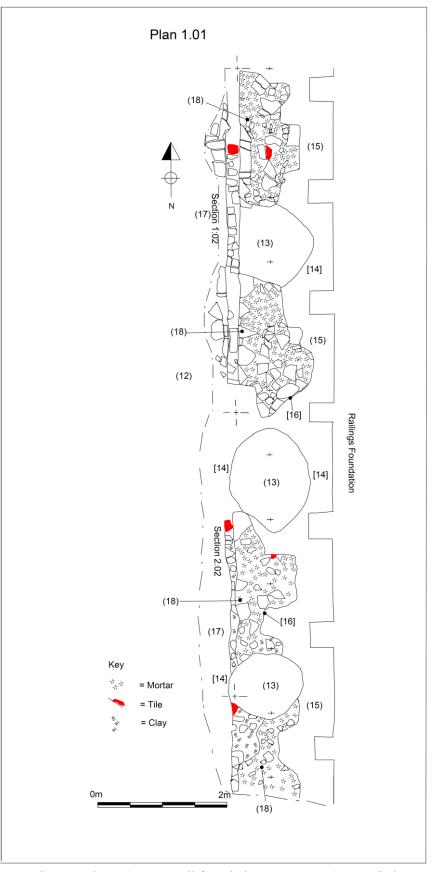


Figure 7 Plan 1.01 east wall foundation Wyggeston's Hospital

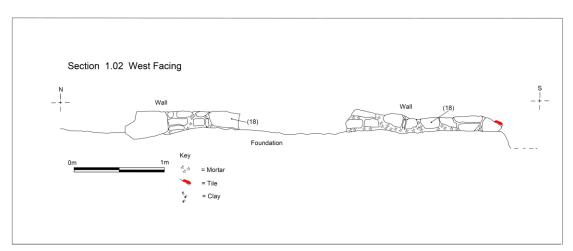


Figure 8 Section 1.02 east wall foundations of Wyggeston's Hospital

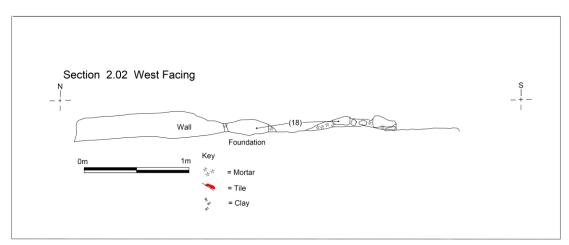


Figure 9 Section 2.02 east wall foundations of Wyggeston's Hospital

Chapel

Further ground-works were undertaken in the south-east corner of the old school yard. The ground-works involved the clearance of existing tarmac surfaces and excavation of service trenches for cable ducts. The tarmac was removed and ground level was reduced by 0.30m. A service trench was then excavated running in a north-south direction and measured 1.00m wide and 0.45m deep. No pre-modern levels or deposits associated with the chapel were reached at this depth. The trench and stripped area only contained a layer orange and gravel and modern brick foundations.

Conclusions

The top of various stone footings were revealed beneath the St Martins Visitor Centre car park adjacent to St Martins West pavement. It is likely that these are part of the footings Wyggeston's Hospital complex. The Hospital is named after its main benefactor and founder William Wyggeston (1472-1536) a wool merchant and three times mayor of Leicester and a parliamentary burgess for the Borough (Hamilton Broadfield 1974 1). The intention of the founder was for the hospital to care Leicester's needy poor of twelve men and twelve women. The Hospital was erected in 1519 facing Saint Martin's church and churchyard. The general plan of the hospital was a simple one of great hall with chapel dedicated to Saint Ursula both located at the southern end. At the northern end, opposite the church, was the Masters house and in between the lay the alms house (Figures 5 and 6) (Hamilton Broadfield 1974 2). The hospital complex also comprised a west wing.

Truncated stone footings for a rectangular masonry structure running north to south and located directly adjacent to St Martins West pavement are believed to be part of the hospital's alms-house and Master's house. Additional truncated stone footings were also revealed further west. These footings are thought to be the north wall associated with a masonry and timber west wing extension of the hospital complex. Further stripping to the north for new pavements and service trenches revealed a probable well and brick pavement believed to part of the hospital complex. The overall shallow depth for excavated services within the hospital complex generally only reached a layer of demolition stone rubble thought to be associated with the demotion of the hospital in the late 19th century. A potential clay and stone floor surface was only partially exposed close to the east wall of the hospital.

In the south-east corner of the car park the trench for cables found no evidence or remains of Saint Ursula's Chapel or great hall that once fronted on to Peacock Lane and adjoined the main hospital building. The shallow depth of the services suggests that any remains of the chapel that had survived were not reached on this occasion.

Burials within the churchyard

No record was made during previous developments and clearances, so the current height of burials and location of tombs was unknown. The various excavations carried out for the new service trenches and bedding layers in advance of the new lawns and pavements does suggest that the pre-1980 level of the churchyard was only a little higher than the new pavement and lawn. These excavations revealed a total of 19 brick-lined graves or vaults within the former church yard. Some were found below the new formation levels at a depth of 0.45m for bedding layers and 1.00m for new services, while others were found to be slightly above these levels. These inspections undertaken during the various works suggest that the previous graveyard clearances had overall removed burials to a depth of 0.50m and emptied nearly all of the top chambers within the brick-lined graves or vaults. However this had not occurred in every case and some of the vaults did contain burials that were above the new formation levels for pavements and services such as BLG 3, 4, 5 and 18. These burials were exhumed and were later reinterred. Other brick-lined graves contained human remains that were located just below the 0.45m formation level such as BLG 8, 13 and 14. These burials were sealed with a sheet of geotextile membrane and a pea grit gravel layer carefully deposited on top. These burials are now located at a depth of between 0.45m and 0.50m below the new pavement and lawns

These various narrow subterranean lined burial chambers within this graveyard are commonly classified as brick-lined graves. The true definition of a burial vault is stone or brick capable of housing a minimum of two coffins side by side with internal height of not less than 1.74m (Litten 1991 207). Only the large brick-lined subterranean grave BLG 17 found in the south-east corner of the grave yard could be classified as a true vault. This structure also had a brick vaulted roof and a set of brick access steps. Within various vaults only two burials were identified. The brass plates attached to the coffins suggest that these vaults dated from the late 18th and early 19th centuries. Burial within brick-lined graves was a popular mode of intramural burial associated more closely with city and large town churches in the 18th and 19th centuries represent attempts by affluent families to create their own private burial space in what were often overcrowed town churchyards (Houlbrooke 1999 193).

Bibliography

Billson, C., 1920 Medieval Leicester. Leicester: Edgar Backus.

Bourne, J., 2013 William Wyggeston and his World. Leicester: Wyggeston's Hospital

Buckley, R., 2010 Design Specification for archaeological Inspection and Recording (watching brief) Cathedral Square, Leicester (SK 583 044) ULAS Ref: 14-014

Dixon, P. 2009 Excavations in the Old Cemetery of St Martin's, 2009 Unpub. Archive report

Gnanaratnam, A., 2009 An Archaeological Watching Brief at Carey's Close, Leicester (SK 5838 0438) ULAS Ref: 2009/120

Litten, J., 1991 The English Way of Death The Common Funeral Since 1450, Robert Hale Limited, London

Hamilton, A., Broadfield, A., 1974 *The Chapel of William Wyggeston's Hospital* The Leicestershire Archaeological and Historical Society Transactions Vol XLVIII

Houlbrooke, R., 1999 *The age of decency: 1660 – 1760, Death in England An Illustrated History* eds Peter C. Jupp and Clare Gittings, Manchester University Press.

Meek J., 2005 An Archaeological Desk-based Assessment at Peacock Lane, Leicester ULAS unpublished report

Meek J., 2008 Specification for Archaeological Mitigation at Peacock Lane/Carey's Close, Leicester WSP doc ref 12261413-001

Shore M., Parker D. and Jarvis W., 2007 An Archaeological Evaluation by Trial Trenching for a Proposed Development at Carey's Close, Leicester (SK 5838 0438) ULAS report 2007-117

MAP 2: The management of archaeological projects 2nd edition English Heritage 1991

MGC 1992 *Standards in the Museum Care of Archaeological Collections* 1992 (Museums and Galleries Commission)

RFG/FRG 1993 *Guidelines for the preparation of site archives* (Roman Finds Group and Finds Research Group AD 700-1700 1993)

SMA 1993 Selection, retention and Dispersal of Archaeological Collections. Guidelines for use in England, Wales and Northern Ireland 1993 (Society of Museum Archaeologists)

Acknowledgements

I would like to thank the clients Daniel Lyle (Casey); Pete Hobson acting Cannon Missioner (Leicester Cathedral); Philip Dixon Cathedral Archaeologist; Rachel King and Paul Nye (both Pick Everard); Phil Storer and Laura Buxton both Faithful + Gould for their help and co-

operation on site. The project was managed by Dr Richard Buckley and the fieldwork was carried out by the author, Tim Higgins and also by Leon Hunt, Wayne Jarvis, Andy Hyam, Andy McLeish and Luis Huscroft all of ULAS.

A summary of the work will be submitted for publication in the *Transactions of the Leicestershire Archaeological and Historical Society* in due course. The report has been added to the Archaeology Data Service (ADS) Online Access to the index of Archaeological Investigations (OASIS) database held by the University of York.

The Archive

A full copy of the archive as defined in Brown (2008) will usually be presented to within six months of the completion of fieldwork. This archive will include all records directly relating to the investigation undertaken.

The archive consists of 1 copy of this report, indices, watching brief recording forms, context sheets, copies of site location plans and synthesised plans, 1 copy brief for archaeological work, 1 photo index form, colour digital photo contact sheet, and 1 CD containing digital photos, B+W photos contact sheet and negatives.

Subject to confirmation it will be deposited with Leicester City Museums under accession number A15.2013.

All modern artefacts found during the watching brief were examined and then discarded.

Appendix 1 Oasis

INFORMATION REQUIRED	EXAMPLE
Project Name	Cathedral Square Leicester
Project Type	Watching Brief
Project Manager	Richard Buckley
Project Supervisor	Tim Higgins
Previous/Future work	Evaluation
Current Land Use	Gardens
Development Type	Gardens
Reason for Investigation	Landscaping
Position in the Planning Process	As a condition
Site Co ordinates	NGR SK 583044
Start/end dates of field work	19/11/2013 to 25/06/2014
Archive Recipient	Leicester City Council
Study Area *	Approx. 4080 square metres

Appendix 2 Burial Descriptions

Burial Number	Туре	Location	Description
BLG1	Brick lined Grave	I Towards the north-west corner of cathedral gardens	This complete coffin shaped brick-lined grave measured 2.00 long and 0.90m wide. It comprised of least two chambers 0.40m deep divided by slate slabs. The upper chamber was empty but when the slate was removed an inhumation and coffin was found in the lower chamber. The slate division was replaced over the inhumation and upper chamber was back filled with pea gravel
BLG 2	Brick lined grave	I Located under the former fountain in the north-east corner of cathedral gardens	It comprised of least three chambers divided by slate slabs. The top capping slates were removed and it was found that the upper chamber which measured 0.60m deep was empty. At the base a slate division was partly removed and inhumation and coffin was found in the lower second chamber at a depth of 1.00m. The slate division was replaced over the inhumation and upper chamber was back filled with pea gravel
BLG 3 SK 3	Brick lined grave	East side of the south porch	Appeared to be constructed as single chambers and capped with slate slabs although they may have been partly dismantled and any upper chambers and burials were removed during the last grave yard clearance. Contained a single inhumation SK 3 buried in what is now a decayed coffins with associated coffin furniture. Burial was recorded and removed, and stored awaiting re-interment.
BLG 4 SK4	Brick lined grave	the south porch	Appeared to be constructed as single chambers and capped with slate slabs although they may have been partly dismantled and any upper chambers and burials were removed during the last grave yard clearance. Contained a single inhumation SK4 buried in what is now a decayed coffin with associated coffin furniture. This burials was recorded and removed, stored and later re-interment.
BLG 5 SK5	Brick lineo grave	East side of the south porch	Appeared to be constructed as single chambers and capped with slate slabs although they may have been partly dismantled and any upper chambers and burials were removed during the last grave yard clearance. Contained a single inhumation SK 5 buried in what is now a decayed coffins with associated coffin furniture. Burial was recorded and removed, and stored and later re-interment. The coffin

				aloto inconintion for SV5 read Elizabeth
				plate inscription for SK5 read Elizabeth Farmer
				Died 26 th October 1817 Age 23
BLG 6	Brick grave	lined	Close to the Cathedral's Old Song School and Administrative Chapter	Brick lined grave had been capped with slate and contain at least two chambers. The slate capping was removed and revealed an empty upper chamber which measured 0.60m deep. At the base of upper chamber a potential slate division or lintel was absent. Below a second chamber was visible and contained and inhumation and coffin. A terran membrane fabric was place over the burial and carefully sealed with pea grit gravel
BLG 7	Brick grave	lined	Close to the Cathedral's Old Song School and Administrative Chapter	This brick lined grave was only partially exposed and then buried again. The structure appeared to be had been capped with slate and contain at least two chambers.
BLG 8	Brick grave	lined	Northern end of the west lawn.	Located close to the south porch and had no slate capping. The upper chamber contained a collection of charnel bone place on top of a lead coffin. The charnel and disarticulated bone were collected and stored. The lead coffin was damaged and had been partially opened but still contained inhumation. It was thought that this coffin may have been moved from another location and re-interned along with the charnel within this grave. Below the lead coffin the chamber had been back filled with soil
BLG 9	Brick grave	lined	Northern end of the west lawn close to the St Martin's West Lane	Capped with slate which was removed and revealed two empty upper chambers. At base of the two chambers 1.00m deep a slate slab division had collapsed and third chamber was visible and this did contain an inhumation and coffin. A terran membrane fabric was place over this burial and carefully sealed with pea grit gravel.
BLG 10	grave	lined	Adjacent to St Martin's East Lane and close the Cathedral's Administrative Chapter	A brick lined grave for infant that measured 1.40m long 0.60m wide and 0.50m deep. The capping slate had been previously disturbed and the single chamber below was empty. This burial was located above the new formation level and was removed by machine.
BLG 11	Brick grave	lined	Adjacent to St Martin's East Lane and close the Cathedral's Administrative Chapter	This was only partially revealed and was at sufficient depth below the new formation levels that there would be no impact to the burials

DI C 12	D 1	1' 1	NT (1 1	
BLG 12	Brick grave	lined	Northern end of the west lawn.	This had slate capping partially removed and contained a coffin. This burial was located below any new formation level so was re- sealed with deposit of pea grit gravel.
BLG 13	Brick grave	lined	Adjacent to St Martin's East Lane and close the Cathedral's Administrative Chapter	This burial had been re-used for re-interned charnel which had filled the upper chamber. Part of this grave was above the new formation level so the charnel was removed for later re-interment and top two brick courses were removed. The remaining empty chamber was filled with pea grit
BLG 14	Brick grave	lined	Adjacent to St Martin's East Lane and close the Cathedral's Administrative Chapter	During excavations for new drain a single chamber burial was found. The slate capping was partly removed. The chamber contained a single coffin that was located below the service formation level. The burial was carefully sealed under a layer of pea gravel
BLG 15	Brick grave	lined	Provost's Lodging and surrounded a garden	The slate cap had been partially removed revealing the chamber below. Contained a single inhumation buried in what is now a decayed coffin with associated coffin furniture. The burial was below the new pavement formation level so were carefully sealed under a layer of pea-grit gravel.
BLG 16	Brick grave	lined	Provost's Lodging and surrounded a garden	The slate cap had been partially removed revealing the chamber below. Contained a single inhumation buried in what is now a decayed coffin with associated coffin furniture. The burial was below the new pavement formation level so were carefully sealed under a layer of pea-grit gravel.
BLG 17	Vault		Provost's Lodging and surrounded a garden	A larger subterranean burial chamber which can be classified as a vault as it could house a minimum of two coffins side by side. The vaults internal dimensions measured 2.00m long, 1.30m wide and 2.60m high. The internal side walls of the vault displayed four brick ledges each to support lintels or slate divisions. A long with the height this would suggest that the vault had five separate chambers which could house at two coffins side by side. The chamber at the base of the vault appears to be the only one that was used to house burials. The remaining four were empty and no lintels or stone slabs had been inserted to divide the chambers. The burials found at base chamber comprised three inhumations buried in what were now decayed coffins with associated coffin furniture. Two of the coffins were adult size while the third which was located in the middle was a child. This

				was lead lined coffin complete with a brass inscription plate which was legible and so enabled identification. The coffin plate inscription for infant burial reads William the Son of William and Hannah Ingle was born Feb 8 th 1783 died Nov 10 th 1787
BLG 18	Brick grave	lined	Northern end of the west lawn close to the St Martin's West Lane	Excavations for drain revealed burial capped with slate and contain at least two chambers. The slate capping was removed and revealed a single inhumation SK 6 buried in what is now a decayed coffins with associated coffin furniture. The burial was recorded and removed, and stored and later re-interment. At the base a slate division was seen and sealed inhumation and coffin was found in the lower second chamber at a depth of 0.54m.
BLG 19	Brick grave	lined		During excavations for tree pit a single chamber burial was found. The slate capping was partly removed. The chamber contained a single coffin that was located below the service formation level. The burial was carefully sealed under a layer of pea gravel

Appendix 3 Test pits

Prior to the to the removal of old garden features and the initial stripping/ground reduction, six test pits were excavated by hand and machine within the east and west lawns. An additional pit was excavated within a pavement area on the east side of the south porch.

Test Pit	Length	Width	Depth
1	2.00m	1.70m	1.50m

This test pit was located towards the northern end of the west lawn and was machine excavated to a depth of 1.50m. A potential undisturbed graveyard level was reached at a depth of 1.30m below the top of the pit. This deposit was a greyish-brown silty clay that contained frequent human bone. Overlying was a mixed overburden layer 0.80m thick that comprised greyish-brown silty clay mixed with frequent fragments of stone and brick with the occasional human bone. This layer was thought to be a disturbed graveyard soil associated with the earlier clearances and deposited as a layer made ground that supported the raised west lawn. This was sealed under layer of dark greyish-brown silty clay topsoil that measured 0.50m deep.

Test Pit	Length	Width	Depth
2	2.80m	1.70m	0.70m

Test pit 2 was also located towards the northern end of the west lawn and excavated to a depth of 0.70. An undisturbed brick-lined grave or shaft was reached at this depth (BG 1). This complete coffin shaped brick structure contained at least one coffined inhumation and was sealed under slate slabs. This grave was sealed under layer disturbed grave yard soil that contained occasional human bone and measured 0.20m deep. This was sealed under layer of dark greyish-brown silty clay topsoil that measured 0.50m deep.

Test Pit	Length	Width	Depth
3	2.00m	1.70m	1.40m

This test pit was located towards the southern end of the west lawn and was excavated to a depth of 1.40m. The pit contained a deposit of mixed overburden 0.60m thick that comprised greyish-brown silty clay mixed with frequent fragments of stone and brick with the occasional human bone. This layer was similar to the layer seen in test pit 1 and was also thought to be a disturbed graveyard soil associated with the earlier clearances and deposited as a layer made ground that supported the raised west lawn. This was sealed under layer of dark greyish-brown silty clay topsoil that measured 0.80m deep.

Test Pit	Length	Width	Depth
4	0.90m	0.60m	0.90m

Hand excavated Test pit 4 was located towards the northern end of the east lawn and was excavated to a depth of 0.90m. This pit contained a layer of topsoil that comprised dark greyish-brown silty clay which measured 0.90m deep. The soil was very clean of finds and was thought to be an imported garden soil associated with previous landscaping.

Test Pit	Length	Width	Depth
5	0.90m	0.60m	0.90m

Test pit 5 was located towards the southern end of the east lawn and was excavated to a depth of 0.90m. This hand excavated pit contained a layer of topsoil that comprised dark greyish-

brown silty clay which measured 0.90m deep. This soil was again very clean of finds and was also thought to be an imported garden soil layer.

Test Pit	Length	Width	Depth
6	3.30mm	1.20m	0.80m

A test pit in the location of the new water feature had been excavated on the east side of the south porch. This test pit has revealed to articulated burials/human remains (SK1 and SK2) at a depth of 0.60m below the current ground/pavement level. These burials were recorded and removed, and stored with the other disarticulated remains, awaiting reinterment. These burials were sealed layer greyish-brown silty clay mixed 0.40m deep. Overlying was layer of sand and gravel that supported the pavement above 0.20m deep.

Additional Test Pits

Further work undertaken within the fountain area in the north east corner of the gardens and at the northern end of the west lawn caused two voids to appear. It was decided that two further test pits should be excavated over these voids to determine the reason why the soil had collapsed in these locations.

Test Pit	Length	Width	Depth
7	2.60m	1.50m	1.55m

Test pit 7 was located towards the northern end of the west lawn and excavated over a void that appeared during machine stripping. The test pit was excavated to maximum depth to a maximum depth of 1.55m. The void was had depth 0.90m and appeared to be empty. It was assumed that cause of the void was perhaps decayed coffin within a grave cut. A layer of greyish-brown silty clay mixed with crushed sandstone, mortar was reached at a depth of 0.90m where the void ended. Overlying was a undisturbed graveyard layer which was 0.90m deep. This deposit comprised a greyish-brown silty clay that contained frequent human bone.

Test Pit	Length	Width	Depth
8	2.10m	0.85mm	1.20m

Test pit 8 was also located over a void that appeared under the fountain and was excavated to a depth of 0.70. A second brick-lined grave (BLG2) was revealed and again measured 2.00 long and 0.90m wide. The grave structure was found at a depth 0.20m below the surface and was sealed by slate slabs that had collapsed. It comprised at least three chambers divided by slate slabs. The top capping slates were removed and it was found that the upper chamber which measured 0.60m deep was empty. At the base a slate division was partly removed and inhumation and coffin was found in the lower second chamber at a depth of 1.00m. A second slate division was visible below the burial and it was assumed that a second burial was still present in a potential third chamber. This brick-lined grave was located below the formation level for the new pavements and so the slate division was replaced over the inhumation and upper chamber was back filled with pea gravel.

Appendix 4 Written Scheme of Investigation

UNIVERSITY OF LEICESTER ARCHAEOLOGICAL SERVICES

Written Scheme of Investigation for Archaeological Attendance,

Inspection and Recording (watching brief)

Cathedral Square,

Leicester

NGR: SK 583044

For: The Casey Group

Planning Authority: Leicester City Council

Planning application Ref:

Start Date: November 2013

1 Introduction

Definition and scope of the specification

- 1.1 This document is a Written Scheme of Investigation (WSI) for Archaeological Attendance, Inspection and Recording (watching brief) at the above site. This specification provides details of the methodologies to be adopted for archaeological monitoring of groundworks associated with the creation of 'Cathedral Square', a new public open space to the south and west of Leicester Cathedral (Fig. 1).
- 1.2 The document provides details of the following work proposed by ULAS on behalf of the client.
 - Archaeological attendance, inspection and recording during groundworks.
 - Preparation of a report on the results
 - Preparation of an archive for deposition with the Leicester City Museum Service.

2. Background

2.1. The site lies adjacent to the cathedral. It consists at present of the old school playground to the west, and the former churchyard to the south, now in a state in which it was relaid at the end of the 1980s. The latter area is within the Green Line of the Precinct, and accordingly is within the supervision of the Cathedral Fabric Commission. The former area lies outside this Line, but it is anticipated that the archaeological work is to be carried out in the same fashion in both areas, under the overall supervision of the Cathedral Archaeologist, reporting to the Dean and Chapter, and with the collaboration with the City Council and the CFCE. After several years of discussion, a proposed layout has been arrived at, including lawn and flower beds, and a water feature immediately south of the cathedral.

2.2 *Geology and Topography*

The Ordnance Survey Geological Survey of Great Britain Sheet 156 indicates that the underlying geology consists of Mercia mudstone, with overlying river sands and gravels. The natural ground lies at 3.34 - 4.70m below the present ground surface of c.61 - 63m OD.

2.3 Archaeological Background

Previous archaeological fieldwork that has been undertaken in the vicinity confirms that the site is located within an area of high archaeological potential, within the heart of Roman and medieval Leicester, with the possibility of remains of Roman, medieval and post-medieval date. Possible late Saxon remains have also been recorded directly to the north-west of the area.

The site lies between the Visitor Centre, Peacock Lane and the southern side of the Cathedral, and includes the Schoolyard, formerly the garden of and the site of the Wyggeston Hospital, and the former churchyard, now part of the Cathedral Precinct.

3. Archaeological Aims and Objectives

- 3.1 The purpose of the archaeological work may be summarised as follows:
 - To identify the presence/absence of any archaeological deposits.
 - To describe, record and if possible provide a date range for the stratigraphy.
 - To produce an archive and report of any results to inform the need for further work and to provide supplementary data for the Heritage Assessment.

Research objectives

- 3.2 All mitigation work will be considered in light of the East Midlands Research Framework (Cooper ed. 2006) and strategy (Knight *et al.* 2012), along with targeting national research aims. Research aims will be reviewed and updated as the work progresses and new information comes to light. The following research objectives have the potential to be addressed by this project:
 - 1. Urbanism: How did the major towns and smaller market towns of the region develop after the Norman Conquest
 - 2. Can we define more closely the industrial and trading activities associated with the towns and the nature and extent of urban influence on the countryside.
 - 3. Can we shed further light on the commercial role of fairs, markets, ports and other trading centres? (Knight 2012, para 7.1, 94)
 - 4. Can we elucidate further the development of hospitals and colleges? (Knight 201, para 7.5, 3
 - 5. Can we shed further light upon the distribution and development of early churches and chapels and the origins and growth of the parish system (Knight 2012, para 7.5, 4)

4. Methodology

General methods and Standards

- 4.1 All work will follow the Institute for Archaeologists (IfA) *Code of Conduct* (2010) and adhere to their *Standard and Guidance for Archaeological Watching Briefs* (2008). The Leicestershire County Council *Guidelines and Procedures for Archaeological work Leicestershire and Rutland* (1997) will be adhered to.
- 4.2 Staffing, recording systems, health and safety provisions and insurance details are included below.
- 4.3 An accession number will be and used to identify all records and artefacts.

Archaeological attendance for inspection and recording

4.4 As part of the development of the former school, and its incorporation into the precinct of the cathedral as Cathedral Gardens, it has been decided to lower the level of the Precinct lawns to their pre 1980 level, and to form raised beds and other garden features, including a water feature, across the whole area.



Fig. 1: Site location and archaeological watching brief strategy

- 4.5 The project will involve attendance to monitor any groundworks which have the potential to damage buried archaeological remains.
- 4.6 Cuttings, area clearance and removal of tarmac will be the responsibility of the landscape contractor. Groundworks below this point will be under the supervision of the archaeologists, who will have full access to the site at points and times agreed with the landscape contractors, in order to excavate, reveal and if necessary lift any archaeological features discovered by the necessary works.
- 4.7 Any stratigraphy identified will be recorded by sketch or drawn sections (ass appropriate), photographs and written descriptions of samples and deposits including any artefacts.
- 4.8 Archaeological deposits will be excavated and recorded using standard ULAS procedures.
- 4.9 Spoil will be monitored for artefacts.
- 4.10 Any human remains encountered will be initially left in situ, covered and protected, and only be removed in accordance with a Ministry of Justice licence and in compliance with relevant environmental health regulations. The landowner and/or developer, the Planning Authority and the coroner will be informed immediately of their discovery.

Preservation in situ and Contingency Provisions

- 4.11 In the event of significant unexpected archaeological remains being located during the archaeological investigation work may be halted until a mitigation strategy can be agreed with the client, planning authority Cathedral and City Archaeologist.
- 4.12 On the discovery of potentially significant remains the archaeologist will inform the developer and the planning authority in order for detailed discussion between all relevant parties to take place.

Recording Systems

- 4.12 The ULAS recording manual will be used as a guide for all recording.
- 4.13 Individual descriptions of all archaeological strata and features excavated or exposed will be entered onto pro-forma recording sheets.
- 4.14 All archaeological records will be tied into the Ordnance Survey plan of the area.
- 4.15 A photographic record of the investigations will be prepared. This will include both detailed shots of the stratigraphy and general shots to show the place the test-pits within a locational context. The photographic record may also include 'working shots' to illustrate more generally the nature of the archaeological operation mounted.
- 4.16 This record will be compiled and checked during the course of the excavations.

5 Finds & samples

- 5.1 The IfA Guidelines for Finds Work will be adhered to (*Standards and Guidance for the collection, documentation, conservation and research of archaeological materials* (2008))
- 5.2 Finds which may constitute 'treasure' under the Treasure Act, 1996 must be removed to a safe place and reported to the local Coroner. Where removal cannot take place on the same working day as discovery, suitable security will be taken to protect the finds from theft.
- 5.3 All antiquities, valuables, objects or remains of archaeological interest, other than articles declared by Coroner's Inquest to be subject to the Treasure Act, discovered in or under the Site during the carrying out of the project by ULAS or during works carried out on the Site by the Client shall be deemed to be the property of ULAS provided that ULAS after due examination of the said Archaeological Discoveries shall transfer ownership of all Archaeological Discoveries unconditionally to Leicester City Council for storage in perpetuity.
- 5.4 All identified finds and artefacts are to be retained, although certain classes of building material will, in some circumstances, be discarded after recording.
- 5.5 All finds and samples will be treated in a proper manner. Where appropriate they will be cleaned, marked and receive remedial conservation in accordance with recognised best practice. This will include the site code number, finds number and context number. Bulk finds will be bagged in clear self-sealing plastic bags, again marked with site code, finds and context.

6. Environmental Sampling

6.1 If environmental deposits are encountered, samples may be taken to test for their environmental potential.

7. Report and Archive

- 7.1 The full report in A4 format will usually follow within six weeks of the completion of the fieldwork and copies will be directed to the client, the Planning Authority and to the Historic Environment Record.
- 7.2 The report will include consideration of:
 - Summary
 - The aims and methods adopted in the course of the archaeological investigation.
 - The location and extent of the work
 - Appropriate illustrative material including maps, plans, sections, drawings and photographs.
 - a summary of artefacts, specialist reports and a consideration of the evidence within its local, regional, national context.
 - The location and size of the archive.

- 7.3 A full copy of the archive as defined in the IfA Standard and Guidance for archaeological archives (Brown 2008) will normally be presented to the recipient museum within six months of the completion of fieldwork. This archive will include all written, drawn and photographic records relating directly to the investigations undertaken and will follow the Leicestershire City Council guidelines detailed in *The Transfer of Archaeological Archives to Leicester City Museum Service* (LCMS).
- 7.4 The copyright of all original finished documents shall remain vested in ULAS and ULAS will be entitled as of right to publish any material in any form produced as a result of its investigations.

8 Publication and Dissemination of Results

- 8.1 A summary of the work will be submitted to the local archaeological journal. A larger report will be submitted for inclusion if the results of the investigations warrant it.
- 8.2 University of Leicester Archaeological Services supports the Online Access to the Index of Archaeological Investigations (OASIS) project. The online OASIS form at http://ads.ac.uk/project/oasis will be completed detailing the results of the project. Once the report has become a public document following its incorporation into the HER it may be placed on the web-site.
- 8.3 Should the results warrant it, ULAS undertakes to present them to the public via the web, talks and lectures.

9 Acknowledgement and Publicity

- 9.1 ULAS shall acknowledge the contribution of the Client in any displays, broadcasts or publications relating to the site or in which the report may be included.
- 9.2 ULAS and the Client shall each ensure that a senior employee shall be responsible for dealing with any enquiries received from press, television and any other broadcasting media and members of the public. All enquiries made to ULAS shall be directed to the Client for comment.

10. Timetable and staffing

10.1 The work is scheduled to commence in November 2013. The work will normally involve one archaeologist on site, supplemented by others should significant deposits be identified.

11. Health and Safety

11.1 ULAS is covered by and adheres to the University of Leicester Statement of Safety Policy and uses the ULAS Health and Safety Manual (revised 2010) with appropriate risks assessments for all archaeological work. A draft Health and Safety statement for this project is in the Appendix. This project is likely to fall under CDM regulations and the relevant Health and Safety Executive guidelines will be adhered to as appropriate.

12 Insurance

12.1 All ULAS work is covered by the University of Leicester's Public Liability and Professional Indemnity Insurance, details of which are provided in the accompanying Health & Safety Method Statement.

13. Bibliography

AAF 2007 Archaeological Archives: A Guide to Best Practice in creation, compilation, transfer and curation

Cooper, N.J., (ed) 2006 *The Archaeology of the East Midlands An Archaeological Resource Assessment and Research Agenda*. Leicester Archaeology Monograph 13.

Courtney, P., 1998 'Saxon and medieval Leicester: A framework for archaeological research' *Trans. Leics. Arch and Hist. Soc.* **72**, 110-145

English Heritage 2001 Centre for Archaeology Guidelines on Archaeometallurgy

Institute for Archaeologists (IfA) 2008 Standard and Guidance for Archaeological Watching Briefs

Institute for Archaeologists (IfA) 2008 Standards and Guidance for the collection, documentation, conservation and research of archaeological materials (2008) (finds)

Institute for Archaeologists (IfA) 2010 Code of Conduct

Knight, D.; Vyner, B.; Allen, C.; 2012, *East Midlands Heritage. An Updated Research Agenda and Strategy for the Historic Environment of the East Midlands.* Nottingham Archaeological Monographs 6, University of Nottingham and York Archaeological Trust.

Richard Buckley ULAS University of Leicester University Road Leicester LE1 7RH

Tel: 0116 252 2848 Fax: 0116 252 2614 Email: rjb16@le.ac.uk

Contact Details

Richard Buckley or Patrick Clay University of Leicester Archaeological Services (ULAS) University of Leicester, University Road, Leicester LE1 7RH

T: +44 (0)116 252 2848 F: +44 (0)116 252 2614 E: ulas@le.ac.uk w: www.le.ac.uk/ulas







