NORFOLK ARCHAEOLOGICAL UNIT

Report No. 827

The former Mann Egerton site Greyfriars Road/Rose Lane Norwich An Archaeological Impact Assessment and Mitigation Strategy carried out on behalf of Countryside Properties Ltd.

845N & 26583N

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Contents

Location:	Former Mann Egerton Site, Greyfriars Road/Rose Lane, Norwich
Grid Ref:	TG 2347 0857 (centre)
HER No.:	845N & 26583N
Date of Fieldwork:	23rd to the 30th June 2003

Summary

An assessment of the potential impact upon surviving archaeological deposits of a proposed residential development on the former Mann Egerton site has been carried out on behalf of Countryside Properties Ltd. The site lies within the core of the Late Saxon town and medieval city of Norwich. The northern part of the site sits within the precinct of the Greyfriars friary, established in 1226 and dissolved in 1538. Extensive archaeological excavations were carried out on the site between 1992 and 1995.

In general the archaeological impact of the proposed scheme is low, provided care is taken during site clearance operations. Preservation in situ, *executed through a variety of strategies, can be achieved across most of the site. It will be necessary, however, to excavate a further area measuring* c*.7.5m by 30m on the south-western margin of the proposed development area.*

1.0 Introduction

(Fig. 1)

The residential development proposed by Countryside Residential (North Thames) Ltd occupies the southern and western parts of the former Mann Egerton site. In total, excluding areas where relatively non-intrusive hard landscaping are to take place, the footprint of the proposed new build takes up an area of approximately 4050m^2. To the west the site fronts onto Greyfriars Road and is bounded to the south by Rose Lane and Maidstone Road.

Archaeological evaluation trenches were first dug by Norfolk Archaeological Unit (NAU) on the site in 1990 (Wallis 1990). Large scale archaeological excavations followed these and were carried out between 1992 and 1995 (Emery forthcoming). These works were undertaken as part of a proposed redevelopment of the site for offices by Knight Properties of behalf of NFU Mutual. The excavations between 1992 to 1995 were designed only to excavate the new-build footprint of this scheme. In addition to this the depth of excavations was restricted to a proposed formation level in some areas.

Only the north-western part of the Knight Properties scheme was ever constructed. This consisted of the building now known as 1 Prince of Wales Road, on the corner of Prince of Wales Road and King Street, and the three properties to the east of it (15 to 19 Prince of Wales Road). The remainder of the site has remained open ground for at least eight years and has accumulated modern urban detritus, both natural and anthropogenic. An impact assessment of a proposed residential development of the site by Twigden Homes Ltd (Emery 2000) led to a further evaluation trench being excavated by NAU in 2001, close to The Rose Lane frontage (Whitmore 2001).

The NAU was commissioned by Countryside Residential (North Thames) Ltd to conduct an archaeological impact assessment of the outline design for their proposed residential development. A Project Design for this assessment was prepared by the NAU (Ref: AS/1575).

This report was designed to assist in defining the character and extent of any archaeological remains within the proposed redevelopment area, following the guidelines set out in *Planning and Policy Guidance 16 — Archaeology and Planning* (Department of the Environment 1990). Whilst suggestions as to the nature of any future archaeological mitigation strategies have been made, and these suggestions have been discussed with by Andy Hutcheson of Norfolk Landscape Archaeology (NLA), they remain suggestions. The results of this report will enable decisions to be made by the Local Planning Authority and NLA with regard to the treatment of the archaeological remains. Any future pre-determination or planning approval conditions will be set out in a brief or briefs issued by NLA.

Aside from a fleeting site visit no fieldwork has been carried out in connection with this study, nor has reference been made to Listed Buildings information or other present planning constraints. This report has been substantially informed by the results of previous NAU excavations (1992 to 1995) and evaluation work (2001). Assessment of the impact of the proposed development upon surviving archaeological deposits has been based on outline designs supplied by Hudson Architects (drawings; GRY sk 07B, sk12 and a revised lower ground floor plan supplied by email with the file name lower-X). It has been assumed that the formation levels for the scheme will be 450mm below the finished floor levels given on the drawings as set out in a letter from Ian Wickerson (Countryside Properties) to Andy Shelley (NAU) dated 10th April 2003. This gives a proposed general formation level for the lower ground floor/basement car park of 5.35m OD. The probability of additional intrusions below these formation levels and their potential impact is discussed below. All as existing levels are based on site survey carried out as part of the Twigden Homes Ltd scheme.

2.0 Geology and Topography

The uppermost natural geological deposit occurring on the site is a buff-coloured sand, presumably part of the Norwich Crag deposits and of glacial origin. This overlies chalk. A weathered deposit of this material out-crops in the north-western part of the site.

Although altered and truncated by hundred of years of human activity the upper levels of these natural deposits drop from 6.00m OD in the north-western corner of the site to approximately 1.00m OD to 1.50m OD in the south-east. This slope to the east and south-east from the terminus of the Ber Street Ridge toward the River Wensum seems to reflect both the ancient and historic topography of the site.

3.0 Archaeological and Historical Background

3.1 Introduction

The principal source of information concerning the archaeological remains on this site, both extant and excavated, are the 1992 to 95 excavations and the 2001 evaluation. A monograph concerned with presenting the results of the 1992 to 1995 excavations is currently in preparation (Emery forthcoming). Elements of this monograph are summarised in the 2000 impact assessment (Emery 2000). Part of the work towards the main excavation monograph included extensive documentary and cartographic research carried out by Elizabeth Rutledge. Much of Section 3.2 is based upon this work.

Whilst recent excavations in Norwich (Adams 2003) have added to a growing body of evidence relating to prehistoric activity in the Wensum valley little such evidence was recovered during the 1992 to 95 excavations. Unlike many historic towns and cities in England Norwich has no direct Roman antecedent. The remains of the Romano-British regional capital *Venta Icenorum* lie *c.*5km south of the modern city centre at Caistor St. Edmund. Unlike comparable urban centres such as Ipswich evidence of Middle Saxon occupation in Norwich is sparse (Ayers 1994, 22) and its significance debatable.

3.2 Documentary and Cartographic Evidence

Documentary, topographic and place-name evidence strongly suggest that the former Mann Egerton site lies within the area of the southern defended enclosure of the Late Saxon town (9th to 11th centuries AD), south of the market at Tombland. By the 11th century the site was surrounded by churches (Ayers 1994, 32). An informed conjectural pre-Norman street pattern for the site is shown on Fig. 1. The main north-to-south street is described as a former highway in a document of 1285. This source connects well with excavated evidence. A north-to-south aligned metalled road was found during the 1992 to 1995 excavations. The minor north-to-south routes are suggested by property boundaries reconstructed from a mortmain license of 1292. As reconstructed on Fig. 1 they do not take into account two small streams or cockeys, former tributaries of the Wensum that may once have flowed across the site. The 1285 documents also indicate the probable position of St Vedast's church, its churchyard and east-to-west aligned lane leading to it. The evidence placing the church of St. John the Evangelist towards the corner of King Street and Rose Lane is more ambiguous.

Following the Norman conquest the Late Saxon town was extensively remodelled. By the late 11th and early 12th centuries the market had been moved form Tombland to its present location (Fig. 1 inset). The construction of the castle and its extensive outer baileys to the west of the site had the effect of cutting off the whole area between Rose Lane and Tombland from the new market, French Borough and Jewish quarter, west of the castle (Fig. 1 inset). The site was also hemmed in to the north by the extensive precincts of the cathedral priory (Fig. 1 inset). In short the site became marginalised, cut off from the economic and cultural centres of the early medieval city. As mentioned the former highway was described as a lane in 1285. Land gable records of 1292 indicate that once occupied plots lay vacant and by the

middle of the 13th century the church of St. John the Evangelist had probably been abandoned.

By 1226 a Franciscan Friary had been established on land between the church of St. Cuthbert, immediately south of Tombland, and St Vedast's church. In the early 13th century mendicant orders or orders of friars began to become popular in many medieval cities. Traditional monasteries were great landlords "cut off by high walls" (Sutermeister 1977, 3) who controlled many parish priests. The friars not only adopted a 'back to basics' approach to monasticism, but offered more accessible religious services and an emphasis on relations with the wider community. Friaries were entirely funded by public donation, usually form the growing wealth of the emerging middle classes. By the end of the 13th century the Greyfriars were only one of four major orders to have sizeable precincts with the city.

Initially what became the eastern part of the later precinct was given to the Greyfriars by John de Hastingford. Like many Friary foundations the initial grant was of rather marginal land north of the surviving precinct wall and south of St. Faiths Lane. In 1292 and 1299 the Franciscans obtained mortmain licences to acquire twenty-one plots of land. This allowed them to construct a new church and claustral building west of the original site, closer to King Street. By *c.*1400 the Greyfriars precinct extended as far north as St. Faith's Lane. The area of land bounded by the precinct wall in the north, Rose Lane in the south and the former St. Vedast's churchyard in the east is known to been bought by the Friary between 1479 and 1489. This land was, however, sold off before the dissolution of the Friary in 1538.

In 1559 the Friary site was bought by the city and there is considerable documentary evidence for many of its buildings being dismantled and their building materials reused. Both archaeological and documentary evidence point to the large scale reuse of stone and wood as well as the melting down of architectural ironwork and roofing lead.

Post-medieval maps such as Cleer's (1696), Hochsetter (1789), Millard and Manning (1830) and the Ordnance survey 1885 1:500 plan of 1885 all show most of the former friary precinct and the area to the south of it bounded by Rose Lane as green space used as gardens and orchards. By the late 18th century however, the north-west piece of the site was partly occupied by Greyfriars House, a substantial high-status dwelling.

The major difference between the 1830 and 1885 maps is the presence of Prince of Wales Road. Empowered by Act of Parliament in 1859 the construction of Prince of Wales Road was designed to link Thorpe railway station to the castle and the recently remodelled cattle market on the site of the present Castle Mall shopping centre and the market place via Castle Meadow (Sandred and Lindström 1989, 128). It was completed by 1864 and at first served as a dual purpose road and tramway. Prince of Wales Road, together with its contemporaries Cathedral Street and South Cathedral Street (later St. Vedast Street), cut a swathe across the medieval street pattern.

The Ordnance Survey 1885 1:500 plan of 1885 shows that the south side of Prince of Wales Road had been heavily developed by 1873. Also by this date the access road that runs from St Vedast Street, parallel to Prince of Wales Road was in place.

Initially this road ran a straight course but by 1885 had developed it's present dog-leg shape. Between 1873 and 1900 the north-to-south aligned arm of Greyfriars Road was in place, augmenting the pre-existing east-to-west aligned section. Between 1885 and 1900 Maidstone Road was built. It had nine small tenements, presumably containing terraced houses on the east side of the road and seven on the west. In addition to this the north side of Rose Lane also became built-up with five properties between Greyfriars Road and Maidstone Road and seven properties and a livery stables between Maidstone Road and St. Vedast Street.

During the second half of the 19th century much of the area immediately to the north of Rose Lane was made-up. NAU excavations between 1992 and 2001 revealed that up to 1.3m of material was dumped onto the upper levels of the pre-existing post-medieval gardens.

In 1905 Mann, Egerton & Co., motor engineers, took over 5 Prince of Wales Road from George Morris, carriage builder (Gurney Read 1988). The company expanded rapidly and by 1908 they had taken over most of the north side of Greyfriars Road. By 1935 the Mann Egerton premises encompassed 5-13 Prince of Wales Road, 21-23 and 31 King Street, major sections of the west side of Greyfriars Road as well as Greyfriars House and the former livery stable on the junction of Rose Lane and St Vedast Street. The company's territorial expansion was almost complete by 1952.

As early as 1912 a large spiral concrete ramp had been constructed close to the bend in Greyfriars Road. Further concrete-floored buildings extended eastwards. Parts of these structures, the former Mann Egerton basement, survive along the northern edge of the proposed development area. The only other structure to survive from the Mann Egerton era is the former computer centre, 4-7 Greyfriars Road. This building, having been built to house a mainframe-type computer sometime between 1978 and 1982 is already something on an historical curiosity. It was last used by Wiltshier Construction Ltd during the construction of 1 Prince of Wales Road and the three buildings to the east of it.

3.2 Archaeological Evidence

Although the 1992 to 1995 excavations (Emery forthcoming) recovered Middle Saxon artefacts from the low-lying, eastern part of the site they have arguably contributed little to the elucidation of any settlement in Norwich during that period.

Firm evidence of Late Saxon occupation (10th to 11th century) was however, uncovered. This included a sunken-featured building (lying 30m from Rose Lane) surrounded by pits, ditches and other structural traces. Metalworking (both ferrous and non-ferrous) appeared to have been concentrated in the same area. Further north, towards the west of the central excavation area, antler-working residues predominated. These two concentrations of industrial activity were located to the east of a north-to-south aligned road which crossed the 1992 to 1995 excavation and which appeared to have been laid out in the Late Saxon period (Fig.1).

A proliferation of cess pits dating to the 12th and 13th centuries were recorded in the eastern excavation area. These probably lay to the rear of properties that fronted onto Rose Lane. They indicate a fairly intensive development of that frontage in the medieval period. Among various structural features a set of large post-pits was seen

in the south-east corner of the eastern excavation area. They probably represented a substantial timber-framed building which extended eastwards outside the excavated area. Additional structural evidence of this period, albeit only partially investigated, occurred in the eastern part of the central excavation area.

The 1992 to 1995 excavations covered approximately 10% of the Greyfriars precinct as it existed in 1400. This is a relatively small sample of a Friary precinct when compared to more recent excavations in Norwich. Nevertheless the 1992 to 1995 excavations revealed part of the cloisters and some of the ancillary buildings. Reconstruction of the plan of the Franciscan friary was achieved through the interpretation of this archaeological evidence in tandem with documentary research (Fig 1). A 60m-long extant section of flint walling which crosses the former Mann Egerton site on an east-west alignment, forms part of the southern boundary of the precinct of the Franciscan friary.

Deposits of flint rubble and crushed lime mortar were encountered across large areas of the central and western excavated areas. These were the result of the documented demolition and salvage operations carried out in the late 16th century. Excavations in the western (already redeveloped) excavation area also revealed Greyfriars House, which incorporated elements of flint Friary walling into its largely brick-built substructure.

Remains of gardens and orchards recorded in the extreme south-eastern part of the 1992-5 excavations included a gravel path, turf surface and a segmental ceramic water-pipe.

Following the main phase of the 1992 to 1995 excavations significant earthmoving operations took place in and around the central and eastern excavation areas and ramps were created to connect the two areas to the bend in Greyfriars Road.

3.3 Extant Medieval Structures

3.3.1 Friary Precinct Boundary Wall

Two sections of flint walling were exposed during the 1992 to 1995 excavations and remain standing. The western section in the central excavation area is 12.3m long (Fig. 1). The eastern section is at least 45.5m long. In places the walling stands to a height of over two metres. Built around 1300, it formed part of the southern boundary wall of the Franciscan friary after its acquisition of twenty-one plots in 1292 and 1299.

3.3.2 Foundations of Claustral Buildings

Flint wall foundations, representing part of buildings at the south-western corner of the friary cloister, were found at the northern edge of the central excavation area. These stand to a maximum height of 0.9m, having been truncated at approximately 5.85m OD. The north-south aligned wall foundation, the east face of which is battered, continues northwards beneath the concrete extant floor slab of the former Mann Egerton basement.

3.3.3 The Dovecote

A small cellared structure, interpreted on the basis of documentary evidence as a friary dovecote, was found in the north-western quadrant of the central excavation area. Although nothing survives above ground, some insubstantial flint walling within the foundation trenches still exists at a level flush with the present ground surface.

4.0 Impact Assessment

For the purposes of this report the area of the proposed development has been divided into eight zones (shown on Fig. 1). This are discussed below.

4.1 Zone A: The Rose Lane Frontage

4.1.1 Characterisation of Archaeological Deposits

An evaluation trench was excavated in this area in 1990 but encountered rubble-filled cellars of Victorian date. The deposits beneath the cellar were not investigated. Although outside the area of the main 1992 to 1995 excavations the 2001 evaluation trench was specifically targeted on this area (Whitmore 2001). With aid of shoring this trench was excavated to a depth of *c.* 3.5m below the modern surface in order to characterise the full depth of deposits.

A large 12th- to 13th-century cess pit covered the entire surface of the trench. A 14th-century circular wood and clay-lined well had been constructed through the fills of this cess pit. Subsidence of the sides of the well had led to its backfilling and subsequent capping with mortar. An occupation layer, probably contemporary with the use of this well was also noted.

Cut into this occupation layer was an east-to-west aligned chalk-packed footing for a possible late medieval building.

Over these surviving medieval archaeological deposits a succession of post-medieval garden soils had developed, in total measuring 1.40m thick. The basal 0.4m-0.6m of these deposits was of 16th-century date. The upper portion of these garden soils was 18th- or early 19th-century in date. In turn this garden soil was overlain by extensive later 19th- and 20th-century dumping *c*.0.6m thick capped with *c.*1.0m of brick rubble.

4.1.2 Impact of Proposed Development

As there are no basements or similar structures planned for this area the impact of the proposed development will be low, provided that a suitable mitigation strategy is followed.

4.2 Zone B

4.2.1 Characterisation of Archaeological Deposits

Approximately 16% of this zone lies within the base of the eastern excavation area, termed Area C during the 1992 to1995 campaign. This portion of the zone along with the rest of the base of the eastern excavation area can be regarded as having been excavated in its entirety and thus cleared of archaeological remains. The rest of the zone is taken up with the stepped side of the excavation area. During the 1992 to 1995 excavation the eastern, southern and western sides of the eastern excavation area were dug with a stepped profile in order to prevent collapse (Plate 1). Each step was *c.*2.0m wide and 1.2m deep. There were three steps before the final drop onto the excavation area. The steps were mostly machine excavated through 19th-century make-up deposits and post-medieval garden soils. In the years following the completion of excavations a significant proportion of the steps have collapsed to steep rough batter of around 60°. In addition to this much of the stepped area is heavily overgrown with shrubs and small trees including a 5-10m high silver birch (Plate 2). Significant damage has, therefore, occurred to the upper deposits in the stepped area. Although their archaeological significance is not great they have served to shield the significant Late Saxon and medieval deposits below. The vast majority of pre-friary deposits and features were found in the eastern excavation area.

4.1.2 Impact of Proposed Development

As in Zone A no basements are planned for this area. The impact of the proposed development will therefore be low, provided that a suitable mitigation strategy is followed.

4.3 Zone C

4.3.1 Characterisation of Archaeological Deposits

All of the archaeological remains in this area were completely excavated and recorded during the 1992 to 1995 work.

4.3.2 Impact of Proposed Development

As no archaeological deposits or features remain in this area the development will have no impact upon it.

4.4 Zone D

4.4.1 Characterisation of Archaeological Deposits

With the exception of the extant medieval masonry structures, mitigation strategies for which are dealt with below, this zone can be regarded as having been largely cleared of archaeological remains during the 1992 to 1995 excavations. A partially excavated pit containing an important assemblage of medieval painted window glass possibly still exists towards the middle of the central excavated area (Fig. 1). The significance of this pit was only recognised after completion of the 1992 to 1995 excavations.

4.4.2 Impact of Proposed Development

As this zone has been largely excavated and recorded the impact of the proposed development is low. The generalised formation level of the basement car park will be around 5.35m OD. The finished floor level of the carpark is to be 5.8m OD (Hudson architects drawings sk07B) minus 0.45m to take into account the thickness of the floor slab (set out in a letter from Ian Wickerson (Countryside Properties) to Andy Shelley (NAU) dated 10th April 2003). Existing ground levels close to the pit containing the medieval painted glass are around 5.05m OD. The remains of the pit are therefore unlikely to be affected by the proposed development.

4.5 Zone E

4.5.1 Characterisation of Archaeological Deposits

This zone lies outside the northern limit of the 1992 to 1995 excavations. The concrete floor slab of the Mann Egerton basement remains intact in this area. Above this slab concrete roofs supported on columns are still extant. It is likely that these columns are supported on stanchions, ring beams or similar structures. Despite the considerable truncation caused by the construction of the basement substantial pits and medieval wall footing trenches, such as those which were excavated immediately to the south, are likely to exist beneath the slab. Most significantly, the extant flint wall foundations lying immediately to the south of the area and forming part of the east range of the friary cloister, run northwards under the slab. Additional wall foundations may lie immediately beneath the slab. The positions of these walls could prove critical to further interpretation of the internal layout of the friary.

4.5.2 Impact of Proposed Development

If a suitable mitigation strategy is followed the impact of the proposed development in this area will be minimal.

4.6 Zone F

4.5.1 Characterisation of Archaeological Deposits

Excavations in this area during the 1992 to 1995 campaign were restricted to the formation level of the proposed Knight Properties structure, approximately 2.70m OD. During the 1992 to 1995 excavations it was termed as Area C(B). It is likely that horizontal layers of archaeological deposits between 0.30m and 0.60m thick remain in parts of this area. These probably overly the remains of substantial pits and other cut features of Late Saxon and early medieval date. Features to the east of the pre-Norman road which lies to the west of this zone (Fig. 1) produced good evidence for Late Saxon antler working.

4.6.2 Impact of Proposed Development

This area has already been excavated to a depth of 2.7m OD. The proposed general formation level for the basement car park is 5.35m OD. Thus this area will have to be built-up. Therefore, providing certain precautions are taken, the impact of the proposed development on the remains left in this area will be negligible.

4.7 Zone G

4.7.1 Characterisation of Archaeological Deposits

This zone lies outside the area excavated in 1992 to 1995. It is likely to contain the continuation of the north-to-south aligned Late Saxon to early medieval road that crossed the 1992 to 1995 excavations. Significant archaeological evidence in this area is therefore likely to include the sequence of surfaces and repairs of the road itself, its flanking ditches, plots running back from the road and any remains of buildings on their frontages. These deposits are probably overlain by at least 1.0m of relatively recent material comprising make-up associated with the construction of Prince of Wales Road and post-medieval garden soils.

4.7.2 Impact of Proposed Development

The highest point in this zone, 5.26m OD, lies towards its north-western corner. Ground levels drop away to the south-east, the lowest point in the zone being at *c.*3.10m OD. Given that the proposed general formation level for the basement car park is at 5.35m OD most of this area will have to be built up. Most of the significant archaeological remains in this area are probably shielded by archaeologically unimportant overburden. The impact of the proposed development in this area is therefore, low.

4.8 Zone H

4.8.1 Characterisation of Archaeological Deposits

At present Zone H consists of three elements, all of them outside the area investigated during the 1992 to 1995 archaeological work. The southernmost of these elements is the spur of the proposed underground car park that projects into an area currently occupied by the former Mann Egerton computer centre. North of this is a strip of asphalt hard standing of *c.*4.0m width. This hard standing falls from 7.76m OD at the Greyfriars Road end to *c.*6.2m OD at its eastern end. North of this strip is the stepped or battered edge of the 1992 to 1995 excavations.

During the 1992 to 1995 excavations, a 12th-century grave was recorded some ten metres to the north of this zone. It was curiously located immediately to the north of the property boundary that later formed the friary precinct boundary wall. This burial was likely to have been an outlier of the churchyard of St John the Evangelist which stood north-east of the junction of King Street and Rose Lane. The full extent of the churchyard is unknown. According to the reconstruction of the pre-friary road layout, the grave would have been separated from this church by both a north-to-south lane and an east-to-west lane. It is possible that further burials exist in Zone H given that the church itself possibly lay less than 30m to 40m to the west.

Medieval tenements, running back from Rose Lane, may have extended into this zone. Made ground at the north edge of Zone H is approximately 2.20m thick. At least the upper 1.0m of this is likely to be relatively modern overburden. Archaeologically significant deposits below this are likely to be less than one metre thick with some cut features extending below this depth.

4.8.2 Impact of Proposed Development

Across this zone between 0.4m and 2.6m of material will have to be removed to achieve the general proposed formation level of 5.35m OD. Given the possibility of human burials the archaeological impact of the proposed development on this zone is high.

5.0 Suggested Mitigation Strategies

5.1 Zone A

The nature of the archaeological deposits in this area lend themselves to a strategy of preservation *in situ* enabled by piling. Although destructive in themselves piles have a small impact area and will only affect a small percentage of the deeply buried late medieval and earlier deposits. Furthermore these deposits are capped by *c.*2m of late post-medieval or Victorian garden soils and make-up deposits. There is no evidence of substantial medieval stone buildings in this area. The Victorian brick-built structures that formerly occupied the frontage should have relatively shallow strip foundations.

In general site clearance, pile-proving, service and ground-beam trench excavations should penetrate no deeper than 1.2m below the modern surface. A possible exception to this is where cellars are encountered. Any cellar filled with material unsuitable for piling through should be carefully emptied and refilled with Type 1 aggregate or similar.

Under these conditions there would be little adverse affect to important buried archaeological remains.

5.2 Zone B

In general the mitigation strategy for this area could be the same as that for Zone A; preservation *in situ* enabled by piling. The majority of this zone will need to be built-up with a suitable material before it can be piled through. At the western end of the zone, where no ground making will be required site clearance, pile-proving, service and ground-beam trench excavations should be restricted to a depth of no more than 1.2m below the modern surface.

In the stepped area the shrubs and other undergrowth will need to be removed. Grubbing out the bushes with the a mechanical digger is not desirable. This may cause substantial collateral damage to the archaeological features presently preserved below the overgrown steps. The undergrowth and trees should be cut down using hand tools. The resultant brash, litter and other debris should be removed and the stumps should be treated with amcide or a similar herbicide to prevent regrowth.

5.3 Zone C

As no archaeological deposits or features remain in this area no mitigation strategy will be required.

5.4 Zone D

With the exception of the extant masonry structures, which are dealt with below, a mitigation strategy for this zone should not be necessary. The pit containing painted medieval glass could be marked out and covered with terram-type geotextile although it is by no means certain that the remains of this pit were not destroyed during the creation of the ramps between the excavation areas.

5.5 Zone E

Preservation *in situ* is the most suitable mitigation strategy for this zone. The slab should be retained at its present level of 6.01m OD and the columns supporting the roof above it should be cut off at the level of the slab.

5.6 Zone F

As this area requires building up preservation *in situ* is the most suitable mitigation strategy. The shrub and other undergrowth should be cut down rather than grubbed out, and the stumps painted with herbicide. The area should then be covered with geotextile before the ground is made-up.

5.7 Zone G

Given the generally low impact of the development in this area most archaeological deposits will be automatically preserved *in situ*. However, should the side of the basement car park be formed from contiguous piling a limited area of archaeological remains will be damaged. The proportion of archaeological information lost would be insignificant when placed in the context of the whole site and a productive strategy for preservation by record would largely be impractical.

Aside form preservation *in situ* the only mitigation strategy required in this area is the relatively careful removal of undergrowth as outlined above.

5.8 Zone H

Should the southern boundary of the proposed underground car park remain on its present line preservation by record (archaeological excavation) in this zone would become necessary.

This strategy could be comprised of three components. Firstly a rapid photographic survey and desk-based survey of the former Mann Egerton computer centre building should be conducted. The main purpose of the desk-based survey would be to assess the damage caused to the underlying archaeology by the foundations of the computer centre building. This could be achieved by obtaining the original architects and engineers plans. Until the early 1990s Mann Egerton employed a dedicated archivist. Examination of this archive is another potential avenue of research.

The point of this assessment would be enable decisions to be made as to whether the part of the former computer centre site affected by the development should be included in the potential excavation area or whether an archaeological watching brief on the removal of the computer centre foundations would suffice. The watching brief would form the second element of the preservation by record strategy. The removal

of the former computer centre foundations should be limited to those that are absolutely necessary for the completion of the proposed new-build.

The third element of the preservation by record strategy is an archaeological excavation. The fieldwork would have to be carried out after the demolition of the former computer centre building. Given the total depth of material at the western end of the area excavations would also have to take place after a continuous pile wall had been constructed. Any lowering of the ground surface in this area should take place under archaeological supervision.

Taking into account the proposed formation level of 5.35m OD the excavation area would measure *c.*7.5m by 30m, giving a total area of 225m^2 (Fig. 1). This excludes the area of the computer centre affected by the proposed development which would increase the area of excavations by *c.*70 m^2

5.9 Extant Medieval Structures

5.9.1 Friary Precinct Boundary Wall

It has been proposed by the developer that this wall be demolished during the construction of the development. Some method of marking out the line of this wall on the car-park surface may be appropriate. A line of flints set into the car park surface has been the traditional Norwich method for doing this. This would tie in with the presentation and display elements of the mitigation strategy for the claustral building remains outlined below.

5.9 2 Foundations of Claustral Buildings

These foundations should be retained and preserved *in situ*. A conservation architect should be consulted in order that the strategies for, and methods of, consolidation can be set.

In addition, appropriate measures should be taken to ensure that the archaeology of the site is interpreted and displayed to the public. The simplest means by which this might be achieved is to design and erect display boards or similar. These would explain the significance of the extant remains and place them within the context of the Greyfriars precinct. An historical and archaeological interpretation company or consultant could be employed to devise and produce this scheme, advised by the NAU.

5.9.3 The Dovecote

The physical remains of the dovecote lie well below the formation level of the proposed scheme. In a similar manner to the precinct wall the position of the dovecote could marked out on the car-park surface.

6.0 Conclusions

The impact of the proposed new development on the archaeological resource is generally low. This statement is made with the stipulation that care needs to be taken during the site clearance phase, in order that the edges of the 1992 to 1995 excavation areas are preserved. Some archaeological monitoring of clearance works and other groundworks may be required.

The mitigation strategies for the Zones delineated in Fig. 1 are summarised below.

Zone	**Mitigation Strategy**	**Methodology**
Zone A	Preservation *in situ*	careful site clearance, piling
Zone B	Preservation *in situ*	careful site clearance, piling
Zone C	Preservation *in situ*	not applicable
Zone D	Preservation *in situ*	careful site clearance, conservation, display interpretation of remains of claustral buildings.
Zone E	Preservation *in situ*	retain existing slab
Zone F	Preservation *in situ*	careful site clearance, cover area in geotextile before making-up
Zone G	Preservation *in situ*	careful site clearance
Zone H	Preservation by record	1. Photographic survey and desk-based assessment of the former Mann Egerton computer centre prior to demolition 2. Archaeological watching brief on the removal of the former computer centre foundations if necessary 3. Excavation of a *c.*7.5m by 30m area north of the former computer centre. Excavation area may be extended by *c.*70 m^2

In general the assumed formation level for the proposed basement car park, at 5.35m OD, does not take into account penetrations below that level. It is likely that at least some service trenches, lift winding gear pits, piles and ground beams will penetrate below the proposed formation level. Attempts should be made at the design stage to limit any such intrusions. It is only in Zone F however, that they would be likely to have a significant archaeological impact. Should deep sub-structures be

necessary in this area it may become necessary to formulate a preservation by record strategy for parts of Zone F.

It is vital that plans detailing the layout of any sub-structural elements such as service trenches, pile and ground beams that will intrude below the proposed generalised formation level are supplied to both NAU and Andy Hutcheson of NLA (Appendix 1 for contact details) as soon as they are formulated.

It may be necessary to revise and refine the mitigation strategies outlined above in light of detailed substructure plans.

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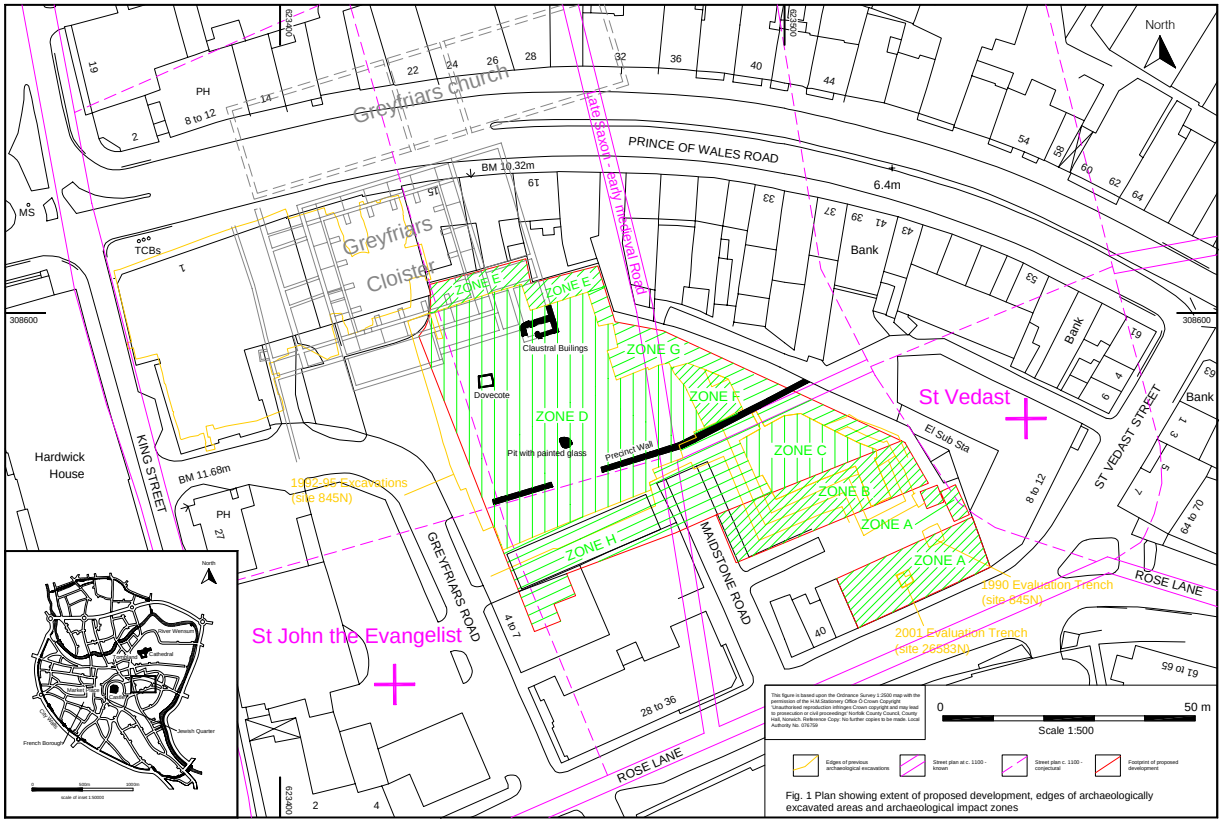

Fig. 1 Plan showing extent of proposed development, edges of archaeologically excavated areas and archaeological impact zones

Plate 1. General view of the 1992 to 1995 excavations looking westwards towards Norwich Castle

Plate 2. Looking North-eastwards Across the Eastern Excavation area, showing the extent of undergrowth and scale of trees as existing