

## **ARCHAEOLOGICAL EVALUATION REPORT**

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**SCCAS REPORT No. 2010/157**

# **West Row Primary School, Beeches Road, Mildenhall MNL 637**

**J. A. Craven**  
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**Lucy Robinson, County Director of Economy, Skills and Environment**  
Endeavour House, Russel Road, Ipswich, IP1 2BX.



## HER Information

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**Funding Body:** Suffolk County Council  
**Curatorial Officer:** Dr Jess Tipper  
**Project Officer:** J. A. Craven  
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## Summary

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An archaeological evaluation, carried out on land at West Row Primary School, Mildenhall, has identified substantial evidence of Roman activity in the 2nd-4th centuries. The results, in combination with previous work to the north and south, indicate that a spread of Roman occupation evidence extends across the school grounds.

A dense spread of features indicates relatively intense activity. The finds assemblage and environmental evidence suggests domestic occupation, probably a rural, agricultural farmstead, and indicates that a building with a tiled roof lay in the immediate vicinity. Later Roman deposits or occupation soils may have been removed by subsequent activity such as ploughing.

Recommendations have been made to excavate in full the footprint of a proposed school extension, whilst other deposits can be left *in situ* below a proposed playground, depending upon the method of construction.





# **1. Introduction**

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An archaeological evaluation was carried out in advance of development at West Row Primary School, Mildenhall, Suffolk. The evaluation was required to assess the archaeological potential of the site in advance of a potential planning application for the construction of a new extension and the creation of a new playground area. The work was carried out to a Brief and Specification issued by Dr Jess Tipper (Suffolk County Council Archaeological Service, Conservation Team – Appendix 5). The project was funded by the developer, Suffolk County Council.

## **2. Geology and topography**

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The site, which lay within the grounds of the school, lies in the settlement of West Row in the parish of Mildenhall at TL 6726 7641, on the corner of Beeches Road and The Green. The site lies on an area of broadly level ground at a height of c.6m AOD, c.1.3km to the north of the River Lark and overlooking the fen-edge to the west and north (Fig. 1). The main trench was placed in the school playing field, within the footprint of a proposed hard playarea. A second smaller trench was situated in the existing playground, within the proposed extension footprint.

The site geology is of loam soils overlying chalky drift and chalk (Ordnance Survey 1983).

## **3. Archaeological and historical background**

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The evaluation was required to assess the site as it had high potential for archaeological deposits to be disturbed or destroyed by the development. The site lay in an area of archaeological importance, as defined in the County Historic Environment Record, within the dense band of prehistoric and Roman activity that exists along the edge of the fens.

Early activity in the vicinity consists of a Palaeolithic Acheulean hand-axe (MNL 202) which has been recorded 300m to the north-east and a Neolithic flint axehead 230m to the south-east (MNL 312).

The main evidence for past activity in the area relates to the Roman period. A dense spread of Roman occupation lies c.500m to the north, centered around the site of a Roman villa (MNL 064) and the findspot of the late 4th century Mildenhall Treasure (MNL 231). A program of fieldwalking identified a large scatter of Roman pottery and flue tile 50m to the south-west of the school, MNL 193, and a series of Roman ditches and a large pit was subsequently identified in evaluation and excavations prior to the construction of School Close, 30m to the south.

Of particular relevance are the results of previous fieldwork within the school grounds. Evaluation and excavation (MNL 612) in advance of the construction of a pre-school building, immediately to the north of the proposed playground, has identified a series of ditches, two pits and a posthole, all dating to between the mid 2nd to late 3rd or 4th century. Further evaluation and monitoring on the north side of the school, MNL 613, identified another Roman ditch, probably a continuation of a MNL 612 feature.

The Portable Antiquities Scheme has also recorded c.20 Roman copper alloy coins, together with other metal objects, pottery and quernstone at several spot locations within 150m to the west and south of the school.

There is little evidence of activity in the vicinity in the post-Roman period, although the settlement of West Row presumably has medieval/post-medieval origins. A medieval ditch is recorded at MNL 612 while evidence of post-medieval settlement has been identified at MNL 538, MNL 593, MNL 614 and MNL 636. There are also four listed buildings of post-medieval date within the settlement.

The site therefore lay in the midst of an area of known Roman settlement and had high potential for further archaeological deposits to exist.

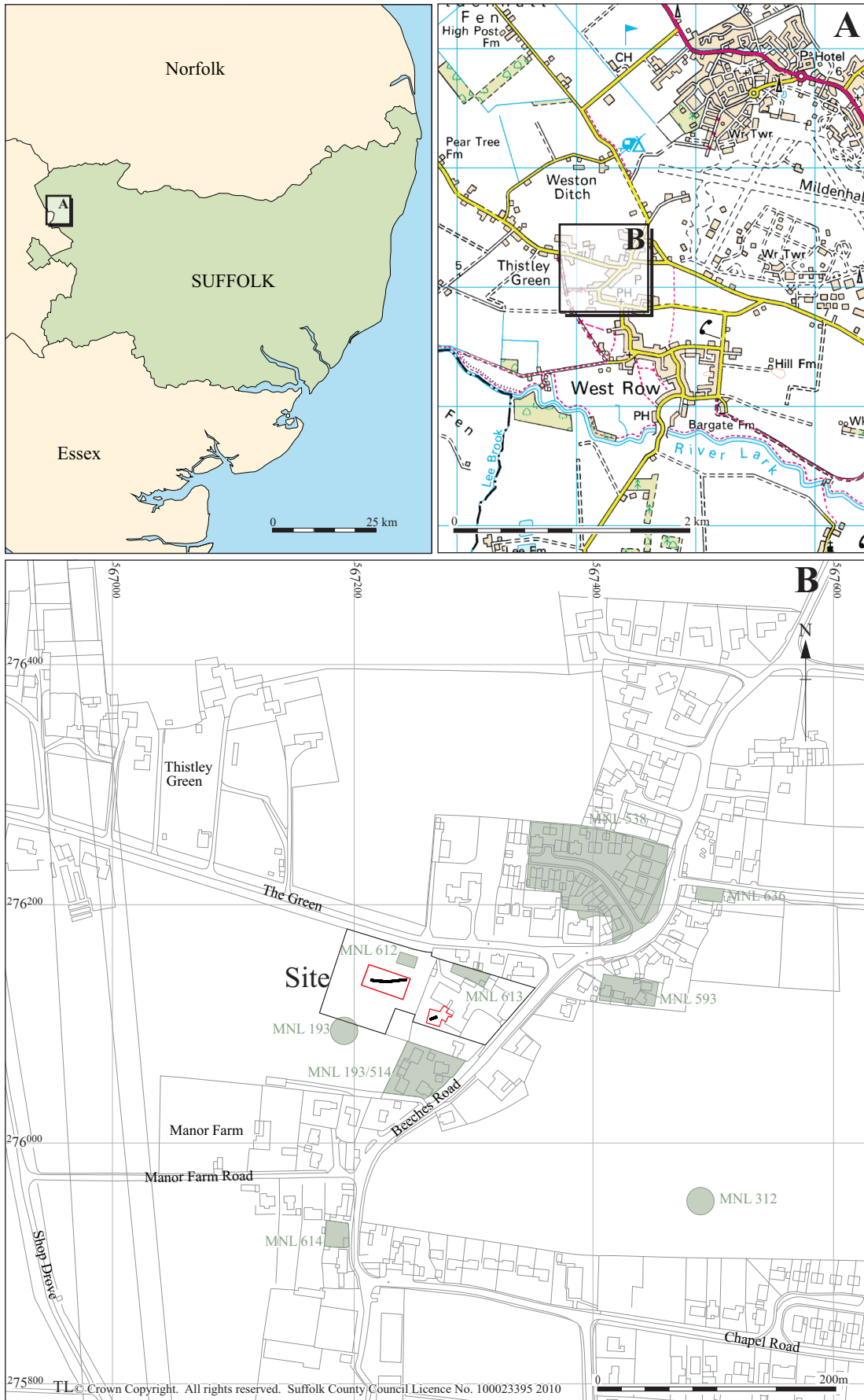


Figure 1. Site location plan

## 4. Methodology

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The two trenches (Fig. 2) were marked out by hand following a layout detailed in the project WSI. They were excavated by a mechanical digger, equipped with a ditching bucket, to the top of the subsoil surface or archaeological levels, under the supervision of an archaeologist. The two trenches totalled 36m in length, as specified in the brief.

The depth of the trenching varied from 0.5m to 0.8m, largely depending upon the thickness of a buried soil layer that underlaid the modern deposits. The natural subsoil consisted of chalk. Trenches and spoilheaps were thoroughly examined for archaeological material and surveyed by an experienced metal-detectorist both during the machining and subsequent hand-excavation of features.

Archaeological features or deposits were generally visible cutting the natural subsoil and were cleaned and excavated by hand as required. The site was recorded using a single context continuous numbering system. Trench positions were recorded using an RTK GPS. Feature sections and trench profiles were drawn by hand on A3 gridded permatrace at a scale of 1:10 or 1:20, trench plans at a scale of 1:50. Site levels were recorded using a dumpy level and relate to a TBM established using an RTK GPS. Digital colour and black and white print photographs were taken of all stages of the fieldwork, and are included in the digital and physical archives respectively. Bulk environmental samples were taken from one context.

Site data has been input onto an MS Access database and recorded using the County HER code MNL 637. Bulk finds were washed, marked and quantified.

An OASIS form has been initiated for the project (reference no. suffolkc1-80501) and a digital copy of the report will be submitted for inclusion on the Archaeology Data Service database (<http://ads.ahds.ac.uk/catalogue/library/greylit>) upon completion of the project.

The site archives are kept in the main store of Suffolk County Council Archaeological Service at Bury St Edmunds under HER Nos. MNL 637.

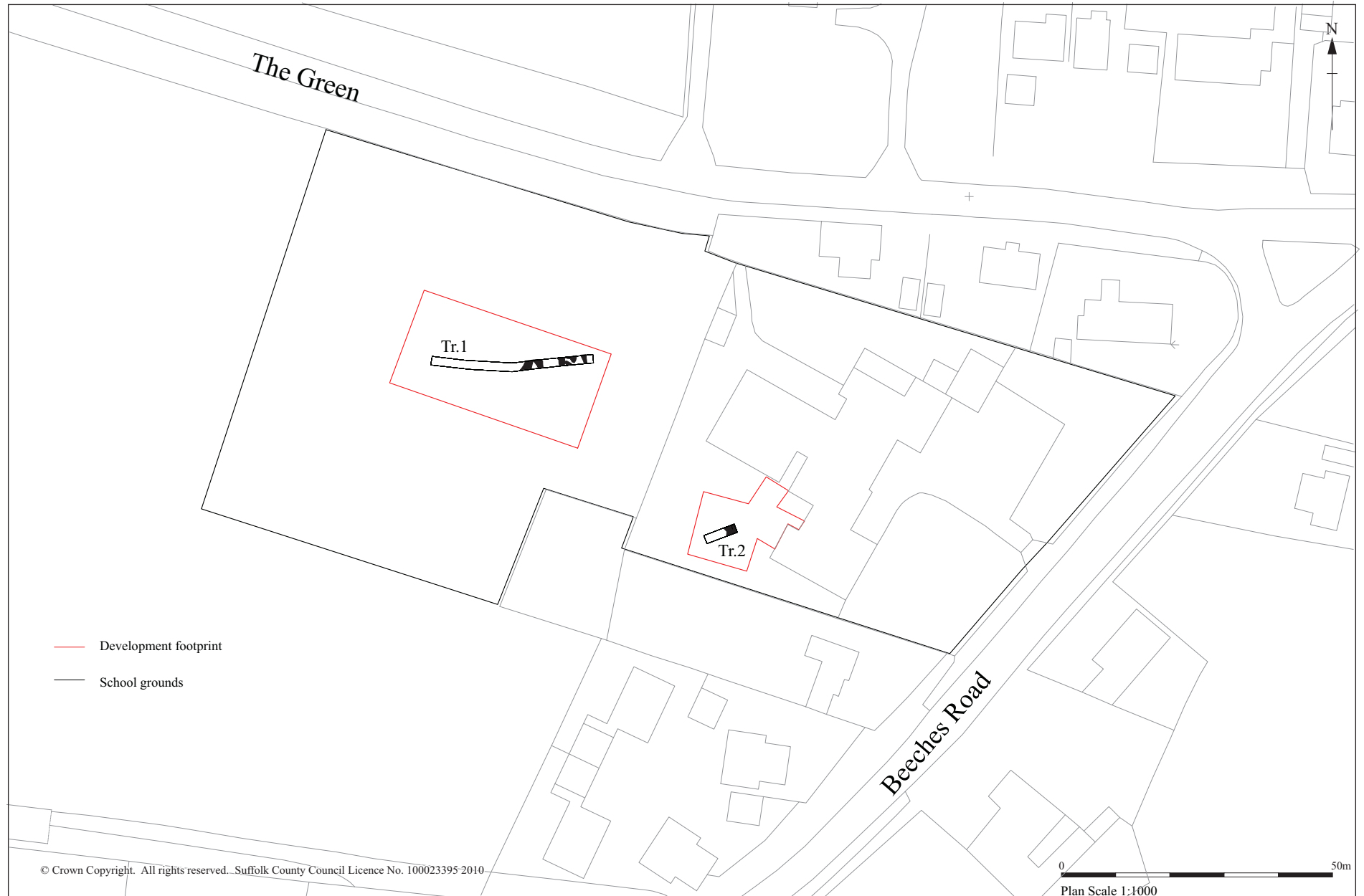


Figure 2. Trench location plan

## 5. Results

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### 5.1 Trench 01

This trench (Figs. 3 and 4) was placed within the school playing field and was 30m in length and aligned east to west. The basic soil profile was of 0.4m of topsoil overlying a buried soil layer, 0035, of compact mid/grey brown silt/sand with occasional fragments of chalk. In the western 15m of the trench this layer was 0.1m deep and overlaid the natural chalk subsoil.

In the remaining part of the trench this layer increased up to 0.35m thick and sealed a series of archaeological features and deposits. A range of unstratified material was collected during the machining, 0001, consisting of Roman pottery, ceramic building material (CBM) and several metal small finds, and much of this material may have come from layer 0035.

0009 was a linear feature, possibly a ditch or building foundation slot. Aligned north to south it measured 1.1m wide and 0.75m deep and had near vertical sides and a flattish base. Its basal fill, 0010, was a 0.26m thick, compacted, very pale grey/white silt with chalk with occasional flecks of charcoal. Above this lay 0011, a 0.2m thick, compact, very pale grey/white silt with chalk, then 0012, a 0.2m thick, compact, mid/dark grey chalky silt with occasional stones. Roman pottery and the bulk of the site's CBM assemblage were recovered from 0010 and 0011.

Extending from 0009 was a possible linear shallow ditch, 0013, aligned north-west to south-east. Only partially visible within the trench it measured over 0.8m wide and 0.2m deep and had moderate sloping sides and slightly concave base. There was no visible relationship with 0009. Its fill, 0014, was a compact pale grey/white silt and chalk.

A possible pit or posthole, 0015, was set in the eastern end of 0013. Measuring 0.5m wide and 0.2m deep, its shape in plan was unclear and could not be differentiated from 0013. Its basal fill, 0027, was a mixed pale grey/white silt and chalk which lay under 0016, a mid/dark grey chalky silt.

A second possible pit or posthole, 0017, was seen on the edge of 0009 after the excavation of 0013, but again no clear relationships were visible between these features. Measuring 0.25m in diameter and 0.07m deep, it had a fill, 0018, of mixed mid grey/white silt and chalk.

0021 was a large linear ditch, aligned north to south, measuring 1.4m wide and 0.6m deep. It had moderate, straight sides, a slightly concave base and a 0.17m thick basal fill, 0020, of compact light grey clay/silt and 50% chalk with occasional flints. Above lay 0019, a 0.45m thick deposit of mid grey clay/silt and 30% chalk, with a lense of dense chalk. Seven sherds of mid to late 2nd century Roman pottery, CBM and animal bone were recovered from 0019.

Lying between 0021 and 0009 was a dense spread of intercutting features, the uppermost fills of which appeared to merge into a general deposit of dark grey/brown silt, 0036, which was removed by machine. These features were all clearly related to the surrounding Roman activity, and a small assemblage of Roman CBM, 0030, was collected from the surface of one of these features. A single slot was excavated through two of the more obvious features, 0023 and 0026, with the remainder being left *in situ* as it was not possible within the confines of the trench to clearly identify their nature.

0023 was a linear ditch, aligned north-west to south-east. Measuring 0.7m wide and 0.32m deep, it had moderate convex sides and a concave base. Its fill, 0022, was a light grey clay/silt and 50% chalk, with occasional flints and charcoal flecks, from which a single sherd of Roman pottery was collected. This was cut by 0026, a linear slot aligned north-west to south-east. This measured 0.7m wide and 0.42m deep and had steep, straight sides and concave base. Its basal fill, 0025, was a 0.2m thick light grey clay/silt and 40% chalk with occasional flecks of charcoal and occasional flints. Above lay 0024, a compact, 0.2m thick mid grey clay/silt and 30% chalk with occasional flints, charcoal flecks, and a single piece of Roman CBM.

0028 was a possible oval pit, or terminus of a curvilinear ditch, measuring c.1m wide and 0.25m deep. It extended west to merge with 0009 but no relationship was visible. With moderate sloping sides and a flat base it had a fill, 0029, of compact dense chalk and mid grey silt. Ten sherds of late 3rd/4th Roman pottery and CBM were collected from 0029.

0031 was a linear ditch, aligned north to south and measuring 0.8m wide and 0.35m deep at the eastern end of the trench. Cut into the natural chalk subsoil it had irregular sloping sides, a concave base, and a basal fill, 0032, of compact chalk mixed with 20% mid grey silt. Above this was 0033, a compact deposit of chalk mixed with 30% mid/dark grey sand/silt.



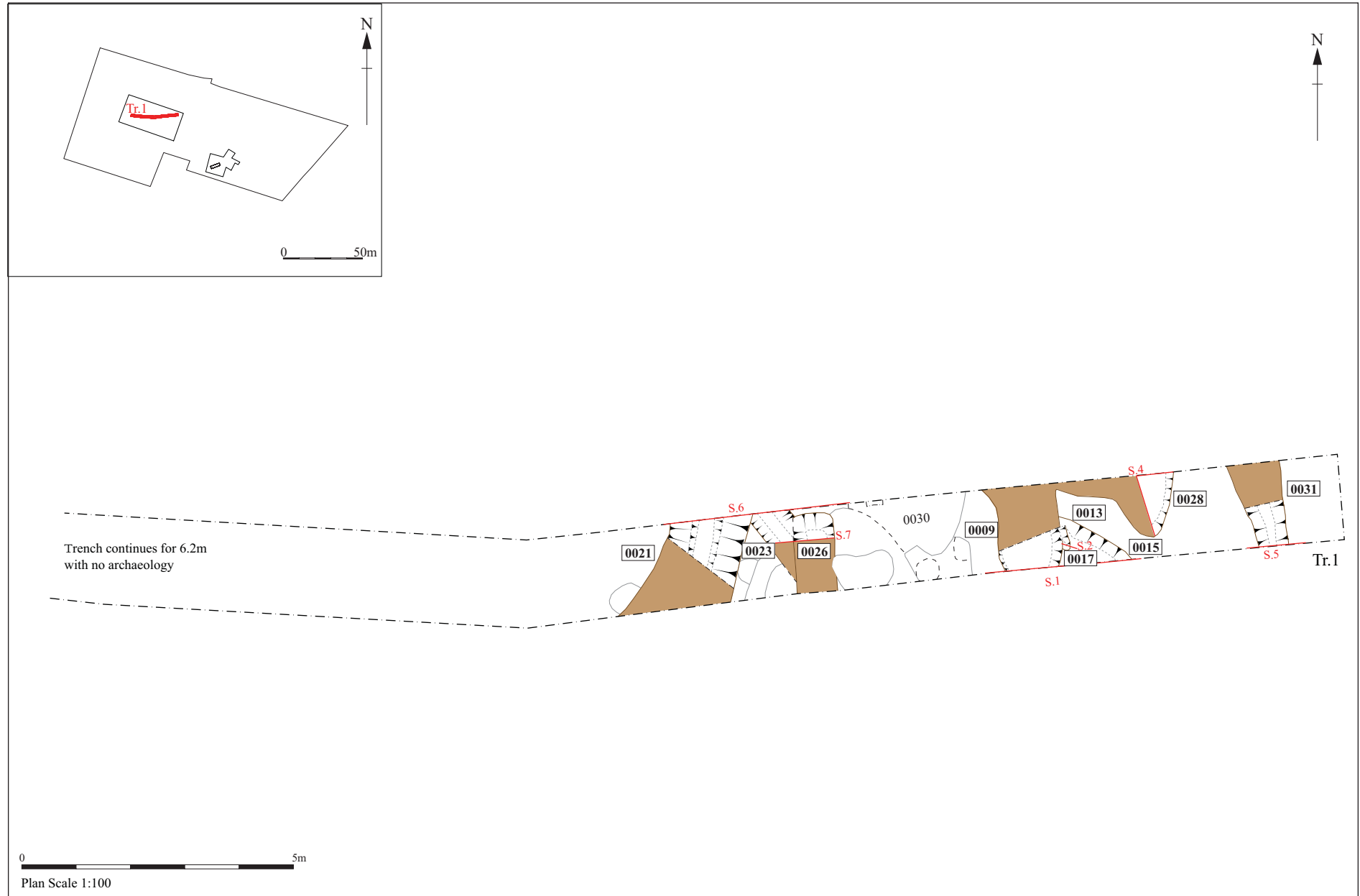


Figure 3. Trench 1 plan

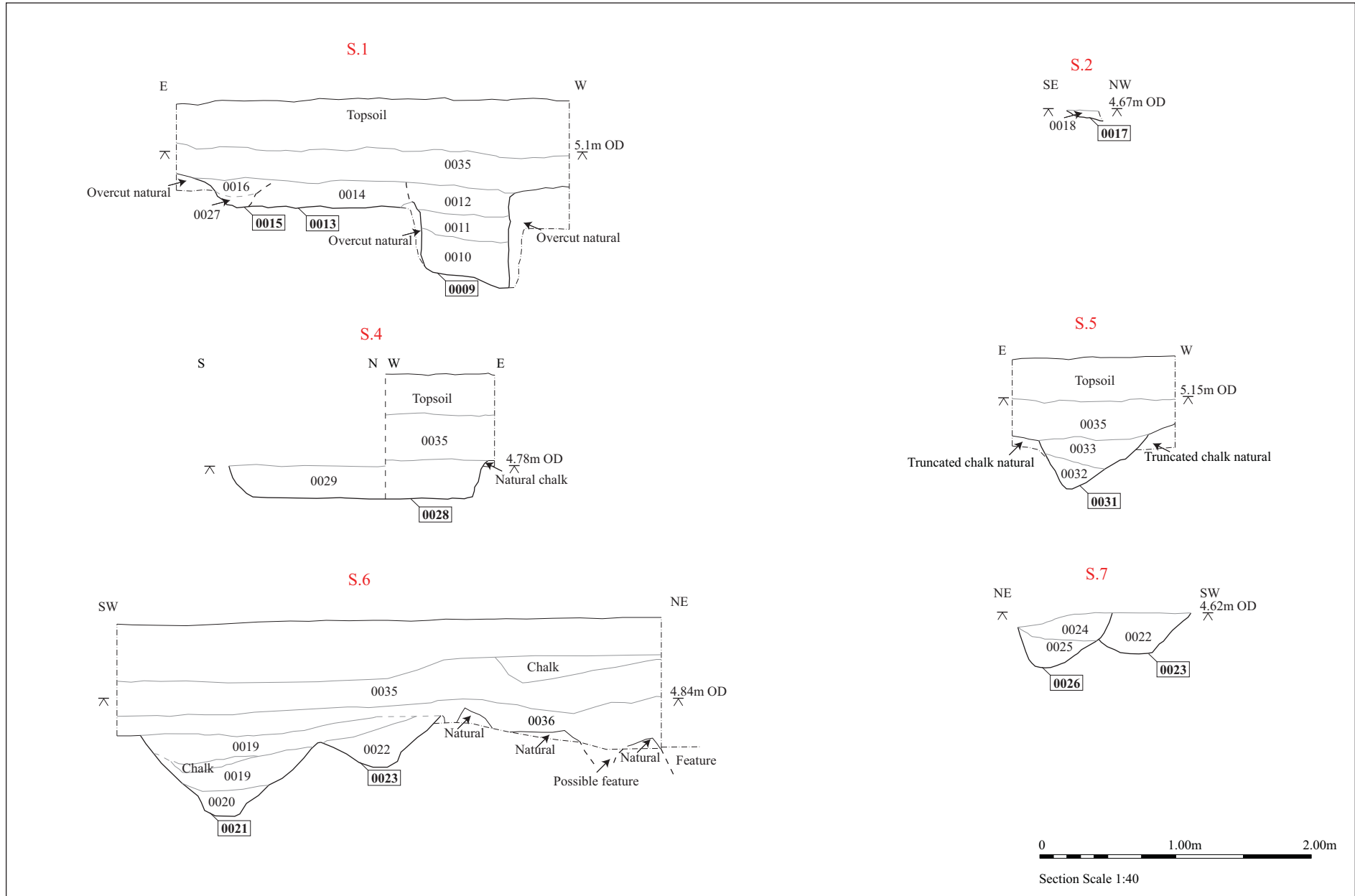


Figure 4. Trench 1 sections

## 5.2 Trench 02

Trench 02 (Fig. 5), which measured 6m in length and was aligned north-east to south-west, was placed through the existing school playground. This showed 0.2m of modern asphalt and hardcore overlying a layer, 0034, of mid brown silt/sand with occasional fragments of chalk. This buried soil layer is probably the same as layer 0035 seen in Trench 01.

In the southern half of the trench layer 0034 could not be removed due to the presence of existing drainage trenches meaning that only a 3m length of the trench was reduced sufficiently to expose the archaeological horizon.

Layer 0034 sealed the uppermost fills of a large feature, 0002. Measuring c.1m deep and at least 1.8m wide, this feature was only partially visible within the confines of the trench so its full extent and shape is unknown. Its irregular sloping sides and series of fills indicate that it may actually consist of two or more intercutting features.

After an initial slumping deposit of crushed chalk and mid grey/brown silt upon the slope of the cut, the base of the feature was infilled with 0007, a 0.2m thick deposit of very dark grey fine silty loam with frequent chalk. Above this was the main fill, 0006, which slumped into the feature from the north. Consisting of a dark grey silt/sand with chalk flecks it extended southwards beyond the apparent cut of 0002 as a 0.2m thick layer lying between 0035 and the chalk subsoil. Eleven sherds of Roman pottery and a small quantity of animal bone were collected from fill 0006, indicating a 2nd century date for the deposit. A bulk environmental soil sample was also taken. Above fill 0006, and also slumping into the feature from the south were three further deposits; 0005 was a layer of crushed chalk and mid grey/brown silt, 0004 was a layer of dark grey silt/sand with scattered chalk and finally 0003 was a 0.3m thick layer of mid grey/brown silt/sand and chalk.

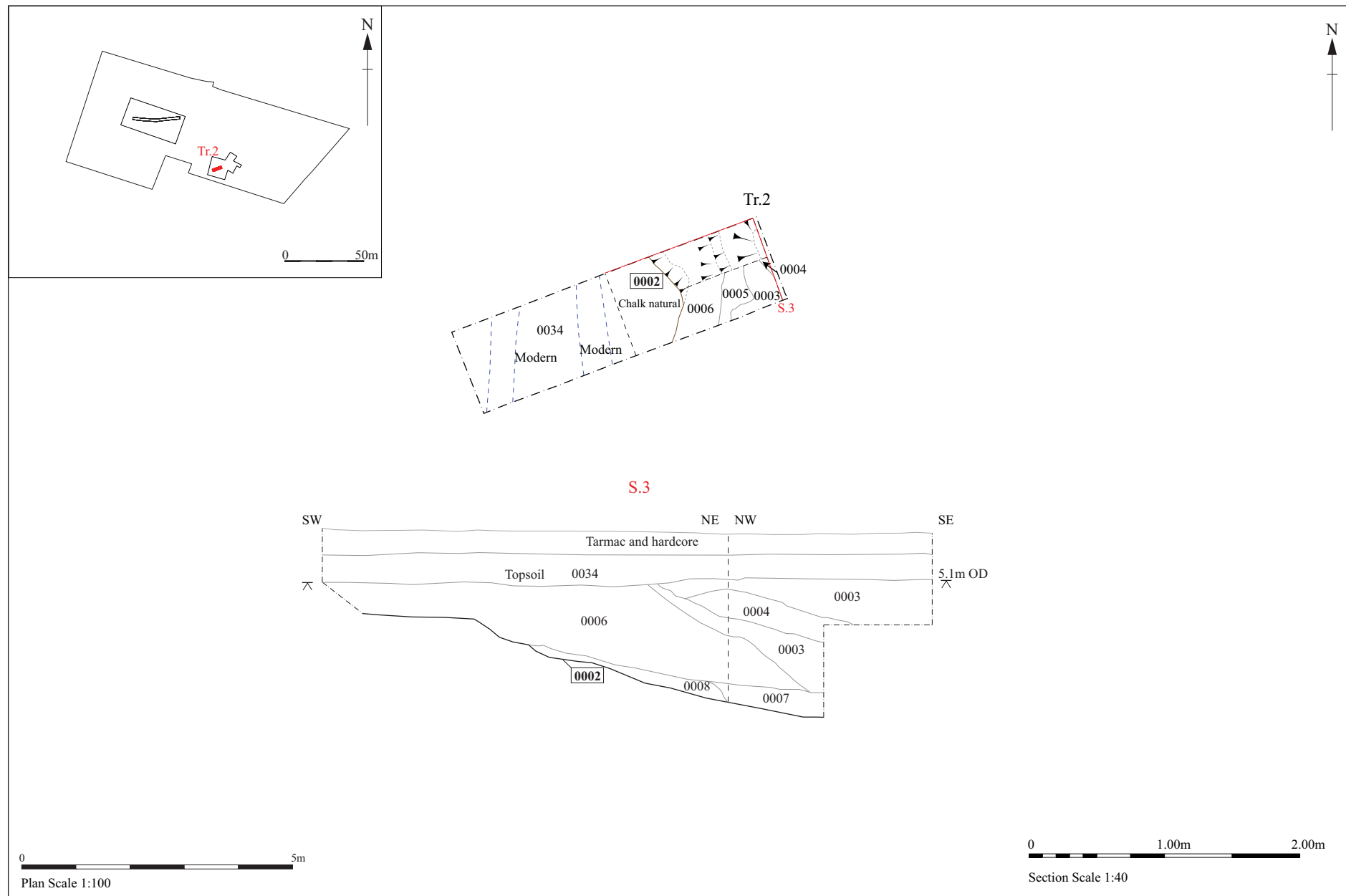


Figure 5. Trench 2, plan and section

## 6. The Finds

Andy Fawcett

### 6.1 Introduction

A total of 161 finds with a weight of 6262g was recorded from eleven contexts, as shown in the table below. A full contextual breakdown of all the finds can be found in Appendix 2.

Context	Pottery		CBM		Animal bone		Shell		Miscellaneous	Spotdate
	No.	Wt/g	No.	Wt/g	No.	Wt/g	No.	Wt/g		
0001	9	134	5	617					Lead 1 @ 31g ?Mortar 1 @ 8g	Roman
0006	11	71			13	252	2	54		?Late 1st to later 2nd C
0010			24	2019	1	2				Roman
0011	1	1	20	1247	2	2	1	1		Roman
0014					2	1				
0019	7	168	5	486	21	270	1	7		Mid to later 2nd C
0022	1	13			5	10	1	10		Roman
0024			1	3	1	4				Roman
0029	10	222	6	112	1	1				Late 3rd to 4th C
0030			5	507						Roman
0032					4	10				
Total	39	608	66	4991	50	552	5	72		

Table 1. Finds quantities

### 6.2 Pottery

#### *Introduction and methodology*

Roman pottery was noted in six contexts (39 fragments @ 608g), unstratified 0001, unknown feature fill 0006, slot fill 0010, ditch fills 0019, 0022 and pit fill 0029. Only three of these fills contained a broad mixture of fabric types, 0001, 0006 and 0019. The sherds in pit fill 0029, with the exception of one, all belonged to the same vessel.

Overall the condition of the assemblage may be described as between abraded and slightly abraded. A small number of forms was noted, but due to the small size of the sherds, these cannot for the most part be identified beyond their general vessel class, (for instance, a narrow-neck jar). All of the pottery has been examined at x20 vision and a list of fabric types and their quantification totals can be seen in Table 2. A full contextual breakdown of fabric and form types appears in Appendix 3. The fabrics were separated into groups and codes were assigned to them using the Suffolk Roman fabric series. Form types were catalogued using the Suffolk Roman type series (unpublished).

<b>Fabric</b>	<b>Code</b>	<b>No</b>	<b>Weight/g</b>	<b>Eve</b>
Eastern Gaulish samian	SAEG	1	5	0.07
Hadham red wares	HAX	1	19	0.06
Horningsea grey ware	HOG	2	17	0.16
Nene Valley colour-coated mortaria	NVCM	9	211	0.12
Verulamium region white ware	VRW	1	7	0.00
Miscellaneous buff ware	BUF	1	2	0.00
Miscellaneous red coarse ware	RX	2	19	0.00
Black surfaced ware	BSW	1	10	0.10
Miscellaneous sandy grey wares	GX	13	223	0.08
Grey micaceous ware (black-surfaced)	GMB	2	18	0.00
Grey micaceous ware (grey-surfaced)	GMG	6	78	0.16
Total Roman pottery		39	609	0.75

Table 2. Roman fabric quantities

### ***The assemblage***

As a whole the pottery is dated from the 2nd to 4th century AD; a similar date range was noted at MNL 612 (Tester 2010). However, a large number of sherds have been simply classed as Roman, because they are represented by long-lived fabrics or forms.

Furthermore none of the contexts contained large numbers of sherds and can therefore be considered as poorly dated. Nonetheless three contexts have been assigned date ranges within the Roman period. The first, feature fill 0006, is likely to be of a 2nd century date, whereas ditch fill 0019 is dated from the mid to later 2nd century and thirdly pit fill 0029 is dated from the late 3rd to 4th century AD. The unstratified context 0001 contained a mixture of these date ranges.

The fabric assemblage is dominated by unsourced miscellaneous grey wares (GX) as well as micaceous variants (GMB & GMG). Thereafter a very limited number of miscellaneous red wares are present (RX) and single examples of buff ware (BUF) and black-surfaced ware (BSW), have also been noted. One sherd of Eastern Gaulish samian ware represents the only imported fine ware, which was recorded in ditch fill 0019. Thereafter a small number of regional imports were identified, Hadham red ware (HAX) from the unstratified context 0001, Horningsea grey ware (HOG) and Verulamium region ware (VRW). These last two fabric types were recovered from ditch fill 0019. Finally pit fill 0029 contained nine joining sherds belonging to a Nene Valley *mortaria*. This type is of the 'reed rimmed' variety and is very similar to Perrin's M40/41 types (1999, 131), dated from the late 3rd to 4th century AD. The form assemblage as a whole is dominated by a small number of jars with beaded rims. Thereafter a single bead rimmed dish has been noted as well as a very small rim fragment which may relate to the poppy-head beaker style.

## Conclusion

Although this is a small assemblage of pottery, it is nevertheless broadly similar in nature to that recovered from the previous archaeological investigations (Tester forthcoming & 2010). There are no ceramics present from any other period and Roman roof tile consistently occurs alongside the pottery.

### 6.3 Ceramic building material

A total of 66 pieces of CBM (4991g) was recovered from seven contexts, all of which is dated to the Roman period. The entire assemblage, in terms of condition can mainly be described as between abraded and slightly abraded although a small number of pieces are very abraded. A full contextual breakdown of fabric types can be seen in Appendix 4, and a classification of tile types can be seen in Table 3.

Type	No	Weight/g
<i>Tegula</i>	16	1483
<i>Imbrex</i>	24	2103
Flat	13	1141
Keyed	1	59
Misc	12	205
Total	66	4991

Table 3. CBM quantities

As Table 3 demonstrates, fragments of *tegula* and *imbrex* are the two main form types within the CBM assemblage. The best examples of these two types of roofing tile were recovered from foundation slot fills 0010 and 0011 and in particular fill 0010, in which three quarters of an *imbrex* survived. This example has a width of 224mm and a maximum depth of 15mm. The remainder of the *imbrices* on the site also have a similar depth measurement. This figure fits in with the results of existing research into the tile type, in which the majority of averages are between 14 to 16mm (Fawcett 1999). Fabric types that are associated with the *imbrex* at West Row are generally towards the finer sanded end of the scale (fs) and often contain calcite (fsc). Most of the *tegulae* are quite fragmented with many of the flanges being broken or too worn for measurement. However depth ranges for this tile type are from 17 to 19mm, and these figures are consistent with the average measurements recorded by the author (Fawcett unpub). The *tegulae* fabrics on the whole are coarser than their *imbrex* counterparts, being either medium sanded (ms) with either clay pellets (mscp), iron ores (msfe) or calcite (msc). A small quantity of CBM has been classified as miscellaneous flat tile, consisting of both structural and roofing tile, which has been recorded by the depth of individual fragments (see Appendix 4). This part of the assemblage is not well preserved enough

to be able to assign a form such as being parts of *tegulae* (as mid-sections) by the analysis of depth measurements. These fabrics are all medium sanded and one example in fill 0011 has faint traces of mortar attached. A single piece of keyed tile was noted in the unstratified context 0001. This example is in a medium sandy fabric (ms) and has combing on both sides, but it is quite abraded and there is no evidence to indicate that it is a box flue tile. Finally a small collection of miscellaneous unidentifiable and abraded pieces complete the assemblage.

Overall the CBM assemblage is consistent in terms of dating, as it is all Roman in date. The presence of both roof and structural tile, indicates the presence of a substantial Roman building(s) within the immediate area. Finally Roman pottery frequently occurs alongside the CBM.

#### **6.4 Mortar**

A small, abraded and heat-affected piece of possible mortar was recovered from feature fill 0006. The fragment is in a poor state of preservation. The fill also contained 2nd century pottery, animal bone and shell.

#### **6.5 Animal bone**

As Table 1 demonstrates, animal bone was recovered from nine contexts (552g). However the majority of this assemblage is very small and fragmentary and is not species identifiable. Two larger collections have been noted in feature fill 0006 (13 fragments @ 252g) and ditch fill 0019 (21 pieces @ 270g). The first of these in fill 0006 all belong to a large mammal, but they are very fragmentary, worn and partially burnt in some cases. Identifiable fragments include fragments of vertebrae, jaw, rib and two phalanges. These latter two pieces, although very worn, belong to an adult and juvenile cow. One of the bones displays canine gnawing and was possibly butchered (M. Feider pers. comm.). Ditch fill 0019 contained a number of very fragmentary pieces including three fragments of pelvis which are likely to be horse (M. Feider pers. comm.). The two remaining identifiable pieces are a rib end and an upper vertebra fragment belonging to a large mammal.

#### **6.6 Shell**

Two types of shell were recorded from the evaluation. Fragments of oyster were recovered from feature fill 0006 and ditch fill 0022. All of the pieces (3 fragments @



64g) are reasonably whole and are only slightly worn. Two examples of common garden snail (*Helix aspersa*) were recorded (18g). The first is a very small broken fragment present in slot fill 0011, and the second, which is whole, was retrieved from ditch fill 0019.

## **6.7 Small finds**

Identified by Jane Carr

Seven small finds were recovered. With the exception of SF1006, which was retrieved from ditch fill 0019, the remainder have been recorded as unstratified from Trench 1.

### **SF1001**

Copper alloy coin

Width 20mm

This is a *nummus* of the House of Constantine whose obverse is worn and displays a diademed bust right. Although the reverse is considerably more worn a globe on an altar is depicted, as well as the lettering *beata tranquillitas* (blessed tranquillity). The coin is dated AD321 to 324.

### **SF 1002**

Copper alloy coin

Width c 9mm

A very small *nummus* fragment, whose reverse is illegible and only a diademed bust right can be seen on the obverse. It is dated from AD300 to 402.

### **SF1003**

Copper alloy coin

Width c 18mm

Although this *nummus* is worn, a helmeted bust of Constantinopolis left, can be seen on the obverse. The reverse has a Victory on prow. The coin is dated AD330 to 340.

### **SF1004**

Lead aulnage seal

Length 22mm, width 17mm

This two part cloth seal is compressed and worn and is made up of one large and one small disc. The numerals VII can be seen horizontally displayed and to their left

vertically X X. These numbers indicate the amount of cloth that the seal was attached to, in terms of weight or length. The seal is dated from the 16th to 17th century.

### **SF1005**

Copper alloy coin

Width c 21mm

A very worn *radiata* fragment of Tetricus I or II, dated from AD271 to 274.

### **SF1006**

Copper alloy coin

Width c 6-7mm

This is an extremely small and very worn *nummus* called a *minimumus*. Due to its size and condition no other information can be extracted from the coin.

### **SF1007**

Copper alloy coin

Width 14mm

This is a worn contemporary copy of a Constantius/Constans *nummus*. The obverse has a bust facing right and the reverse has the lettering VICTORIARE DD AVGG Q NN as well two Victories holding wreaths. It is dated AD347/8.

A single piece of unstratified lead from context 0001 was not assigned a small find number. It is likely to be a piece of scrap and is therefore undateable.

## **6.8 Discussion**

With the exception of SF1004 all of the finds are dated to the Roman period. Within this period pottery dating to the 2nd century has been identified, as well as coins and additional pottery dated to the later 3rd and 4th century. The CBM clearly indicates the presence of a substantial building nearby, and at least one villa type building has been excavated in the West Row area (Bales 2004, 63). Roman activity of a similar date has already been recorded at West Row (Tester forthcoming & 2010). Although only a small number of features have yielded finds, they still provide an important contribution to the overall knowledge of Roman occupation in the area.

## 7. Environmental evidence

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Rachel Fosberry

### 7.1. Introduction and Methods

The flot from a single bulk sample excavated by Suffolk County Council Archaeology Service was submitted to the Environmental Department at Oxford Archaeology East for an initial assessment in order to assess the quality of preservation of plant remains and their potential to provide useful data as part of further archaeological investigations.

The flot had been obtained by the manual flotation of bulk samples carried out by a member of the Suffolk Archaeology team using a 0.3mm mesh sieve. The dried flot was scanned using a binocular microscope at x16 magnification and the presence of any plant remains or other artefacts are noted on Table 4. Identification of plant remains is with reference to the Digital Seed Atlas of the Netherlands and the authors' own reference collection.

### 7.2. Quantification

For the purpose of this initial assessment, items such as seeds, cereal grains and small animal bones have been scanned and recorded qualitatively according to the following categories.

# = 1-10, ## = 11-50, ### = 51+, #### = 100+ specimens

Items that cannot be easily quantified such as charcoal, magnetic residues and fragmented bone have been scored for abundance.

+ = *rare*, ++ = *moderate*, +++ = *abundant*

### 7.3. Results

The results are recorded on Table 4.

Preservation is by carbonisation and is moderate to good. Charred plant remains include charcoal, cereal grains, pulses and seeds. Modern contaminants of rootlets are common.

The charred cereal assemblage is comprised of a high density of wheat (*Triticum* sp.) grains of which the hulled wheat, spelt (*T. spelta*) predominates. This species has been identified by the numerous diagnostic chaff elements although it is possible that emmer (*T. dicoccum*) wheat is also present in low quantities, possibly as a contaminant. A rachis fragment and grains with a rounded morphology indicate the presence of free-threshing wheat. Barley (*Hordeum* sp.) grains are common within the assemblage and a single rachis fragment was also noted. Other food plants include pea (*Pisum* sp.) which occur rarely.

Charred seeds of weeds that are common crop contaminants include Brome (*Bromus* sp.), rye-grass (*Lolium* sp.) and corn gromwell (*Lithospermum arvense*) all of which occur in moderate densities.

Other weed seeds that grow in crop fields but are also found on other rough and disturbed ground include dock (*Rumex* sp.), Knotgrass (*Polygonum* sp.), cleavers (*Gallium aparine*), goosefoot (*Chenopodium* sp.) and grass seeds (Poaceae). Common spike-rush (*Eleocharis palustris*) is a plant of wet ground often found growing on the banks of rivers, ponds and water-filled ditches.

<b>Sample no.</b>			1
<b>Context no.</b>			6
<b>Cut no.</b>			2
<b>Date</b>			Late Roman
<b>Sample volume (litres)</b>			30
<b>Volume of flot (ml)</b>			120
<b>% flot sorted</b>			100
<b>Species</b>	<b>Common name</b>	<b>Habitats</b>	
<b>Cereals</b>			
<i>Triticum spelta</i> (rachis fragments)	Spelt wheat	crop	#
<i>Triticum spelta</i> (grains)	Spelt wheat		###
<i>Triticum spelta</i> (glume bases)	Spelt wheat		####
<i>Triticum spelta</i> (spikelet forks)	Spelt wheat		#
<i>Triticum sp.</i> Free-threshing grain		crop	##
<i>Triticum sp.</i> Free-threshing rachis fragments			#
<i>Hordeum sp.</i> grain	Barley	crop	##
<i>Hordeum vulgare</i> rachis fragments			#
Cerealium indet fragments			##
Culm nodes			#
<b>Other crops</b>			
<i>Pisum sativum</i>	Pea	crop	#
<b>Weeds</b>			
<i>Bromus sp.</i>	Bromes	wide range of grassy places including arable & disturbed	##
<i>Chenopodium sp.</i>	goosefoot	waste & cultivated ground	#
<i>Galium aparine</i>	Cleavers	cultivated & arable land, hedgerows & scrub, other open ground	#
<i>Lithospermum arvense</i>	Field gromwell	arable fields, rough ground & open grassy places	##
<i>Lolium sp.</i>	Rye-grass	grassy places	##
Poaceae	grasses	grassy places	#
<i>Polygonum sp.</i>	Knotgrass	open ground	#
<i>Rumex sp.</i>	Docks	waste ground	##
<b>Wetland plants</b>			
<i>Eleocharis palustris</i>	Common spike-rush	ponds, marshes, ditches, riversides	#
<b>Other plant macrofossils</b>			
Charcoal <2mm			+++
Charcoal >2mm			+++
Indet.culm nodes			#
modern rootlets (contaminants)			#
Indet.seeds			#
<b>Other remains</b>			
Bone (small mammal)			#

Table 4. Identification of plant remains

#### **7.4. Discussion**

This assemblage is dominated by spelt wheat and is comprised of both the cereal grains and the chaff that would have formed the spikelet. Spikelets of wheat are broken off of the cereal ear during the first stages of crop processing (threshing, winnowing and sieving) and are a convenient form in which to transport and store the wheat until it is required (Stevens, 2003). The second stage of crop processing involved parching and/or pounding the spikelet to release the grain. These processes produce diagnostic waste elements of chaff including glume bases and spikelet forks which are seen in the assemblage studied.

The inclusion of a moderate density of charred cereal grains could be interpreted as a separate deposit of grain that has been accidentally burnt. It doesn't seem likely that the grain became burnt during the parching process itself as no complete spikelets were recovered.

The weed seed assemblage is also consistent with the final stages of crop processing in which the semi-cleaned grain would be sieved and hand picked to remove contaminating seeds that are of a similar size to the actual grains such as corn cobs. Bromes and rye-grass grains may have been a tolerated contaminant. The presence of a single spike-rush seed may suggest that wetland resources were being exploited for floor cover or fuel.

#### **7.5. Further work and methods statement**

This particular sample merits analysis and it is recommended that it is submitted to Val Fryer (Archaeobotanical Specialist) for the completion of this work. There is a sufficient density of material for quantification (i.e. 100+ specimens) although analysis could be delayed if further excavations are planned in the near future.

If further excavations are planned for this area, it is recommended that a schedule for environmental sampling should be appended to the updated project design. By extensive sampling the nature of cereal waste and weed assemblages should provide an indication of whether these cereals were locally grown or imported.

## 8. Discussion

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The evaluation results clearly show that the spread of Roman occupation evidence, previously recorded to the north (MNL 612) and south (MNL 193) of the site, extends across the school grounds although the absence of deposits in the western half of Trench 01, beyond ditch 0021, suggests there may be an edge to the settlement area.

The evaluation, although of limited size, has identified substantial evidence of Roman activity in the 2nd-4th centuries which likely relates to a rural, agricultural farmstead, perhaps subsidiary to the MNL 064 villa site to the north. The dense spread of features in Trench 01 shows relatively intense activity with the presence of roof tile indicating that a substantial structure stood in the immediate vicinity, adding to the CBM assemblage recovered from the MNL 193/514 excavations to the south. Two linear features, 0029 and 0026, had vertical cuts suggesting they may have had a structural function as opposed to being general field boundaries or drainage ditches and possible postholes, 0015 and 0017 were also identified. The presence of domestic pottery types and other waste such as animal bone also suggests that the site lies in the immediate vicinity of a settlement complex.

The dating of the finds assemblage suggests that occupation on the site began in the late 1st/2nd century and continued through to the late 3rd/4th. The six Roman coins are of 3rd/4th century date and, being unstratified, indicate that later Roman deposits or occupation soils may have been removed by later activity such as ploughing.

The feature or features in Trench 02, although of uncertain nature and function are also of Roman date. The main fill 0006, which dates to the 2nd century, contained a finds assemblage of pottery and animal bone strongly suggesting domestic activity. The environmental evidence in the feature indicates that grain processing was carried out in the vicinity, again suggesting that the site lies in an area of Roman rural settlement and agriculture.

## 9. Conclusions and recommendations for further work

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Trench 01 has identified further evidence of Roman activity to add to that seen in the adjacent MNL 612 excavations, although only in the eastern half of the trench. The archaeological deposits, while being of sufficient importance to warrant further investigation, lie at a depth of at least 0.6m and so are unlikely to be affected by the development of the new hard playarea. Provided the formation level for the development extends no further than 0.3m below ground level these archaeological deposits can be preserved *in situ* below the 0.25m thick minimum buffer required. If groundworks are to be deeper than partial or full archaeological excavation of the playarea footprint may be required to record archaeological deposits in full.

Trench 02, although limited in size due to the presence of service trenches, identified a substantial feature of Roman date and demonstrates that significant, well-preserved archaeological deposits lie at a depth of only 0.4m. This, combined with the trenches' position, in an area of known Roman activity with deposits recorded 30m to the north, south and west, indicates that Roman occupation evidence is likely to exist throughout the footprint of the proposed extension.

These potential deposits are vulnerable to any groundworks for the extension and are too shallow to be preserved *in situ*. It is recommended that the footprint of the extension, or wider area if the remaining parts of the playground are to be stripped and resurfaced, is subjected to a full program of archaeological excavation, prior to development commencing, to record all archaeological deposits on site. Such an excavation on the school premises should also provide an opportunity for an associated outreach program involving the local pupils.



## **10. Archive deposition**

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Paper and photographic archive: SCCAS Bury St Edmunds

Digital archive: SCCAS Bury St Edmunds T:arc\archive field proj\Mildenhall\MNL 637

West Row Primary School 2010 eval

Finds and environmental archive: SCCAS Bury St Edmunds.

## **11. List of contributors and acknowledgements**

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The project was directed by and managed by John Craven. The evaluation fieldwork was carried out by a number of archaeological staff (Robert Brooks, John Craven, Alan Smith and Duncan Stirk), all from Suffolk County Council Archaeological Service, Field Team.

The post-excavation was managed by Richenda Goffin. Finds processing was carried out by Jonathan Van Jennians and the processing of environmental soil samples by Anna West. The production of digital site plans and sections was carried out by Ellie Hillen. The specialist finds report was written by Andy Fawcett and the environmental assessment by Rachel Fosberry (OA East). Other specialist identification and advice was provided by Jane Carr and Mike Feider. The report was checked by Richenda Goffin.

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### Disclaimer

Any opinions expressed in this report about the need for further archaeological work are those of the Field Projects Team alone. Ultimately the need for further work will be determined by the Local Planning Authority and its Archaeological Advisors when a planning application is registered. Suffolk County Council's archaeological contracting services cannot accept responsibility for inconvenience caused to the clients should the Planning Authority take a different view to that expressed in the report.

## Appendix 1. Context list

Context	Feature	Trench no	Type	Category	Description	over	under
0001	0001	01			Unstratified finds found during machining of Trench 01.		
0002	0002	02	Feature	Cut	Large feature or series of intercutting features seen in restricted area of Trench 02 so full size and shape unknown. Irregular sloping sides, 1m deep. Series of fills		0008
0003	0002	02	Feature	Fill	Mid grey/brown silt/sand and chalk. C.0.3m+ thick, slumping down to south.	0004	0034
0004	0002	02	Feature	Fill	Dark grey silt/sand with scattered chalk.	0005	0003
0005	0002	02	Feature	Fill	Crushed chalk and mid grey/brown silt.	0006	0004
0006	0002	02	Feature	Fill	Dark grey silt/sand with chalk flecks. Relatively finds rich.	0007	0005
0007	0002	02	Feature	Fill	Very dark grey fine silty loam with frequent chalk. Probable basal fill.	0008	0006
0008	0002	02	Feature	Fill	Crushed chalk and mid grey/brown silt. Initial slumping deposit on slope of cut	0002	0007
0009	0009	01	Slot	Cut	Linear cut, possibly a building foundation slot, aligned north to south. 1.1m wide and 0.75m deep. Near vertical sides and a flattish base.		0010
0010	0009	01	Slot	Fill	Very pale grey/white silt with chalk. 0.26m thick basal fill, very compacted. Occasional flecks of charcoal	0009	0011
0011	0009	01	Slot	Fill	Very pale grey/white silt with chalk. 0.2m thick middle fill, very compacted. Occasional stones. Diffuse boundaries with other fills.	0010	0012
0012	0009	01	Slot	Fill	Mid/dark grey chalky silt with occasional stones. Compact. 0.2m thick upper fill.	0011	0035
0013	0013	01	Ditch	Cut	Linear shallow ditch, aligned north-west to south-east. Over 0.8m wide and 0.2m deep with moderate sloping sides and slightly concave base.		0014
0014	0013	01	Ditch	Fill	Pale grey/white silty chalk. Compact.	0013	0035
0015	0015	01	Pit	Cut	Possible pit or posthole set in eastern end of 0013. unclear relationship between the two. 0.5m wide and 0.2m deep, unclear in plan, uneven sides and base.		0027
0016	0015	01	Pit	Fill	Upper fill. Mid/dark grey chalky silt. 0.14m thick.	0027	0035
0017	0017	01	Pit	Cut	Small pit or posthole, 0.25m diameter and 0.07m deep, set in 0013 on side of 0009. No clear relationships visible. Slightly concave sides and base. Possibly natural.		0018
0018	0017	01	Pit	Fill	Mixed mid grey/white silt and chalk.	0017	0035
0019	0021	01	Ditch	Fill	Secondary fill of ditch 0021. Mid grey clay/silt and 30% chalk, with a lense of denser chalk (80%). 0.45m thick.	0020	0036
0020	0021	01	Ditch	Fill	Primary fill of ditch 0021. Light grey clay/silt and 50% chalk. Compact with occasional flints. 0.17m thick.	0021	0019

Context	Feature	Trench no	Type	Category	Description	over	under
0021	0021	01	Ditch	Cut	Linear ditch, aligned north to south, curving slightly? Moderate straight and slightly stepped sides, slightly concave base. 1.4m wide and 0.6m deep.		0020
0022	0023	01	Ditch	Fill	Light grey clay/silt and 50% chalk. Occasional flints and charcoal flecks. 0.32m thick.	0023	
0023	0023	01	Ditch	Cut	Linear ditch, aligned north-west to south-east, 0.7m wide and 0.32m deep. Moderate convex sides and concave base.		0022
0024	0026	01	Slot	Fill	Mid grey clay/silt and 30% chalk. Compact with occasional flints and charcoal flecks. 0.2m thick.	0025	
0025	0026	01	Slot	Fill	Light grey clay/silt and 40% chalk. Occasional flecks of charcoal and occasional flints. 0.21m thick.	0026	0024
0026	0026	01	Slot	Cut	Linear slot, aligned north-west to south-east, 0.7m wide and 0.42m deep. Steep, straight sides and concave base.		
0027	0015	01	Pit	Cut	Basal fill. Mixed pale grey/white silt and chalk. Compact. 0.08m thick.	0015	0016
0028	0028	01	Pit	Cut	Possible oval pit or curvilinear ditch terminus. C.1m wide and 0.25m deep. Moderate sloping sides and flat base.		0029
0029	0028	01	Pit	Fill	Compact dense chalk and mid grey silt.	0029	0035
0030	0030	01	Surface fin	Finds	Surface from miscellaneous unexcavated feature in centre of trench. One of several intercutting features of unclear extent.		
0031	0031	01	Ditch	Cut	Linear ditch, aligned north to south. 0.8m wide and 0.35m deep. Irregular sloping sides, concave base.		0032
0032	0031	01	Ditch	Fill	Chalk with 20% mid grey silt. Compact.	0031	0033
0033	0031	01	Ditch	Fill	Chalk with 30% mid/dark grey sandy silt. Compact.	0032	0035
0034	0034	02	Buried soil	Layer	Buried soil layer in Trench 02. Sealed under modern playground deposits. Mid brown silt/loam with occasional fragments of chalk.	0003	
0035	0035	01	Buried soil	Layer	Buried soil layer in Trench 01. Sealed under modern topsoil. Compact mid/grey brown silt/sand with occasional fragments of chalk.	0012, 0014, 0016, 0029, 0033	

## Appendix 2. Bulk finds quantities

Context	Pottery No	Pottery Wt	Ceramic Period	CBM No	CBM Wt	Mortar/Plaster No	Mortar/Plaster Wt	Animal bone No	Animal bone Wt	Shell No	Shell Wt	Miscellaneous
0001	9	134	Roman	5	617							Lead 1 @ 31g
0006	11	70	Roman			1	8	13	252	2	54	
0010				24	2019			1	2			
0011	1	1		20	1247			2	2	1	1	Pottery is doubtful
0014								2	1			
0019	9	172	Roman	5	486			18	266	1	7	
0022	1	13	Roman					5	10	1	10	
0024				1	3			1	4			
0029	10	222	Roman	6	112			1	1			
0030				5	507							
0032								4	10			

## Appendix 3. Pottery

Context No	Fabric	Form	Sherd No	Weight (g)	Fabric date range	Context date
0001	GX	6.18 style	1	17	Early/mid 2nd to early 3rd C	Roman
0001	GX	4	1	12	Roman	
0001	GMB		1	5	Roman	
0001	GMG		3	58	Roman	
0001	BSW	4/6 style	1	10	Roman	
0001	RX		1	13	Roman	
0001	HAX	4/4.5 style	1	19	Late 3rd to 4th C	
0006	RX		1	6	Roman	Roman
0006	GX		8	54	Roman	Late 1st to later 2nd C
0006	GMG	3.7/8 style	1	4	Late 1st to later 2nd C	
0006	GMG		1	6	Roman	
0011	BUF		1	2	Roman	Roman
0019	SAEG	6	1	5	Mid 2nd to mid 3rd C	Mid to later 2nd C
0019	VRW		1	7	?Late 1st to later 2nd C	
0019	GX		1	115	Roman	
0019	GX		1	1	Roman	
0019	HOG	2.1	2	17	Mid 2nd C+	
0022	GMB		1	13	Roman	Roman
0029	NVCM	7.3	9	211	Later 3rd to 4th C	Late 3rd to 4th C
0029	GMG	4	1	10	Roman	

## Appendix 4. CBM

Context	Form	No	Weight	Height (mm)	Notes
0001	Teg	1	162	19	Teg flange depth 32mm, width 20mm. Sparse clay pellets
0001	Flat	1	305	32	Fabric contains sparse clay pellets and voids
0001	Misc	1	36		Voids indicate calcite
0001	Flat	1	53	12	Oxidised surface grey core
0001	Key	1	59	12	Oxidised surface grey core
0010	Teg	4	246	17	Teg flange depth 19mm, surfaces friable
0010	Imb	5	223	15	Oxidised/gey surface, very thin light grey core
0010	Imb	6	155	15	Oxidised, sparse clay pellets
0010	Imb	3	139	16	Bright orange, sparse clay pellets
0010	Imb	2	1012	12-15	Oxidised, pieces join
0010	Flat	4	151	19	Oxidised, poss imbrex frags, sparse black iron ore
0011	Misc	5	21		Oxidised
0011	Teg	9	665	19	Dark oxidised surface, thick dark grey core, Teg flange depth 32mm, width 19mm. See also 0010
0011	Imb	5	425	14/15	Oxidised, sparse clay pellets, voids. See also 0010
0011	Flat	1	135	25/28	Oxidised, mortar traces
0019	Misc	2	11		Oxidised, one contian calcite
0019	Teg	1	367		Oxidised, no measurements possible on account of abrasion
0019	Teg	1	43		Oxidised no measurements possible on account of abrasion. Red iron ore is common
0019	Imb	1	64	15	Oxidised, thin grey core
0024	Misc	1	3		Oxidised, pink core. Looks like an imbrex fragment
0029	Misc	4	27		Oxidised
0029	Imb	2	85	15-19	Oxidised with light grey core, sparse red iron ore
0030	Flat	5	507	29	Oxidised with thick grey core, sparse clay pellets, all pieces join

## **Appendix 5**

### **Brief and specification**



9-10 The Churchyard, Shire Hall  
Bury St Edmunds  
Suffolk  
IP33 2AR

## **Brief and Specification for Archaeological Evaluation**

### **WEST ROW PRIMARY SCHOOL, BEECHES ROAD, MILDENHALL, SUFFOLK**

***The commissioning body should be aware that it may have Health & Safety responsibilities.***

#### **1. The nature of the development and archaeological requirements**

- 1.1 Planning permission is to be sought from Suffolk County Council for the erection of new extension (20.00 x 17.00m in area) and also the creation of a new hard play (36.00 x 18.00m in area) at West Row Primary School, Beeches Road, West Row, Mildenhall (TL 6726 7641). **Please contact the applicant for an accurate plan of the site.**
- 1.2 The Planning Authority will be advised that any consent should be conditional upon an agreed programme of work taking place before development begins in accordance with PPS5 *Planning for the Historic Environment* (Policy HE12.3) to record and advance understanding of the significance of the heritage asset before it is damaged or destroyed.
- 1.3 The proposed development area is located on the south side of Beeches Road on the Fen margin, on chalky drift and chalk (loam over chalk) at c. 6.00m AOD.
- 1.4 This site lies in an area of archaeological importance, recorded in the County Historic Environment Record. Excavation in advance of a new school building in February 2009, immediately to the north of the proposed hard play, defined Roman ditches, pits and a posthole (HER no. MNL 612). Archaeological investigation in advance of the construction of a rear extension in March/April 2009 defined a Roman ditch (MNL 613). These are indicative of further Roman occupation deposits within this area. There is high potential for heritage assets of archaeological interest to be defined at this location.
- 1.5 Any groundworks causing significant ground disturbance have the potential to damage any archaeological deposit that exists.
- 1.6 In order to inform the archaeological mitigation strategy, the following work will be required:
  - A linear trenched evaluation is required of the development area.
- 1.7 The results of this evaluation will enable the archaeological resource, both in quality and extent, to be accurately quantified. Decisions on the need for and scope of any mitigation measures, should there be any archaeological finds of significance, will be based upon the results of the evaluation and will be the subject of an additional specification.
- 1.7 All arrangements for the field evaluation of the site, the timing of the work, access to the site, the definition of the precise area of landholding and area for proposed development are to be defined and negotiated with the commissioning body.
- 1.8 Detailed standards, information and advice to supplement this brief are to be found in *Standards for Field Archaeology in the East of England*, East Anglian Archaeology Occasional Papers 14, 2003.

- 1.9 In accordance with the condition on the planning consent, and following the standards and guidance produced by the Institute for Archaeologists (IfA), a Written Scheme of Investigation (WSI) based upon this brief and specification must be produced by the developers, their agents or archaeological contractors. This must be submitted for scrutiny by the Conservation Team of the Archaeological Service of Suffolk County Council (SCCAS/CT) at 9-10 The Churchyard, Shire Hall, Bury St Edmunds IP33 2AR; telephone/fax: 01284 352443. The WSI will provide the basis for measurable standards and will be used to establish whether the requirements of the planning condition will be adequately met. The WSI should be compiled with a knowledge of the Regional Research Framework (East Anglian Archaeology Occasional Paper 3, 1997, 'Research and Archaeology: A Framework for the Eastern Counties, 1. resource assessment'; Occasional Paper 8, 2000, 'Research and Archaeology: A Framework for the Eastern Counties, 2. research agenda and strategy'; and Revised Research Framework for the Eastern Region, 2008, available online at <http://www.eaareports.org.uk/>).
- 1.10 Following receipt of the WSI, SCCAS/CT will advise the Local Planning Authority (LPA) if it is an acceptable scheme of work. Work must not commence until the LPA has approved the WSI. Neither this specification nor the WSI is, however, a sufficient basis for the discharge of the planning condition relating to the archaeological works. Only the full implementation of the approved scheme – that is the completion of the fieldwork, a post-excavation assessment and final reporting – will enable SCCAS/CT to advise the LPA that the condition has been adequately fulfilled and can be discharged.
- 1.11 Before any archaeological site work can commence it is the responsibility of the developer to provide the archaeological contractor with either the contaminated land report for the site or a written statement that there is no contamination. The developer should be aware that investigative sampling to test for contamination is likely to have an impact on any archaeological deposit which exists; proposals for sampling should be discussed with the Conservation Team of the Archaeological Service of SCC (SCCAS/CT) before execution.
- 1.12 The responsibility for identifying any constraints on field-work, e.g. Scheduled Monument status, Listed Building status, public utilities or other services, tree preservation orders, SSSIs, wildlife sites &c., ecological considerations rests with the commissioning body and its archaeological contractor. The existence and content of the archaeological brief does not over-ride such constraints or imply that the target area is freely available.
- 1.13 Any changes to the specifications that the project archaeologist may wish to make after approval by this office should be communicated directly to SCCAS/CT and the client for approval.

## **2. Brief for the Archaeological Evaluation**

- 2.1 Establish whether any archaeological deposit exists in the area, with particular regard to any which are of sufficient importance to merit preservation *in situ*.
- 2.2 Identify the date, approximate form and purpose of any archaeological deposit within the application area, together with its likely extent, localised depth and quality of preservation.
- 2.3 Evaluate the likely impact of past land uses, and the possible presence of masking colluvial/alluvial deposits.
- 2.4 Establish the potential for the survival of environmental evidence.
- 2.5 Provide sufficient information to construct an archaeological conservation strategy, dealing with preservation, the recording of archaeological deposits, working practices, timetables and orders of cost.

- 2.6 This project will be carried through in a manner broadly consistent with English Heritage's *Management of Archaeological Projects*, 1991 (MAP2), all stages will follow a process of assessment and justification before proceeding to the next phase of the project. Field evaluation is to be followed by the preparation of a full archive, and an assessment of potential. Any further excavation required as mitigation is to be followed by the preparation of a full archive, and an assessment of potential, analysis and final report preparation may follow. Each stage will be the subject of a further brief and updated project design; this document covers only the evaluation stage.
- 2.7 The developer or his archaeologist will give SCCAS/CT (address as above) five working days notice of the commencement of ground works on the site, in order that the work of the archaeological contractor may be monitored.
- 2.8 If the approved evaluation design is not carried through in its entirety (particularly in the instance of trenching being incomplete) the evaluation report may be rejected. Alternatively the presence of an archaeological deposit may be presumed, and untested areas included on this basis when defining the final mitigation strategy.
- 2.9 An outline specification, which defines certain minimum criteria, is set out below.

### **3. Specification: Trenched Evaluation**

- 3.1 The following trenched evaluation is required:
- A single linear trial trench is to be excavated, 6.00m long x 1.80m wide to cover the area of the new extension.
  - A single linear trial trench is to be excavated, 30.00m long x 1.80m wide to cover the area of the new hard play.
- 3.2 If excavation is mechanised a toothless 'ditching bucket' 1.50m wide must be used. A scale plan showing the proposed locations of the trial trenches should be included in the WSI and the detailed trench design must be approved by SCCAS/CT before field work begins.
- 3.3 The topsoil may be mechanically removed using an appropriate machine with a back-acting arm and fitted with a toothless bucket, down to the interface layer between topsoil and subsoil or other visible archaeological surface. All machine excavation is to be under the direct control and supervision of an archaeologist. The topsoil should be examined for archaeological material.
- 3.4 The top of the first archaeological deposit may be cleared by machine, but must then be cleaned off by hand. There is a presumption that excavation of all archaeological deposits will be done by hand unless it can be shown there will not be a loss of evidence by using a machine. The decision as to the proper method of excavation will be made by the senior project archaeologist with regard to the nature of the deposit.
- 3.5 In all evaluation excavation there is a presumption of the need to cause the minimum disturbance to the site consistent with adequate evaluation; that significant archaeological features, e.g. solid or bonded structural remains, building slots or post-holes, should be preserved intact even if fills are sampled. For guidance:

For linear features, 1.00m wide slots (min.) should be excavated across their width;

For discrete features, such as pits, 50% of their fills should be sampled (in some instances 100% may be requested).

- 3.6 There must be sufficient excavation to give clear evidence for the period, depth and nature of any archaeological deposit. The depth and nature of colluvial or other masking deposits must be established across the site.
- 3.7 Archaeological contexts should, where possible, be sampled for palaeoenvironmental remains. Best practice should allow for sampling of interpretable and datable archaeological deposits and provision should be made for this. The contractor shall show what provision has been made for environmental assessment of the site and must provide details of the sampling strategies for retrieving artefacts, biological remains (for palaeoenvironmental and palaeoeconomic investigations), and samples of sediments and/or soils (for micromorphological and other pedological/sedimentological analyses. Advice on the appropriateness of the proposed strategies will be sought from Dr Helen Chappell, English Heritage Regional Adviser for Archaeological Science (East of England). A guide to sampling archaeological deposits (Murphy, P.L. and Wiltshire, P.E.J., 1994, *A guide to sampling archaeological deposits for environmental analysis*) is available for viewing from SCCAS.
- 3.8 Any natural subsoil surface revealed should be hand cleaned and examined for archaeological deposits and artefacts. Sample excavation of any archaeological features revealed may be necessary in order to gauge their date and character.
- 3.9 Metal detector searches must take place at all stages of the excavation by an experienced metal detector user.
- 3.10 All finds will be collected and processed (unless variations in this principle are agreed SCCAS/CT during the course of the evaluation).
- 3.11 Human remains must be left *in situ* except in those cases where damage or desecration are to be expected, or in the event that analysis of the remains is shown to be a requirement of satisfactory evaluation of the site. However, the excavator should be aware of, and comply with, the provisions of Section 25 of the Burial Act 1857.
- 3.12 Plans of any archaeological features on the site are to be drawn at 1:20 or 1:50, depending on the complexity of the data to be recorded. Sections should be drawn at 1:10 or 1:20 again depending on the complexity to be recorded. All levels should relate to Ordnance Datum. Any variations from this must be agreed with SCCAS/CT.
- 3.13 A photographic record of the work is to be made, consisting of both monochrome photographs and colour transparencies and/or high resolution digital images.
- 3.14 Topsoil, subsoil and archaeological deposit to be kept separate during excavation to allow sequential backfilling of excavations.
- 3.15 Trenches should not be backfilled without the approval of SCCAS/CT.

#### **4. General Management**

- 4.1 A timetable for all stages of the project must be agreed before the first stage of work commences, including monitoring by SCCAS/CT. The archaeological contractor will give not less than five days written notice of the commencement of the work so that arrangements for monitoring the project can be made.
- 4.2 The composition of the archaeology contractor staff must be detailed and agreed by this office, including any subcontractors/specialists. For the site director and other staff likely to have a major responsibility for the post-excavation processing of this evaluation there must also be a statement of their responsibilities or a CV for post-excavation work on other archaeological sites and publication record. Ceramic specialists, in particular, must have relevant experience from this region, including knowledge of local ceramic sequences.

- 4.3 Provision should be included in the WSI for outreach activities, for example, in the form of an open day and/or local public lecture and/or presentation to local schools.
- 4.4 It is the archaeological contractor's responsibility to ensure that adequate resources are available to fulfill the Brief.
- 4.5 A detailed risk assessment must be provided for this particular site.
- 4.6 No initial survey to detect public utility or other services has taken place. The responsibility for this rests with the archaeological contractor.
- 4.7 The Institute of Field Archaeologists' *Standard and Guidance for archaeological field evaluation* (revised 2001) should be used for additional guidance in the execution of the project and in drawing up the report.

## **5. Report Requirements**

- 5.1 An archive of all records and finds must be prepared consistent with the principles of English Heritage's *Management of Archaeological Projects*, 1991 (particularly Appendix 3.1 and Appendix 4.1).
- 5.2 The report should reflect the aims of the WSI.
- 5.3 The objective account of the archaeological evidence must be clearly distinguished from its archaeological interpretation.
- 5.4 An opinion as to the necessity for further evaluation and its scope may be given. No further site work should be embarked upon until the primary fieldwork results are assessed and the need for further work is established.
- 5.5 Reports on specific areas of specialist study must include sufficient detail to permit assessment of potential for analysis, including tabulation of data by context, and must include non-technical summaries.
- 5.6 The Report must include a discussion and an assessment of the archaeological evidence, including an assessment of palaeoenvironmental remains recovered from palaeosols and cut features. Its conclusions must include a clear statement of the archaeological potential of the site, and the significance of that potential in the context of the Regional Research Framework (*East Anglian Archaeology*, Occasional Papers 3 & 8, 1997 and 2000).
- 5.7 The results of the surveys should be related to the relevant known archaeological information held in the County Historic Environment Record (HER).
- 5.8 A copy of the Specification should be included as an appendix to the report.
- 5.9 The project manager must consult the County HER Officer (Dr Colin Pendleton) to obtain an HER number for the work. This number will be unique for each project or site and must be clearly marked on any documentation relating to the work.
- 5.10 Finds must be appropriately conserved and stored in accordance with *UK Institute of Conservators Guidelines*.
- 5.11 Every effort must be made to get the agreement of the landowner/developer to the deposition of the full site archive, and transfer of title, with the intended archive depository before the fieldwork commences. If this is not achievable for all or parts of the finds archive then provision must be made for additional recording (e.g. photography, illustration, scientific analysis) as appropriate.

- 5.12 The project manager should consult the intended archive depository before the archive is prepared regarding the specific requirements for the archive deposition and curation, and regarding any specific cost implications of deposition.
- 5.13 If the County Store is the intended location of the archive, the project manager should consult the SCCAS Archive Guidelines 2010 and also the County Historic Environment Record Officer regarding the requirements for the deposition of the archive (conservation, ordering, organisation, labelling, marking and storage) of excavated material and the archive. A clear statement of the form, intended content, and standards of the archive is to be submitted for approval as an essential requirement of the WSI.
- 5.14 The WSI should state proposals for the deposition of the digital archive relating to this project with the Archaeology Data Service (ADS), and allowance should be made for costs incurred to ensure the proper deposition (<http://ads.ahds.ac.uk/project/policy.html>) with ADS or another appropriate archive depository.
- 5.15 Where positive conclusions are drawn from a project (whether it be evaluation or excavation) a summary report, in the established format, suitable for inclusion in the annual 'Archaeology in Suffolk' section of the *Proceedings of the Suffolk Institute for Archaeology*, must be prepared. It should be included in the project report, or submitted to SCCAS/CT, by the end of the calendar year in which the evaluation work takes place, whichever is the sooner.
- 5.17 County HER sheets must be completed, as per the County HER manual, for all sites where archaeological finds and/or features are located.
- 5.18 An unbound hardcopy of the evaluation report, clearly marked DRAFT, must be presented to SCCAS/CT for approval within six months of the completion of fieldwork unless other arrangements are negotiated with the project sponsor and SCCAS/CT.
- Following acceptance, two copies of the report should be submitted to SCCAS/CT together with a digital .pdf version.
- 5.19 Where appropriate, a digital vector trench plan should be included with the report, which must be compatible with MapInfo GIS software, for integration in the County HER. AutoCAD files should be also exported and saved into a format that can be imported into MapInfo (for example, as a Drawing Interchange File or .dxf) or already transferred to .TAB files.
- 5.20 At the start of work (immediately before fieldwork commences) an OASIS online record <http://ads.ahds.ac.uk/project/oasis/> must be initiated and key fields completed on Details, Location and Creators forms.
- 5.21 All parts of the OASIS online form must be completed for submission to the County HER. This should include an uploaded .pdf version of the entire report (a paper copy should also be included with the archive).

Specification by: Dr Jess Tipper

Suffolk County Council  
Archaeological Service Conservation Team  
9–10 The Churchyard, Shire Hall  
Bury St Edmunds  
Suffolk IP33 2AR  
Tel: 01284 352197  
Email: [jess.tipper@suffolk.gov.uk](mailto:jess.tipper@suffolk.gov.uk)

Date: 27 June 2010

Reference: / WestRowSchool-Mildenhall2010

**This brief and specification remains valid for six months from the above date. If work is not carried out in full within that time this document will lapse; the authority should be notified and a revised brief and specification may be issued.**

**If the work defined by this brief forms a part of a programme of archaeological work required by a Planning Condition, the results must be considered by the Conservation Team of the Archaeological Service of Suffolk County Council, who have the responsibility for advising the appropriate Planning Authority.**