Archaeological Monitoring at 61 Duke Street, Norwich, Norfolk.



Prepared for Mr.J.Tyrrell

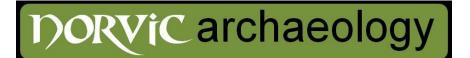
Giles Emery June 2011

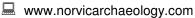
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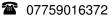
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Contents

1.0	Introduction		2
2.0	Summary of Results		2
3.0	Geology and Topography		4
4.0	Brief Archaeological and Historical Background		4
5.0	Methodology		6
6.0	Results		6
7.0	Conclusions		10
8.0	Acknowledgements		10
9.0	Bibliography		10
	Appendix 1:	OASIS feature summary table	11
	Appendix 2:	Archive summary table	11
Figures	S		
	Figure 1	Site location	3
	Figure 2	Groundworks plan	12
Plates			
i iates	Plate 1	Front of 61 Duke Street	Cover
	Plate 2	Flint lined well	7
	Plate 3	Exposed foundations	7
	Plate 4	Blocked portal	8
	Plate 5	Rear doorway surround	8
	Plate 6	Base plate used as lintel	9
	Plate 7	Exposed beam	9



Archaeological Monitoring at 61 Duke Street, Norwich, Norfolk, NR3 3AP.

Location: 61 Duke Street
Grid Ref: TG 2288 0910
NHES Event No: ENF125463

Dates of work: 16th November 2010 & 11th March 2011

1.0 Introduction

Norvic Archaeology was commissioned by Jason Tyrrell to undertake archaeological monitoring of groundworks for a small rear extension (measuring c. 12m²) along with minor structural alterations at 61 Duke Street, Norwich, Norfolk.

This programme of archaeological work was undertaken to fulfil a planning condition (Planning application No. 10/01503/F) set by Norwich City Council and in accordance with a brief issued by the Historic Environment Service (HES Ref: CNF43086). The aim of the works was to preserve by record the presence/absence, date, nature, and extent of any archaeological remains and features. This report presents a brief description of the methodology followed, the results and the archaeological interpretation of the results.

On completion of the project, the site archive will be offered for long term deposition with Norfolk Museums and Archaeology Service, following the relevant policy on archiving standards.

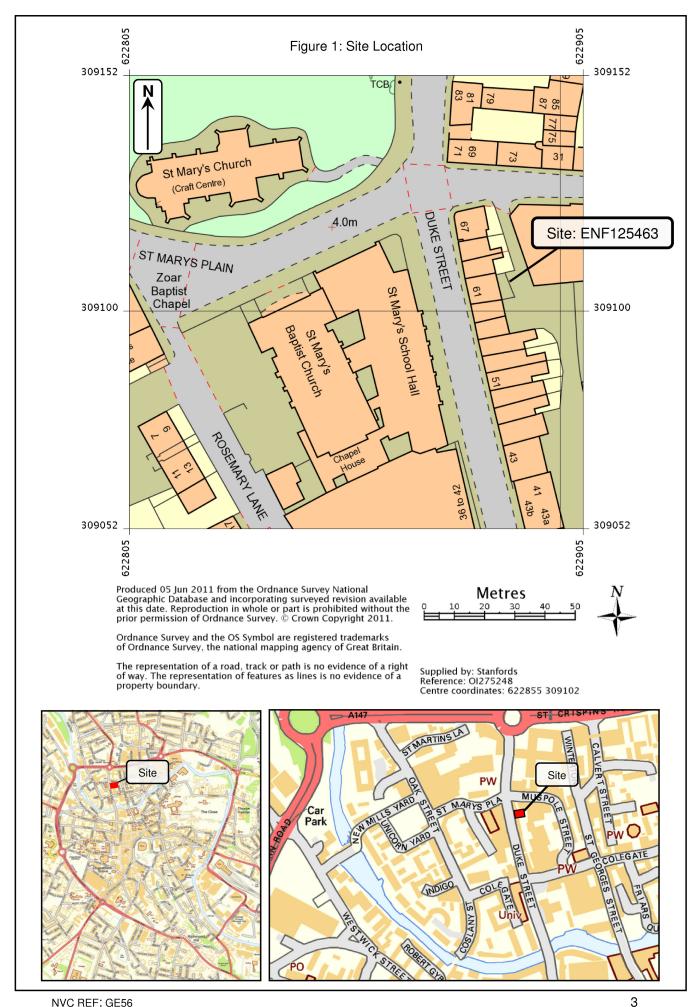
2.0 Summary of Results

An open well of fine flint construction was uncovered which is thought to predate the 19th century house. No soil horizons of archaeological significance were encountered during the excavations which exposed a large number of service pipes.

In addition, a small number of reused oak timbers were exposed during internal works which included a base plate from a stud wall or window assembly. These elements were recycled from a post-medieval structure, as were a large volume of bricks incorporated into the fabric of the 19th century house.

The exposed foundations of the rear wall of the property include late post-medieval bricks and failed to expose any evidence that it incorporates a surviving element of an earlier build as previously suggested. Two worked stone blocks of possible late medieval to early post-medieval date were noted in the foundation fabric – a limestone ?door jamb and a chalk block.







3.0 Geology and Topography

The site lies in a relatively flat part of central Norwich, north of the River Wensum. The solid geology of Norwich is Upper Chalk (British Geological Survey 1975) overlain by drift deposits of Norwich Crag, a sequence of Pliocene and early Pleistocene marine sediments. In practice these largely consist of variable deposits of sands, gravels and sandy clays. Adjacent to the river, early gravel terrace gravels are present, often distinctly grey in colour.

The site lies at the junction of Duke Street, Muspole Street and St. Mary's Plain at c. 4m OD. Modern ground levels here drop away very gently towards the river and also very slightly to the north. The footprint of the extension is a sunken area 0.85m below street level with steps leading down to the rear door of the property.

4.0 Brief Archaeological and Historical Background

The following information has been sourced from the Norfolk Historic Environment Record (NHER). Sites of particular relevance or interest recorded by the Historic Environment Record which fall in relatively close proximity to the development site (c.50m radius) include:

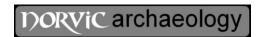
NHER 39336: **Nos. 57, 59 & 61 Duke Street** – a terrace of three early 19th century 3-storey red brick houses with pantile roofs. A Building Report compiled by Robert Smith in 1997 dates their construction to c. 1820 but postulated the rear wall to be earlier. Grade II Listed Building.

No. 61:- Single house in terrace of 3. Single wide bay. Right-hand front door with a fanlight and 3 steps up. Plain pilasters with triglyph and flat hood with dentil course. Small partly glazed door to left side. Sash windows at first and 2nd floors with glazing bars and flat rubbed brick arches. Crude window casement at the ground floor.

Nos. 57 and 59:- A Pair of houses with a central pair of doors within double-order-rubbed brick arch. The central jamb splays outwards to form a steep 4-centre fanlight above each door. The fanlight to No.57 has been altered. Sash windows with glazing bars and rubbed brick flat arches at first and second floors. Central casement at 2nd floor, bricked up to No. 57. Box cornice.

NHER 39367: The site of 63 to 65 Duke Street (adjacent property to the site) - An archaeological evaluation carried out in 2003 prior to redevelopment revealed *in-situ* archaeological features and deposits. The earliest feature was an early medieval effort to extract ferrous gravels from a pre-existing hollow for iron-smelting. The fill of the resulting pit comprised of both natural silting and dumped deposits containing 11th to 12th century pottery, domestic rubbish and animal remains indicative of hide and fur preparation and horn working in the area. Following a build-up of garden soil from the 11th to 12th centuries, evidence for a 13th to 14th century timber building was recorded in the form of a clay floor, postholes & beamslots and a possible robbed out tiled floor. Above this and following a thin abandonment layer was a second phase of occupation in the form of levelling deposits and a single skin brick wall associated with mortar flooring; this was interpreted as the dividing wall for a late 16th to 17th century precursor to Nos. 63 and 65. Evidence for substantial remodelling was recorded along with the laying of pamment tiles, perhaps associated with the changes which took place to allow the construction of Duke Street in the 1830s and possibly concerned with conversion of the property into a shop. Overlaying the 19th century remains was a layer of burnt linoleum flooring and rubble from the destruction of the properties through bombing in WWII, most likely the 'Baedecker' air raids of 1942. The site remained vacant until redevelopment in 2003.

NHER 26289: No.67 Duke Street - a 17th century and later single-cell flint and rubble building, now a cafe occupying a corner site. It has timber framing on the first floor facing Muspole Street. It may once have been part of a longer building, some of which was demolished when Duke Street was constructed. Grade II Listed Building.



NHER 331: 69 to 89 Duke Street (formerly 1 to 3 Pitt Street) - A Grade II Listed Building formed by two 15th century and later ranges parallel to each other. They have been somewhat altered, but the coved first floor jetty remains to the long Muspole Street frontage and above it is mathematical tiling. There is also a jetty to the courtyard side (south) of the other parallel range. In the 16th and 17th centuries, two further ranges were added to form a courtyard plan.

NHER 54305: World War Two emergency water tank - visible on aerial photographs of St Mary's Plain.

NHER 553: **St Mary Coslany's Church** – (Grade I Listed Building) an 11th and 15th century cruciform church with a round west tower. Redundant and used as a craft centre for a number of years, it is now the offices of an internet bookshop and a publishing company.

NHER 701: No. 43 Duke Street – A late 17th century brick and flint-lined cess pit was discovered by accident in 1984 after a workman fell into it.

NHER 716: **Nos. 49-53 Colegate -** A test hole and foundation trenches dug on the Radio Broadland site in 1984 noted Late Saxon pottery fragments and evidence of contemporary iron-working.

Duke Street lies within the medieval core of Norwich and No.61 is located on the north side of the river Wensum. Anglo-Scandinavian occupation was concentrated in the defended area to the east of St Georges Street (Ayers 2003, 36). The western side of this defended area was bounded by the marshy Muspole or Muspool (ibid., 31). The name Muspole is believed to be a derivation of moss pool, meaning muddy or marshy pool, and dates from at least the 13th century (Sandred & Lindström 1989, 120). A cockey, a former tributary stream of the Wensum also named the Muspole, probably rose in the marsh and flowed southeastwards into the river in the area of Fye Bridge (Ayers 2003, fig. 2b).

The area of Muspole appears to have been a marginal zone from the Late Saxon into the Medieval period when it was used primarily for 'quarrying and rubbish dumping' (ibid., 144) with evidence for Late Saxon and medieval industrial activity to the west and east. Excavations in the area have shown that iron ore was quarried nearby at Alms Lane from the 11th to 13th centuries and smelted nearby (Atkin 1985). Excavations at Oak Street c. 100m to the south-west of the site have revealed further evidence of iron smelting and smithing from the Late Saxon to early medieval period (Adams 2000) and an evaluation adjacent to the site at 63 to 65 Duke Street revealed evidence for small scale ore extraction from the ferrous gravels of a similar period (NHER 39367).

From the 14^{th} century until the mid- 19^{th} century the east-to-west aligned section of Muspole Street and St. Mary's Plain was known as Southgate Street or Southergate Street – a corruption of the medieval name Soutergate Street, referring to shoe makers. This trade persisted in the area into the 20^{th} century when Webster's shoe works occupied 24-23 Muspole Street.

Although there is currently minimal archaeological evidence for the nature of medieval settlement or activities in the location of the site, the enrolled deeds list the occupations of several occupiers or land owners of the site from 1290 to 1322. These include craftsmen such as weavers, shoemakers and skinners.

Duke Street was constructed as a 'new' thoroughfare in 1821. Hochstetter's plan of 1789 indicates that prior to this the alley which now provides access to the rear of the site may previously have had buildings fronting on to it. The current position of Duke Street was an open yard or garden, also with buildings fronting onto it. It seems likely that the present west facing frontage of Duke Street occupies the former frontage of this lost yard area.



Local trade directories for 61 Duke Street provide the names and occupation of former owners or tenants from the late 19th century.

	Occupant	Activity
1885 Jarrold's Directory	Mrs Dinah Wood	Music Teacher
1905 Jarrold's Directory	John Yaxley	Private Resident
1922 Jarrold's Directory	Mary Anne Wilkinson	Private Resident
1935 Kelly's Directory	No entry	
1952 Kelly's Directory	Frank Guymer	Private Resident

Photographs taken in 1930 by local photographer and social historian George Plunkett record the general appearance of buildings at the corner of Muspole Street and a post WWII photograph shows the adjacent site of 63-65 Duke Street as a bomb site; this site remained undeveloped until as late as 2003 when a new building completed the present street frontage. The area was subject to an archaeological evaluation in advance of the development which recorded deposits and features down to natural deposits at a depth of c. 2.5m below the modern ground surface (see NHER 39367 above).

5.0 Methodology (Figure 2)

The objective of the programme of archaeological works was to record any archaeological evidence revealed during groundworks associated with the construction of a ground floor extension to the rear of the property and other minor structural alterations. The groundworks were carried out by hand with excavated spoil removed from site. Spoil, exposed surfaces and features were scanned with a metal detector (Minelab XTerra 705).

All archaeological features and deposits were recorded using Norvic Archaeology *pro forma* sheets. Site drawings were recorded at appropriate scales and digital images were taken of all relevant features and deposits.

Site conditions were good, although the discovery of highly saturated ground at formation level initiated a lengthy investigation by Anglian Water. Leaking water pipes away from the site proved to be the source of the problem, which severely delayed the programme of works.

6.0 Results (Appendix 1)

• Deposit Observations

The footprint for the kitchen extension required minor reduction of well mixed soils by c.0.2m followed by a c.0.5m trench for wall footings. Patches of a smooth worn cobble surface encrusted with ash and soil were revealed just below the modern surface in the area adjacent to the current steps. Non-retained finds present below the level of the cobbled surface included a small number of 19th to early 20th century pottery sherds, clay tobacco pipe stem fragments and tile fragments. Numerous service pipes and lead water pipes were also uncovered with no in-situ archaeologically significant horizons revealed.

• Well (see Figure 2)

During the demolition of a small outbuilding an open well was discovered in the north-east corner of the footprint which had been bridged by the build. The well was capped briefly with brick and cement mortar while demolition work continued. This temporary cap was later removed and the well examined in more detail. It was constructed of flint and mortar and measured 2m deep to a hard infill hidden below 0.35m of dirty, noxious water. It was of fine construction using small cobbles bonded with a hard sandy white mortar with traces of a lime wash still visible in patchy areas. Only four small fragments of brick were noted within the fabric of the



Plate 2: Flint lined well (looking north-east) [0.5m Scale]

construction, these were handmade pink and yellow estuarine clay of a late medieval to post-medieval date. The top of the well was reduced slightly to accommodate the new footings and the void infilled with a suitable aggregate.

Rear Wall Observations

The foundation coursing of the rear wall was only partly exposed during the works. This was of potential interest as a previous study of the house postulated the rear wall to be of an earlier construction than the rest of the house.

The rear wall foundations were of uneven coursed small flint cobbles mixed with late post-medieval and post-medieval brick of similar fabric those dimensions to exposed in the kitchen of the house (see below). The foundations were of shallow construction, no more than c.0.4m deep (as observed at the north corner). Much of the mortar appears to have all but washed out and the foundations rest on a



Plate 3: Foundations including reused worked stone in the NE corner (looking west) [0.5m Scale]

mid greyish-brown silty-loam of moderate compaction. A reused abraded chalk block (0.16m thick with a carved groove in its upper face) and a reused block of worked limestone (with fairly fine diagonal tooling and chamfered face which may have once formed part of a door jamb) were identified where a modern drain punched into the house. Additional brickwork exposed during the alteration of the window to become the new doorway into the extension revealed that this area of wall was in fact modern, from a recent alteration or repair and no earlier fabric was exposed during the works.



Internal Structural Observations

Brickwork

The exposed brick fabric of the stripped out kitchen was an irregular bond recycled of handmade post-medieval brick mixed with late-post-medieval brick. The post-medieval bricks were generally of a sandy-clay, mid-orange fabric with occasional over firing measuring c.225mm by 50mm. The post-medieval bricks were of mid-orange to dark pinkish red sandy-clay fabric measuring c.215mm by 60mm. The mortar was a friable chalky, sandy mix.

In the north-west corner of the kitchen a clear joint in the brickwork betrays a former opening infilled by brick and mortar of the same fabric and



Plate 4: Brick infilling in the NW corner of the kitchen (looking west) [0.5m Scale]

form as the internal wall and either modified or left open as a possible niche/cupboard before being infilled by more recent brickwork. The scar of a former internal wall could also be seen.

Doorway

The timber doorway lining at the rear of the property was a simple 19th to early 20th century century type with a rectangular blocked fanlight and minimal molding.

Lintel (reused timber)

The lintel of the kitchen to reception room doorway was formed of two parallel timbers. Both were reused pieces of oak with insect damage;

Piece A on the reception room side (Plate 5)
This 1.25m length of reused timber is an oak base plate which once formed the bottom member of a stud wall or window assembly. It has sockets for seven studs - two of which are square, one rectangular, one upright plank (sawn end still in place) and three simple sockets. It also has a single chamfered edge and measured 0.16m deep by 0.10 wide.

Piece B – on the kitchen side

A 1.3m long section of a longer post to support a rail or plate on a deeply cut square resting joint. It measured c. 0.15m².



Plate 5: Rear doorway surround (looking west) [0.5m Scale]



Plate 6: Base plate used as a lintel (looking east) [0.5m Scale]

Beam (reused timber)

Timbers were exposed as decorative features in the rear bedroom on the first floor - a square cut upright post supports a rough cut slightly bowed/smoothly curved timber used as a beam which may be a reused timber from a roof frame or brace of a structure predating the existing 19th century house.



Plate 7: Exposed Beam (looking west) [0.5m Scale]



7.0 Conclusions

No soil horizons of archaeological significance were disturbed during the excavation of the extension footprint however an open well of fine flint construction was discovered. The well is difficult to assign to a specific period but is suspected to pre-date the 19th century house based on its fine flint construction, close proximity to the house foundations within what was formerly a confined alley and the fact that no well or pump is marked on the 1st edition OS plan of 1885. This well may have been set within a more open yard area or gardens with a frontage further to the west area as surmised to exist here prior to the 19th century creation of Duke Street.

The fabric of the house incorporates a large number of reused post-medieval bricks along with examples of structural timbers from an earlier building; a section of oak post and a base plate for a stud wall have been utilised as a lintel and a slightly curved timber used as a beam, exposed in a rear bedroom on the first floor.

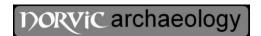
The exposed foundations of the rear wall of the property suggest that the wall is contemporary to the house with no clear surviving element of an earlier build exposed during the works. Two worked stone blocks of possible late medieval to early post-medieval date were noted in the foundation fabric – a limestone ?door jamb and a chalk block.

8.0 Acknowledgements

Thanks are due to Jason Tyrrell who commissioned Norvic Archaeology to carry out this work. All stages of the monitoring and post-excavation analysis work were carried out by the author.

9.0 Bibliography

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British Geological Survey	1975	Norwich, England and Wales Sheet 161 Solid and Drift edition, 1:50,000 series (Southampton)
Jennings, S.	1981	Eighteen centuries of pottery from Norwich. East Anglian Archaeology 13.
MPRG	1998	A Guide to the Classification of Medieval Ceramic Forms. Medieval Pottery Research Group Occasional Paper 1.
Sandred, K.I., & Lindström, B.	1989	The place-names of Norfolk part 1. English Place-name Society LXI.
Shopland, N.	2005	Archaeological Finds, a guide to identification. Tempus



Appendix 1: OASIS feature summary table

Period	Feature type	Quantity
Unknown	Architectural	1
	Fragment - Chalk (block)	
Unknown	Architectural	1
	Fragment -	
	Limestone ?Jamb	
Post-medieval (1540 to 1900AD)	Sill Beam	1
	Well	1

Appendix 2: Archive summary table

Factual Type	Quantity
Site diary	1
Field note sheets	3
Permatrace scale drawing sheets	2
Photo Index	1
Digital Images	35



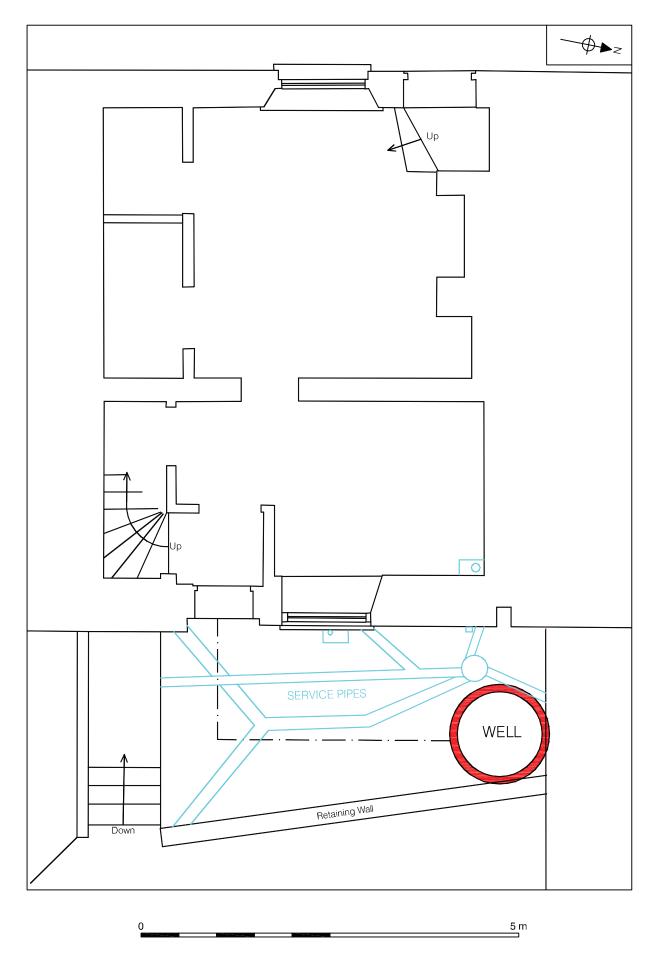


Figure 2. Groundworks plan. Scale 1:50.