

# Swinton Pottery SAM, Swinton, Near Rotherham, South Yorkshire

National Grid Reference: SK 439 989 (centred)

## Archaeological Watching Brief Report

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## OASIS SUMMARY FORM

<b>PROJECT DETAILS</b>		
OASIS identifier	Arucs2-46457	
Project title	Swinton Pottery	
Short description of the project	Watching brief carried out during the de-silting of two ponds that are within the boundary of a Scheduled Ancient Monument of the Swinton Pottery (SAM 29957). The ponds had been previously de-silted so no archaeological deposits were uncovered. Possible kiln waste was located along the southeast bank and a brick lined culvert was exposed in the northeast corner of the pond. The culvert appeared to run to the northeast and was possible installed to carry away excess water from the upper pottery pong.	
Project dates	22-05-2008 to 17-06-2008	
Previous/future work	None	
Monument type and period	Pond – Post medieval	
Significant finds (artefact type and period)	Bricks – post-medieval; Leather – post-medieval	
<b>PROJECT LOCATION</b>		
County/Parish	South Yorkshire, Swinton	
Site address	Swinton Pottery, Blackamoor Road, Swinton, S64 8UX	
Site co-ordinates	SK 439 989	
Site area	2.1 hectares	
Height OD		
<b>PROJECT CREATORS</b>		
Organisation	ARCUS	
Project brief originator	English Heritage	
Project design originator	ARCUS	
Project supervisor	Helen Holderness	
Project manager	Anna Badcock	
Sponsor or funding body	M. R. Newell	
<b>PROJECT ARCHIVES</b>		
<b>Archive Type</b>	<b>Location/Accession no.</b>	<b>Content (e.g. pottery, metalwork, etc)</b>
Physical	Clifton Park Museum, Rotherham	Bricks, leather, ceramics
Paper	Clifton Park Museum, Rotherham	Site archive eg context sheets, drawings
Digital	South Yorkshire HER	Pdf copy of report, digital photographs
<b>BIBLIOGRAPHY</b>		
Title	Archaeological Watching Brief of land at Swinton Pottery SAM, South Yorkshire	
Report no	1173.1(1)	
Author	Helen Holderness	
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## **NON-TECHNICAL SUMMARY**

*ARCUS were commissioned by Mr. R. Newell to undertake a programme of augering and an archaeological watching brief at the Swinton Pottery SAM (The Rockingham Works), South Yorkshire. The work was carried out in May and June 2008. The works were required as part of Scheduled Monument Consent for the clearing and de-silting of two ponds.*

*The ponds were initially hand-augered to assess the depth of the deposits. The results of the auger survey concluded that the upper pond had a consistent depth of approximately 1.30m. Most of the pond was filled with silty grey deposits of well-rotted vegetation. No artefacts were recovered. The lower pond was shallower and silt deposits were encountered at a depth of 0.25m*

*During the de-silting of the ponds a brick-lined culvert was uncovered in the northeast corner of the upper pond. This led to the northeast in the general direction of the uppermost pottery pond. Brick samples were taken and provided a 17<sup>th</sup> and 18<sup>th</sup> century date for their manufacture. A small T-shaped piece of leather from a shoe was also recovered.*

*The lower pond had been used as a dump and contained a small amount of bricks and stones, probably from the farm buildings that had previously stood on the southwest of the site.*

## 1 INTRODUCTION

ARCUS were commissioned in by Mr. R. Newell in June 2008 to undertake a programme of augering and watching brief at the Swinton Pottery (The Rockingham Works) Scheduled Ancient Monument (SAM 29957), Swinton, South Yorkshire (centred on SK 439 989) (**Illustration 1**). The archaeological works were required as part of Scheduled Monument Consent for the cleaning and de-silting of two existing ponds. A method statement for the de-silting works was provided to English Heritage by the client (R. Newell).

## 2 AIMS AND METHODOLOGY

### 2.1 Aims

The aims of the archaeological works were:

- to clarify the form and profile of the ponds;
- to determine the nature and depth of the silt and any archaeological deposits;
- to inform the extent and method of the de-silting activity
- to ensure that any archaeological remains or deposits exposed by the de-silting were recorded and interpreted;
- to produce a report detailing the recording and interpretation undertaken and setting that into local and historical context.

All work was undertaken with the Institute of Field Archaeologists' *Code of Conduct* (1997 and 1999).

### 2.2 Methodology

The archaeological work comprised of two stages: evaluation (hand-augering of the silts) and supervision of the de-silting works.

#### 2.2.1 Augering

A hand operated auger was used with a 0.05m gouging bit and a 0.10m spiral bit.

The depth and nature of the silts within the ponds were unknown and were augered to establish the depth of accumulated leaf litter and silt. The auger coring stopped at the top of the clay bed.

A visual assessment was made to characterise the sediments.

#### 2.2.2 Watching Brief

A long-reach tracked mechanical digger was used to de-silt to pond to the clay bed under the strict control of a professional archaeologist. The silts were removed and stockpiled on site for removal at a later date (**Plate 9**). Due to the width of the pond and to lessen the impact of the mechanical digger on the banks of the pond, several platforms of brick rubble were positioned. These were removed after the completion of the de-silting and were monitored by a professional archaeologist.

Both ponds were photographed and a full written record was completed on the contexts encountered.

All retained finds were cleaned, marked, catalogued and packed in materials suitable for long term storage in accordance with the English Heritage guidance document A

*Strategy for the Care and Investigation of Finds* (1995).

Two site monitoring visits were made by Keith Miller, Inspector of Ancient Monuments for English Heritage.

The project was managed by ARCUS Assistant Director Anna Badcock and the fieldwork was carried out by ARCUS Project Archaeologist Helen Holderness assisted by ARCUS Site Assistant Justin Wiles in May and June 2008.

### 3 RESULTS

The ponds are in a field below the Swinton pottery (**Plate 1**). Only the pottery cone and the upper pottery pond survive although houses around the locale might have been used as outbuildings and other buildings connected to the potteries.

No previous archaeological work has been carried out in the immediate vicinity of the ponds.

#### 3.1 Pond A

Pond A was clearly defined and was almost totally silted up. There was a dense mat of vegetation in the southern part of the pond with the northern half being more liquid. The pond was rectangular in shape and approximately 50m by 10m in size. The pond is aligned northeast to southwest. There is an upper cut that is approximately 1m higher than the current pond surface which extends the limits of the pond by another 1.5m. The southern part of the pond had an 8m clay ledge, which appeared to be dumped clay.

The pond was augered (**Illustrations 2a** and **2b**) and the depth of the pond was consistently found to be within the range of 1.26m and 1.40m. The bottom of the pond was regular and the fluctuations in depth were due to surface debris. The pond debris was visually assessed and appeared to be homogenous, comprising watery silt sediments. The basal clay had very fine grains and was light grey in colour.

No archaeological material was recovered during the de-silting phase of works. The pond sediments were black-grey and formed by the accumulated vegetation within the pond [100]. On the eastern bank two small areas of light grey, ashy deposits were uncovered, [101] and [102] (**Plate 4**). These were very similar and were probably some form of kiln waste. Two small pieces of leather were recovered from [102]. These were identified as belonging to a toe-cap from a boot of possible 17<sup>th</sup> or 18<sup>th</sup> century date. These deposits ran under the baulk formed by the edge of the pond which could imply that the upper bank deposit has been brought in to make up the level of the bank.

A brick culvert [107] was recorded in the northeast corner of the pond (**Plate 6**). The culvert was 0.80m tall and 0.48m wide with a curved roof. It was constructed of handmade red brick, with specially shaped bricks used within the arch. The bricks may have been re-used, but appear to have been manufactured in the late 17<sup>th</sup> or early 18<sup>th</sup> century. A thick white grey deposit was found in the lower part of the culvert. The culvert as it was full of water. The water appeared to come from the upper pottery pond which was approximately 150m uphill.

It was not possible to completely empty the pond of all debris, but enough was uncovered to conclude that the pond had a regular shape and a flat base that was cut into the natural clay (**Plates 2, 3** and **5**). This clay was mid-grey and very fine.

## 3.2 Pond B

Pond B was approximately 20m by 10m and forms a rectangle but is less clearly defined than Pond A (**Illustrations 3a** and **3b**). The pond continues the alignment of the upper pond but it is unlikely that they had been a single pond in the past. The ground beyond the pond was wet and waterlogged but this was caused by run-off from the pond.

The pond was augered along a central line. Although the depth of the pond was 1m the sediment and silt at the bottom was only 0.25m and contained no archaeological material.

The sediments in Pond B were very similar to those in Pond A although thinner in both depth and composition. A dump of building debris was uncovered in the southern part of the pond [106] (**Plate 8**). This was formed from bricks; both machine and handmade, stone and sewer pipe (see section 4.1 below). Three pottery sherds were also recovered (see section 4.2 below). Only one of these sherds came from a vessel which was dated to the later 18<sup>th</sup> or 19<sup>th</sup> century: the others were a sherd of undateable ceramic tile and a sherd of sewer pipe. The rubble and other material are likely to have been deposited when the buildings in the southwest of the site were removed during the early 20<sup>th</sup> century.

The pond was not completely emptied of the sediments as the client wished to construct a wildlife pond and decided to leave some of the deposits *in situ* (**Plate 7**).

## 4 ARTEFACT ANALYSIS AND ASSESSMENT

### 4.1 Ceramic Building Material

By J. Tibbles

#### 4.1.1 Introduction and Methodology

Nine examples of brick, ceramic drains and kiln furniture was recovered from two contexts within pond A and B with a total weight of 20.416 kg. Assessment of the assemblage was based on a visual scan of all the retained material.

It should be noted that the diversity of size and colour within brick and tile caused during the manufacturing process must be taken into consideration when comparing examples within collected assemblages and local typologies. The varying sizes and colours can be attributed to the variation in the clays used, shrinkage during drying, firing within the kiln or clamp and the location of the brick/tile within the kiln. The dating of ceramic building material can be highly contentious due to its re-usable nature.

The assemblage was examined using a x15 magnification lens were applicable to aid dating, though fabric analysis was not undertaken as was considered beyond the scope of this assessment. Information regarding the dimensions, shape and fabric (where applicable) was recorded and catalogued accordingly

#### 4.1.2 The Assemblage

All the assemblage was of a post-medieval to modern date and manufactured in provisionally identified five different fabrics with six part bricks, three complete bricks and four ceramic objects with a combined weight of 20426 gm was submitted for assessment (**Table 1**).



The majority of the hand-made bricks bore evidence characteristic of their method of manufacture. i.e. moulding lips, moulding/drying sands and skintling marks.

Dating of bricks is highly contentious due to their re-use nature as a valuable building commodity. The standardisation of bricks by Parliament over the centuries helped to create a more uniform brick and better architecture. However, it should be noted that although these statutes were binding with severe finds for those contravening, it would be naive to believe that all pre-mechanical brickmakers adhered strictly to these sizes at all times.

#### **4.1.3 Pond A**

##### **Context 107**

One complete culvert brick displaying dimensions of 230mm x 111mm x 33-55mm and one near complete brick of same dimensions, both slop-moulded with impressions of a coarse drying surface. Based upon maximum thickness of 55mm, a mid to late 17<sup>th</sup> century date of manufacture is suggested. However, it should be noted that in hidden structures and wall infill the re-use of brick was common.

Two complete bricks with dimensions of 230mm x 115mm x 65mm which were slop moulded or 'pressed'. These had coarse fabrics with coarse drying surface impression on one surface. One sample displays lenses of unfired clay within the fabric. The stretcher edge showed a distinctive longitudinal skintling mark formed from the stacking of bricks within the kiln, tending to suggest a late 18<sup>th</sup> century date of manufacture (Campbell & Saint 2002).

One near complete brick measuring 220mm+ x 110mm x 65mm displayed a lime mortar over breaks. Slop moulded with coarse gravel drying impressions on one surface. Filling piece from culvert construction. Surviving dimensions suggest mid 17<sup>th</sup>-18<sup>th</sup> century (Lloyd 1925: 98-99)

Single fragment of non-diagnostic brick in a hard fabric. One surface displays a dark red glaze, opposite surface displays a whitish/yellow glaze. The fragment is likely to have been utilised as a kiln spacer/separator within the pottery kilns, retaining residual glaze from the glazing of the pots. Similar bricks have been recorded within re-deposited 17<sup>th</sup> century kiln demolition rubble at Beverley, East Yorkshire (Tibbles 2000) and Selby (Tibbles 2006).

Two large fragments of hand-made kiln furniture were identified as cylindrical *saggars* surviving to a height of 201mm and 17mm thick. Interior surfaces of sagger walls show evidence of white/grey engobe (clay wash). The second fragment represents a probable sagger base at least 80mm in diameter and 17mm thick. One flat surface (interior?) displays a white/grey engobe wash whilst the opposite surface displays a reddish brown glaze.

Saggars of a similar nature were recorded at Potovens (Wrenthorpe) pottery, near Wakefield (Moorhouse & Roberts 1992: 104) within 16<sup>th</sup>-17<sup>th</sup> century contexts. Saggars at this site had increased in height to 300mm by the early 18<sup>th</sup> century (Brears 1967: 36). Barton suggests that there is no evidence of their use before the 16<sup>th</sup> century (Barton 1926).

#### **4.1.4 Pond B**

##### **Context 106**

One part brick measuring 9mm x 110mm x 65mm. Surviving dimensions tend to suggest a mid 17<sup>th</sup>-18<sup>th</sup> century date of manufacture (Lloyd 1925,98-99). However, the

stretcher edge shows a distinctive longitudinal skintling mark, which tends to suggest a late 18<sup>th</sup> century date of manufacture (Campbell & Saint 2002).

Two part bricks displaying residual dimensions of 9mm x 105mm x 65mm and 9mm x 110mm x 70mm respectively. Sizes suggest 17<sup>th</sup>-18<sup>th</sup> century date range. Thinner brick displays longitudinal skintling mark suggesting a late 18<sup>th</sup> century date of manufacture (Campbell & Saint 2002).

A small flat fragment of tile 10mm thick has been provisionally identified as part of a Horseshoe land drain Type 1 (Tibbles in prep). Date range between 1780 and 1850.

Single fragment of salt-glazed sewer pipe 16mm thick glazed both internally and externally. Salt glazed earthenware pipes generally date from the early 19<sup>th</sup> century.

#### **4.1.5 Conclusions and Recommendations**

In conclusion the assemblage contained late post-medieval to early modern hand-made brick. The assemblage from Pond A gave a date range between the late 17<sup>th</sup> to 18<sup>th</sup> century based upon comparable brick sizes in other areas. Within the same assemblage large pieces of pottery kiln saggars were identified. The Pond B assemblage was of a similar date range but slightly later and contained fragments of land drain and sewer pipe.

No further work is recommended on the assemblage.

## **4.2 Ceramic**

By C.G. Cumberpatch

### **4.2.1 Introduction**

The pottery assemblage from excavations adjacent to the site of the Rockingham Pottery, Swinton was recovered from one of two ponds prior to the removal of accumulated silt deposits. The details are summarised in the catalogue below. All of the sherds and fragments were recovered from context 106.

### **4.2.2 Catalogue**

Two (joining and freshly broken) sherds from the rim of a pancheon in Brown Glazed Coarseware (161g); brown glazed internally with a sharply everted, flat rim; mid to later 18<sup>th</sup> or 19<sup>th</sup> century

One fragment of ceramic building material, possibly part of a tile(24g); undated

One fragment from a salt glazed sewer pipe (62g); mid to late 19<sup>th</sup> or early 20<sup>th</sup> century

### **4.2.3 Discussion**

Only one of the three sherds submitted for this report was from a pottery vessel. Brown Glazed Coarsewares are ubiquitous on sites of 18<sup>th</sup> and 19<sup>th</sup> century date. This example differs slightly from the norm in having a sharply everted flat rim rather than the commoner rounded and clubbed form but the significance of this is unknown.

### **4.2.4 Conclusion**

No further work is needed on the sherd of pottery but given the importance of the site in the history of pottery manufacture in South Yorkshire, it should be retained even though it is of relatively limited significance in its own right.

## 4.3 Leather

By Linzi Harvey

### 4.3.1 Summary

Two leather fragments were recovered from Pond A (see **Table 2**). They are shoe components. They are likely to be the toe cap from a wooden patten (an over shoe) which would date them to the 17<sup>th</sup> century. Alternatively, they could be from the toe puff (internal lining) or toe cap (outer covering for the toe area) from the vamp of a square toed shoe which would date them to the 18<sup>th</sup>-19<sup>th</sup> century (pers. comm. Quita Mould).

## 4.4 Glass

By Linzi Harvey

### 4.4.1 Summary

A single glass bottle was recovered and is described in **Table 3**.

The medicine bottle recovered from [100] is machine made and likely to date to the early part of the 20<sup>th</sup> century. It was embossed with measure lines and 'TABLESPOONS' indicating it contained a medicine to be taken orally. No further work is recommended.

## 5 DISCUSSION AND RECOMMENDATIONS

### 5.1 Results

The augering suggested that both ponds had been de-silted and possibly re-cut in the past which was confirmed by the watching brief during the silt removal. The silts had formed through the accumulation of vegetation in the pond.

Pond A had a more formal profile with an almost level base. It had not been used as a dump for any material and the silt deposit was homogenous. The northern end was more watery but this was due to the springs and culvert feeding into it. The pond exhibited signs that it had been de-silted in relatively recent past as the client remembered that his brother had swam in the pond approximately 40 years ago. It is likely that the pond had been periodically emptied as there were no artefacts or large pieces of wood found in the silt. Usually ponds tend to be used as rubbish dumps, especially on farms but Pond A showed no signs of this.

The culvert in the northeast corner, feeding from the upper pottery pond, suggests that the pond was formalised, probably during the early development of the potteries in the mid 18<sup>th</sup> century but its origins are unknown. The bricks were manufactured in the 17<sup>th</sup> or 18<sup>th</sup> centuries but they may have been re-used from another structure before being used for the culvert. The clay that the pond was cut into was very clean and fine and it is possible that it started as a small scale clay quarry and then developed into a pond.

The deposits located along the eastern side of Pond A and the leather found corroborates the idea that the pond was previously emptied as the deposits found were suggestive of kiln waste which had probably been dumped into the pond. The re-cutting of the pond exposed these which imply that the pond may have been smaller.

Pond B had a less formal profile and was less regular in both profile and shape. The

pond had been used as a small scale dump with the remnants of building materials uncovered at the southern end. Mr Newell suggested that they had been dumped from the farm buildings that had stood in the southwest corner of the field.

## 5.2 Recommendations

There was no archaeological evidence to tie in the Rockingham Pottery directly to the ponds. The date from the bricks suggests an earlier date as the Rockingham Works was initially in production from 1826-1830, and the culvert could be part of an earlier pot works that may have been on the site.

In conclusion the re-cutting of the ponds had removed any archaeological evidence that might have been in the ponds and has meant that further work is limited. Previously the relationship between the lower ponds and the pottery, which sits on the hill above the ponds, was not entirely clear, but it is now evident that Pond A was probably constructed to carry excess water away from the upper pottery pond and that Pond B developed from a marshy area created by the run-off of Pond A.

The recommendations from the specialists suggest that no further work is required on the assemblage.

## 6 ARCHIVE

The archive will be deposited at Clifton Park Museum, Rotherham. Copies of the report will also be deposited with the Sites and Monuments Record held by South Yorkshire Archaeology Service, with English Heritage and with the client Mr. R. Newell.

## 7 BIBLIOGRAPHY

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## 8 APPENDIX 1 - TABLES

**Table 1 – CBM Assemblage Analysis**

Areas	No of fragments	Weight (gm)
Pond A	8	15010
Pond B	5	5406
<b>Total</b>	<b>13</b>	<b>20426gm</b>

**Table 2 - Leather**

Context	Context info.	No. frags	Date	Description and measurements
[102]		2	18 <sup>th</sup> - 19 <sup>th</sup> C	1 complete 'T' shaped leather fragment, measuring roughly 130mm by 130mm, width of cross bars around 50mm. Fairly coarse stitching visible on all edges. 1 fragment of similar 'T' shaped piece, part of the top cross bar of the 'T', measures 130mm by 50mm.
	<b>Total</b>	<b>2</b>		

**Table 3 - Glass**

Context	Context info.	No. frags	Date	Description and measurements
[100]	Pond sludge	1	Early 20 <sup>th</sup> C	Complete clear glass medicine bottle, rectangular 65x45mm at base, height 170mm. Embossed with horizontal measure lines and 'TABLESPOONS' on one side. Vertical seams past lip.
	<b>Total</b>	<b>1</b>		

## 9 APPENDIX 2 - CONTEXT LIST

Context Number	Type	Description
100	Deposit	Pond sludge – accumulated vegetation in Pond A
101	Deposit	Fine ashy clay deposit on lower bank of Pond A
102	Deposit	Fine ashy clay deposit on lower bank of Pond A
103	Cut	Cut for Pond A
104	Deposit	Pond sludge – accumulated vegetation in Pond B
105	Cut	Cut for Pond B
106	Deposit	Lower deposits in Pond B – rubble
107	Structure	Handmade red brick culvert in NE corner of Pond A

## **10 ILLUSTRATIONS**

## **11 PLATES**