

**Trench 20, Area A, Severn Street,
Royal Worcester Porcelain, Worcester**

**An Archaeological Evaluation
for Berkeley Homes (Oxford and Chiltern) Limited**

by Andrew Weale

Thames Valley Archaeological Services Ltd

Site Code RWP04/65

February 2008

Summary

Site name: Royal Worcester Porcelain, Severn Street and King Street, Worcester

Grid reference: SO 8215 5425

Site activity: Field Evaluation

Date and duration of project: 30th January 2008

Project manager: Steve Ford

Site supervisor: Andrew Weale

Site code: RWP04/65

Summary of results: The trench revealed modern truncation and remnants of a late 19th-century building, but did show that beneath an undated buried subsoil, a Roman gully survived.

Monuments identified: Roman gully

Location and reference of archive: The archive is presently held at Thames Valley Archaeological Services, Reading and will be deposited at Worcester City Museum in due course.

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	Steve Preston ✓ 29.02.08

Trench 20, Area A, Severn Street, Royal Worcester Porcelain, Worcester An Archaeological Evaluation

by Andrew Weale

Report 04/65h

Introduction

This report documents the results of an archaeological field evaluation carried out at Severn Street, Royal Worcester Porcelain, Worcester (SO 870 543) (Fig. 1). The work was commissioned by Mr Cliff Buddery of Berkeley Homes (Oxford and Chiltern) Ltd, Berkeley House, Abingdon Science Park, Barton Lane, Abingdon, Oxfordshire, OX14 4NB.

Planning permission (App no P05D0432) has been gained from Worcester City Council to redevelop the site of the Royal Worcester Porcelain works for a hotel complex and new residential apartments, with the refurbishment and reuse of existing historic buildings. This permission applies to both the northern and southern parts of the Porcelain Works complex, and the planning consent is subject to three archaeological conditions (54, 55 and 56). Conservation Area consent has also been gained (App no L05D0073) with a further condition (2) for a record of the factory buildings and manufacturing processes prior to demolition. A summary of the relevant consents is presented in a brief for the project (WCM2006). The conditions attached are in accordance with the Department of the Environment's Planning Policy Guidance, *Archaeology and Planning* (PPG16 1990), and the City Council's policies on archaeology.

For planning and development purposes the Severn Street site has been divided into three zones, Areas A-C (Fig. 1) and this archaeological evaluation concerns one location within Area A. This stage of evaluation consisted of one trench excavated across the footprint of Building M, the Grinding and Polishing Shop (west), following its demolition for structural reasons. This is the latest in a series of investigations on this part of the site (AA 2005b; AA 2005c; Cass 2007; Milbank and Muddin 2007; Milbank and Weale 2007). The southern section of the site has previously been reported upon (Wallis and Colls 2006).

The field investigation was carried out to a specification approved by Mr James Dinn, Archaeological Officer for Worcester City Council. The fieldwork was undertaken by Andrew Weale and David Platt on the 30th January 2008 and the site code is RWP 04/65. The archive is presently held at Thames Valley Archaeological Services, Reading and will be deposited with Worcester City Museum in due course.

Location, topography and geology

The site is located in the Diglis area of Worcester, which is situated in the Severn Valley, to the north of the Severn's confluence with the River Teme. The site itself lies in the valley of a former tributary to the Severn, the Frog Brook, whose extant part now comprises part of the Birmingham to Worcester Canal. According to the British Geological Survey, the underlying geology consists of alluvium, with gravel terrace deposits of the River Severn occurring at the northern edge of the site (BGS 1993). A borehole investigation (STATS 2004) showed that on average, made ground overlay alluvial deposits to a depth of at least 2m below present ground level.

The site comprised an irregular parcel of land, the majority of which was occupied by large industrial buildings, many undergoing demolition or rebuilding and the visitor's car park area. The evaluation was situated within the former footprint of Building M within the site. The site is reasonably flat at a height of approximately 17m above Ordnance Datum.

Archaeological background

The archaeological background and potential of the site has been investigated in a desk-based assessment, small scale evaluation and watching brief during geotechnical investigation (AA 2005a; 2005b; 2005c; Morriss and Sherlock 2005), and small scale evaluations and a watching brief carried (Wallis and Coles 2006; Cass 2007a and b; Milbank and Muddin 2007; Milbank and Weale 2007). In summary, the site lies close to the confluence of the Frog Brook and River Severn (Fig. 1). Such a riparian location, especially if a terrace edge can be identified, is often one preferred for earlier prehistoric settlement and the Worcester City Historic Environment Record notes the presence of prehistoric metalwork finds recovered from the river nearby. There is also a possibility of the presence of Roman deposits on the site, perhaps associated with a river port. Roman deposits including burial are recorded both to the south of the site and immediately to the north at the Severn Street site (AA 2005b; 2005c). Prior to use as a factory, the site was used as allotments, a ropewalk, timber yard and saw mill and apparently as a dump for pottery manufacturing waste. An evaluation at the southern end of the site (Portland Walk) (Wallis and Colls 2006) failed to identify any deposits of archaeological interest (Fig. 2).

The northern zone, which comprises Areas B and C and the northernmost part of Area A, of the planning and development timetable, includes the medieval town wall and ditch, a tower, the site of St Peter's church and graveyard, and tenements. The church is recorded in Saxon times and it is likely that late Saxon remains are to be found in the same zone as the medieval deposits. The extent of the Roman town is less clear cut but earlier limited pre-determination evaluation located some Roman deposits at the northern end of the site in Area B.

Roman occupation and burial are recorded just to the north-west of the redevelopment site and further burial deposits are recorded to the south-west.

In early post-medieval times, specifically at the time of the civil war, the site was traversed by the earthen defences erected to defend the city. The site area was occupied in later post-medieval times for pottery production and eventually became the Royal Porcelain Works. A recent evaluation comprising machine dug trenches was carried out on Area A (Cass 2007a and b), where walls and other brick-built features of late 19th- and early 20th-century date were encountered. These relate to both earlier and more recent phases of use of the site for structures associated with porcelain production. Three dumps of pottery manufacturing waste were also sampled. Watching briefs have been carried out on service trenching and ground reduction in areas B and C, and the northern part of Area A, together with Japanese Knot Weed removal in the northern section of Area A alongside the canal and the excavation of a burrow pit for the deposition of the Knot Weed. A small part of a sandstone wall of possible medieval date, and 18th- to 20th-century brick structures relating to the Porcelain Works, the churchyard of St Peter the Great and housing on King Street and Severn Street were encountered (Milbank and Mundin 2007; Milbank and Weale 2007).

Objectives and methodology

The purpose of the evaluation was to determine the presence/absence, extent, condition, character, quality and date of any archaeological deposits within the area of development.

Specific aims of the project were;

To determine if archaeologically relevant levels have survived on the site.

To determine if archaeological deposits of any period are present

To determine if there are any deposits of prehistoric, Roman or later date.

To determine if there are any deposits present relating to Royal Porcelain Works manufacturing or earlier pottery manufacturing facilities are present.

One trench was excavated using a 360° tracked machine. Crushed concrete and demolition material was removed using a toothed bucket; a toothless grading bucket was employed in more archaeologically sensitive deposits under constant archaeological supervision. The trench was extended from the specified 7.0m to 10m due to the difficulty in locating the footprint of Building M beneath the overlying crushed concrete and brick rubble layer masking this portion of the site. The trench was located as near as possible to its intended position given on-site constraints (Figs 2 and 3) and all spoil heaps were monitored for finds. A metal detector was employed to

aid the recovery of metallic items. Mr James Dinn, Archaeological Officer for Worcester City Council was kept informed of the progress and changes to the specification.

A summary of the trench giving length, breadth, depth and a description of section and geology is given in Appendix 1. A list of features forms Appendix 2.

Results

Trench 20 (Figs 4 and 5; Pls 1-3)

The trench measured 9.2m long by 2.20m wide and was 3.27m deep at its deepest point. The observed stratigraphy within the trench was 0.12m of crushed concrete and ceramic building material over 0.61m of demolition material (750), mostly brick and concrete rubble with dark brown silty clay together with plastic coated wire. Beneath this was 0.78m of made ground (751) consisting of a reddish brown sandy/silty clay with frequent brick, tile, concrete, wood, pottery, kiln furniture, plastic, wire, metal pipes, saggars and pieces of moulds. Beneath this in the northern part of the trench was wall 752 and in the southern part dump 761.

Wall 752 survived as a single brick course made of unfrosted bricks measuring 240mm by 120mm by 80mm together with two courses of mortar 10mm thick above and below the brick course. Wall 752 was set on a concrete foundation 753. This foundation was 0.96m wide, 0.41m thick and extended across the trench. The concrete was in a heavily fractured condition and appears to be in the same alignment as the exterior wall to Building M, and may have formed part of it. Fragments of unglazed waste pottery were recovered from foundation 753, which did not appear to have an associated foundation cut.

Beneath made ground 751 in the southern part of the trench was dump 761, which was 3.50m+ long, 1.54m thick and extended across the trench. Dump 761 was a mixture of loose reddish brown sandy silt with frequent brick, concrete, tile, slate pottery, kiln furniture, mould fragments, wire and plastic bag fragments. Dump 761 overlay dump 755 which was 2.4m long, 1.53m thick and extended across the trench. Dump 755 was similar to dump 761 but contained a higher proportion of ash and burnt debris; it also contained a quantity of clear plastic bags marked with Royal Worcester in blue. Beneath dump 755 was wall 756.

Wall 756 consisted of two courses of unfrosted bricks which measured 240mm by 120mm by 80mm in what appeared to be header on stretcher bond together with two courses of mortar 10mm thick. Wall 756 extended across the trench but was heavily fractured. Beneath the bottom course of brick was a layer of mortar mixed with a high portion of black burnt material 760. This layer was 0.06m thick and 0.30m wide and extended across the trench. Layer 760 contained unglazed pottery fragments. Beneath layer 760 was foundation 757. Foundation 757 consisted of fractured white concrete with a moderate proportion of brick, pottery, ceramic

fragments and small rounded gravel. Foundation 757 was 0.60m wide, 0.71m thick and extended across the trench on the same alignment as wall 752. Foundation 757 was set within the remains of cut 702 which was linear in plan with vertical sides and a flat bottom but only 0.02m deep (Plate 3). Wall 756 with its foundation and foundation cut may represent a basement level within Building M and was within cut 701.

Cut 701 was a large cut which appeared to have a linear upper edge, steeply sloping sides and a gently sloping base. Cut 701 was 6.5m+ long 1.58m deep and extended across the trench. Cut 701 may have been associated with the construction of the wall 756 and Building M, or its demolition.

Cut 701 cut through layer 758. Layer 758 was firm dark reddish brown silty clay with occasional small rounded pebbles and charcoal flecks. Layer 758 was 0.20m thick and extended across the trench. Layer 758 contained no artefacts and appears to be buried subsoil. Beneath subsoil 758 was gully 703.

Gully 703 was 0.60m wide and 0.20m deep and was filled with deposit 754. It cut the natural geology. Fill 754 was firm mid reddish brown silty clay with occasional sub-rounded pebbles, pottery, burnt bone and slag. Deposit 754 filled cut 703 which was linear in plan with steeply sloping sides and a flat base. Cut 703 appears to be the remains of a gully which was later cut by 701. The natural geology was a firm mid red silty clay with moderate sub-rounded stones as encountered elsewhere on the site.

Finds

Pottery by Alan Vince and Kate Steane

Roman

Sixteen sherds of one or more Severn Valley Ware jars were recovered from gully 703(754). The fabric contains abundant charcoal fragments, a feature which in Gloucester was particularly common in the later 1st and 2nd centuries.

Early Modern

Twenty-nine sherds of kiln furniture made from Coal Measures Whiteware clay, containing numerous rounded off-white clay pellets in a similarly-coloured groundmass, were recorded. The clay could have been obtained from the Staffordshire potteries, Bristol or almost any area where the Coal Measures outcrop. Most of the fragments came from saggars, some of extremely large diameter. Several had a layer of bitstone on the inside of the base, to raise the pots being fired in the saggar above the base level. Several had vitrified exterior surfaces. Four spacers were present. These were short sausages of clay which had been squashed to an oval section. The maximum cross-sectional dimensions were measurable in three cases: 9 by 6mm; 5 by 13mm and 7 by 10mm.

The remaining fragments were made in a fine white clay, presumably one which if fired to the correct temperature would have formed porcelain. All were actually biscuit fired. The fragments include turned rings, presumably used as separators within saggars. These rings occurred in a variety of sizes ranging from 50mm to 130 mm in diameter. A single example of a moulded trivet was present. The remainder consisted of fragments of biscuit-fired porcelain, including bowls, cups, a figurine, jars, jugs, and plates.

None of the pieces included any features which were immediately closely datable but the material is very similar to that from previously reported finds which it was suggested dated to the mid 20th century.

Gully 703 can be dated to the later 1st century or later and the pottery appears to be fresh, so the deposit is likely to be of early Roman date. The remaining contexts, 753, 755, 757, and 760, all date to the later 18th century or later, and most probably all are actually of 20th-century date.

Ceramic Building Material by Alan Vince and Kate Steane

Two fragments of brick, one with concrete adhering to it, were submitted. They were not examined in detail.

Conclusion

Modern truncation associated with the building and demolition of Building M removed the archaeological potential for the majority of the trench. In the northern quarter of the trench beneath the footings for Building M, an undated subsoil survived. This subsoil sealed an earlier gully which was dated to the Roman period by 1st or 2nd century AD pottery it contained. This gully extended north-west beyond the limit of the trench. The buried subsoil was at a height of 15.67m AOD, with the surface of the natural geology through which the gully was cut at 15.46m AOD. These were located c. 1.8m below the current ground level.

In the demolition of Building M, the Grinding and Polishing Shop (west), the walls have been removed down to the top of the footing level, which has been heavily fractured. Pottery removed from the concrete footings of Building M was dated to the late 18th to early 20th centuries. Building M predated the building that butted against its eastern gable (Building N, the Grinding and Polishing Shop (east)). The decoration of that range suggests an 1870s date therefore Building M must predate it and may be as early as the 1860s (Morriss and Sherlock 2004, 36). Building M first appears on the First Edition Ordnance Survey map of 1884.

Subsequently to the demolition of Building M dumps of modern made ground have been deposited across the whole of the area of the evaluation.

References

- AA, 2005a, 'Portland Walk, Worcester, an archaeological desk-based assessment', Archenfield Archaeology, WCM 101315, Fownhope
- AA, 2005b, 'The archaeological evaluation of Royal Worcester Porcelain, Severn Street, Worcester; Stage 1', Archenfield Archaeology, WCM 101323, Fownhope
- AA, 2005c, 'The archaeological evaluation of Royal Worcester Porcelain, Severn Street, Worcester; Stage 2', Archenfield Archaeology, WCM 101382, Fownhope
- BGS, 1993, *British Geological Survey*, 1:50000, Sheet 199, Solid and Drift Edition, Keyworth
- Cass, S, 2007, 'Trenches 12 and 13, Area A Severn Street, Royal Worcester Porcelain, Worcester, an archaeological evaluation', Thames Valley Archaeological Services report 04/65d, Reading
- Cass, S, 2007b, 'Trenches 1-11 and 16-19, Area A, Severn Street, Royal Worcester Porcelain Factory, Worcester, an archaeological evaluation', Thames Valley Archaeological Services report 04/65e, Reading
- English Heritage 1997, Research Agenda (Draft, 8th April), Archaeology Division, English Heritage, London
- Millbank D and Mundin A, 2007, 'Royal Worcester Porcelain Factory, Severn Street and King Street, Worcester, an archaeological watching brief (service trenches)', Thames Valley Archaeological Services report 04/65f, Reading
- Millbank D and Weale A, 2007, 'Royal Worcester Porcelain Factory, Severn Street and King Street, Worcester, an archaeological watching brief (Japanese knotweed removal)', Thames Valley Archaeological Services report 04/65g, Reading
- Morriss, R K and Sherlock H, 2004, 'Royal Worcester Porcelain Factory, an outline heritage appraisal with brief notes on the built heritage', Archenfield Archaeology, AA/04/70/1, Herefordshire
- Morriss, R K and Sherlock H, 2005, 'Re-development of surplus land at the Royal Worcester Porcelain Factory' PPG16, 1990, *Archaeology and Planning*, Dept of the Environment Planning Policy Guidance 16, HMSO
- Sherlock, H, and Feryok, M, 2004, 'Royal Worcester Porcelain Factory and St Peter's Church, desk-based assessment', Archenfield Archaeology, AA/04/70/3, Herefordshire
- STATS, 2004, 'Royal Worcester Site, Severn Street and Portland Walk, Worcester, Geotechnical and Geoenvironmental Report', STATS Ltd, report 34281/02, St Albans
- Vince, A and Steane, K, 2007, Assessment of Pottery and Kiln Furniture from the Royal Worcester Porcelain Factory, Worcester (RWP04/65). AVAC Reports 2007/74 Lincoln
- Wallis, S and Colls, D, 2006, 'Portland Works, Royal Worcester Porcelain, Portland Walk, Diglis, Worcester', Thames Valley Archaeological Services report 04/65, Reading
- WCM 2006, 'Brief for archaeological mitigation (including evaluation), Royal Worcester Porcelain site, Portland Walk, Worcester', Worcester City Museum Archaeology Section Brief 06/5

APPENDIX 1: Trench details

0m at south end

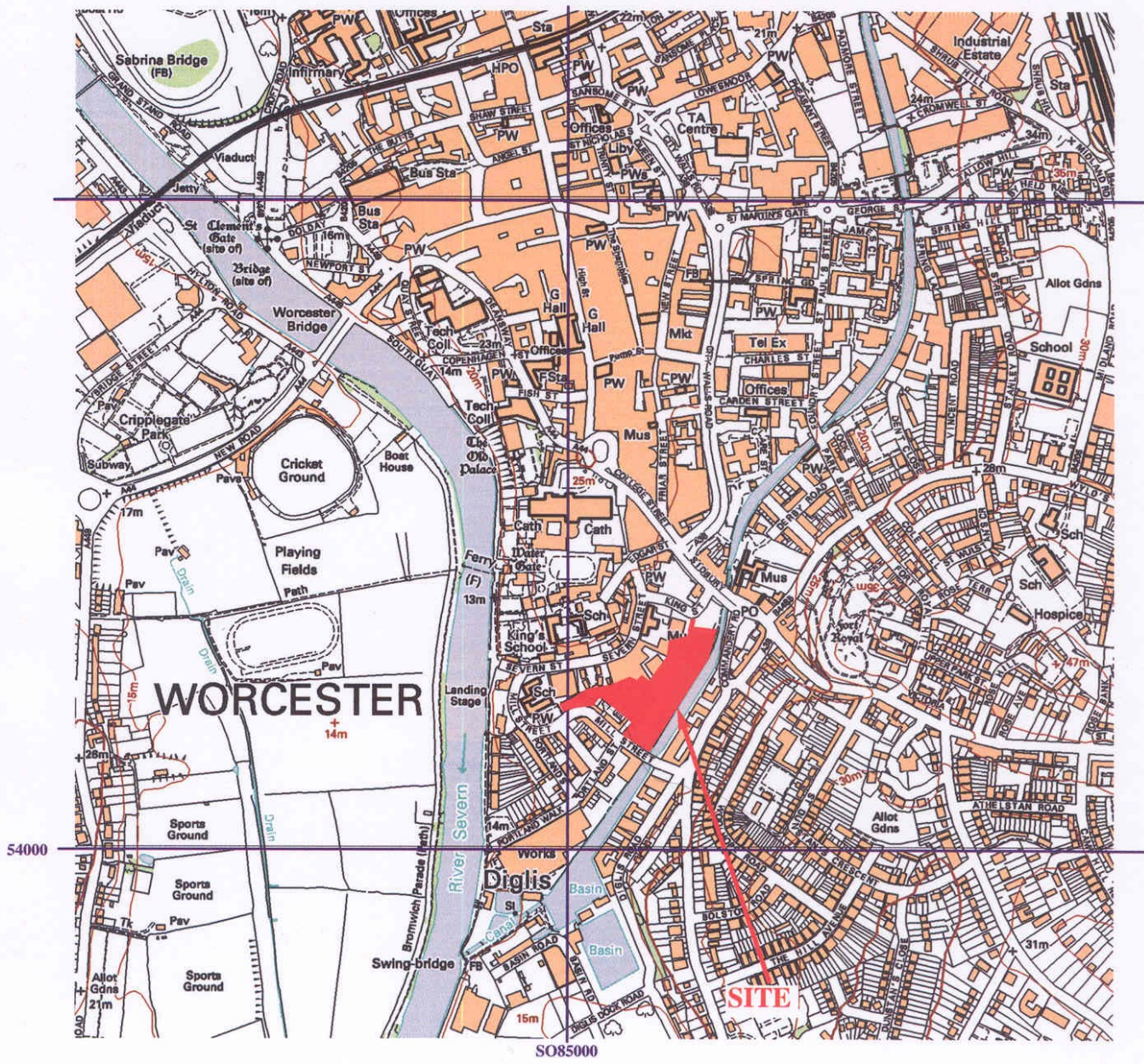
Trench	Length (m)	Breadth (m)	Depth (m)	Comment
20	10.0	2.20	3.27	Layers of modern made ground and dumps (750, 751, 755, and 761). Wall 752, wall 756, cut 701, and gully 703. Natural geology at 15.46m AOD

APPENDIX 2: Feature details

Trench	Cut	Fill (s)	Type	Date	Dating evidence
20		752, 753	wall	Late 18th-early 20th century	Pottery
20	702	756, 757 and 760	wall	Late 18th-early 20th century	Pottery
20	701	755, 761	?		None
20	703	754	Gully	Roman 1st-2nd century	Pottery

Appendix 3. Pottery

Context	Cname	Subfabric	Description	Form	Part	Nosh	Weight	Condition
753	Enpo	Biscuit		Bowl	B	1	26	
753	Enpo	Biscuit		Plate	R;bs	2	20	
753	Enpo	Biscuit		Jar	B	1	12	
753	Enpo			Plate	B	1	8	
703,754	Svw			Jar	Bs	2	23	
703,754	Svw		Cordon on shoulder	Jar	Bs	14	80	
755	Enpo	Biscuit	Plate frag attached to plaster	Plate/plaster	Bs	1	99	Ashy soil dep
755	Cmw		Frag	Sagger	Bs	1	5	
755	Pmtil			Concrete and brick	Bs	1	5	
755	Cmw		Spacer; squashed to 9 by 6	Kilf	Bs	1	7	
755	Enpo?	Biscuit	Test cone? 24 base dia; 48 tall	Kilf	Near complete	1	20	
755	Enpo	Biscuit	Frag	Kilf	Part	1	7	Ashy soil dep
755	Enpo	Biscuit	Ring 90 dia	Kilf	Part	1	12	Soil dep
755	Enpo	Biscuit	Ring 55 dia	Kilf	Part	1	17	Ashy soil dep
755	Enpo	Biscuit	Ring 130 dia	Kilf	Part	1	40	Soil dep
755	Enpo	Biscuit	Ring 55 dia	Kilf	Part	1	26	Ashy soil dep
755	Enpo		Ornate moulded handle	Jug	H	1	33	
755	Enpo	Biscuit		Cup	R;bs	5	8	Soil dep
755	Enpo	Biscuit		Plate	R;b;bs	16	290	Soil dep
755	Cmw		Spacer; squashed to 5 by 13	Kilf	Bs	2	5	
755	Cmw		Frag	Sagger	Bs	4	24	
755	Cmw			Sagger	Bs	1	55	
755	Cmw		Frag	Sagger	Bs	3	87	
755	Cmw			Sagger	B	1	101	
755	Cmw			Sagger	R	1	46	
755	Cmw		Frag, bigger than 520 dia	Sagger, large	Bs	1	235	
755	Cmw		Frag	Sagger	Bs	2	137	
755	Cmw		52 deep	Sagger	Bs	1	163	
755	Enpo	Biscuit		Cup	R;bs	16	19	Soil dep
755	Enpo	Biscuit		Plate	R;b;bs	19	67	Ashy soil dep
755	Pmtil			Brick	Bs	1	2	
755	Enpo	Biscuit	Moulded	Figurine?	Bs	1	6	
755	Enpo	Biscuit	Drapery folds	Figurine	Bs	1	11	
755	Enpo			Plate	Bs	1	7	
755	Cmw		Spacer; squashed 10 by 7	Kilnf	Bs	1	3	
755	Cmw			Sagger	Bs	5	37	
755	Enpo	Biscuit	Trivet; one arm with point	Kilnf	Part	1	7	
755	Enpo	Biscuit	Frag	Kilnf	Part	3	13	Soil dep
755	Enpo	Biscuit	Ring 90 dia	Kilnf	Part	1	8	Soil dep
755	Enpo	Biscuit	Ring 60 dia	Kilnf	Part	1	8	Soil dep
755	Enpo	Biscuit	Ring 80 dia	Kilnf	Part	1	9	Soil dep
755	Enpo	Biscuit	Ring 60 dia	Kilnf	Part	1	12	Soil dep
755	Enpo	Biscuit	Ring 70 dia	Kilnf	Part	1	22	Soil dep
757	Cmw			Sagger	Bs	5	97	
757	Enpo	Biscuit		Large jar	43	1	43	Ashy soil dep
757	Enpo	Biscuit		Plate	B	1	13	Soil dep
757	Enpo	Biscuit		Plate	B;bs	4	64	Ashy soil dep
757	Enpo	Biscuit	Ring 80 dia	Kilnf	Part	1	26	Ashy soil dep
760	Enpo	Biscuit	Ring 50 dia	Kilnf	Part	1	12	Soil dep
760	Enpo	Biscuit		Plate	R;bs	3	40	Soil dep



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Royal Worcester Porcelain, Severn Street,
Worcester 2008
Archaeological Evaluation

Figure 1. Location of site within Worcester.

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Royal Worcester Porcelain, Severn Street, Worcester, 2008

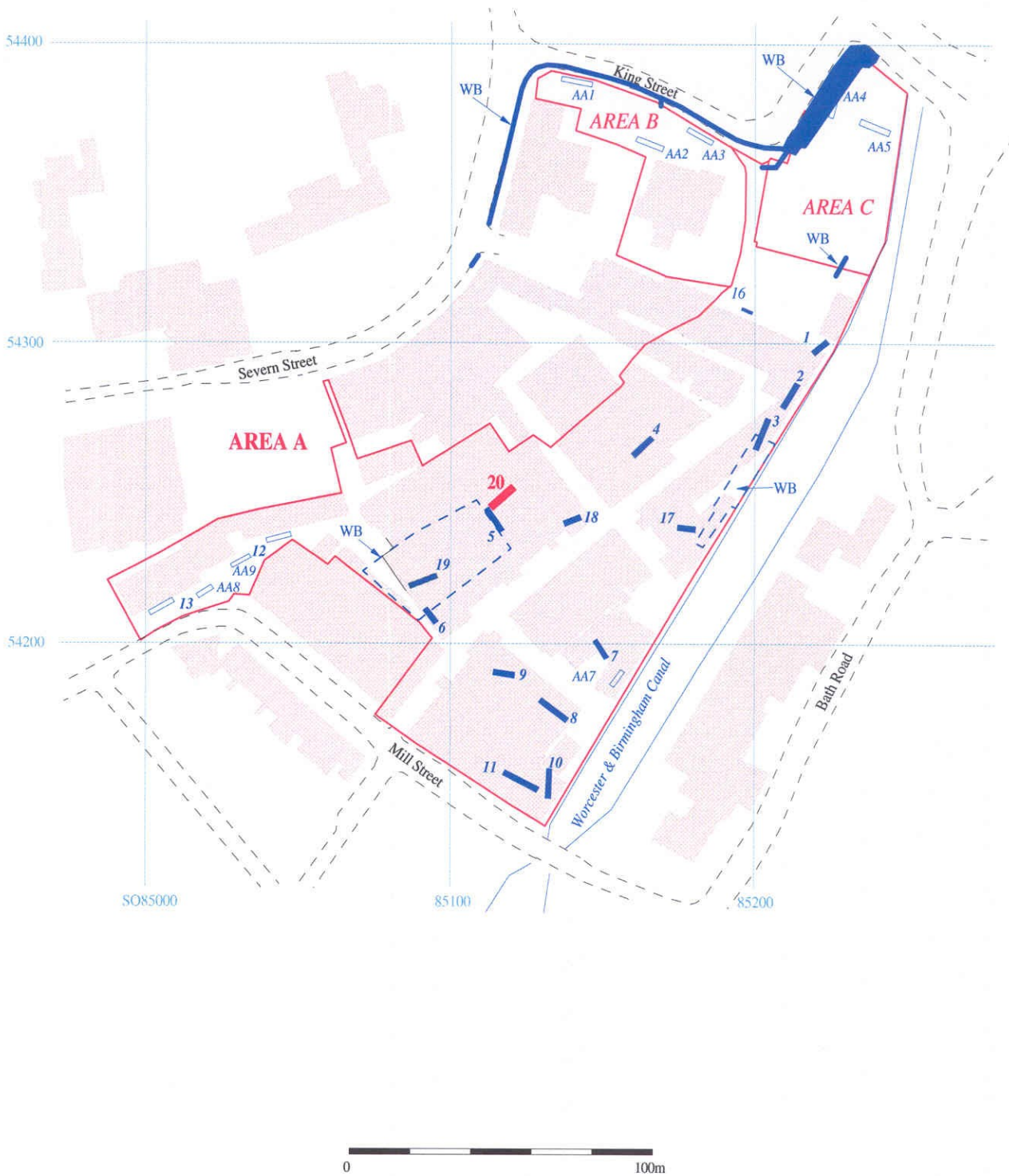


Figure 2: Overall plan of Severn Street site showing Trench 20 in relation to locations of previous fieldwork (blue).

Royal Worcester Porcelain, Severn Street, Worcester, 2008

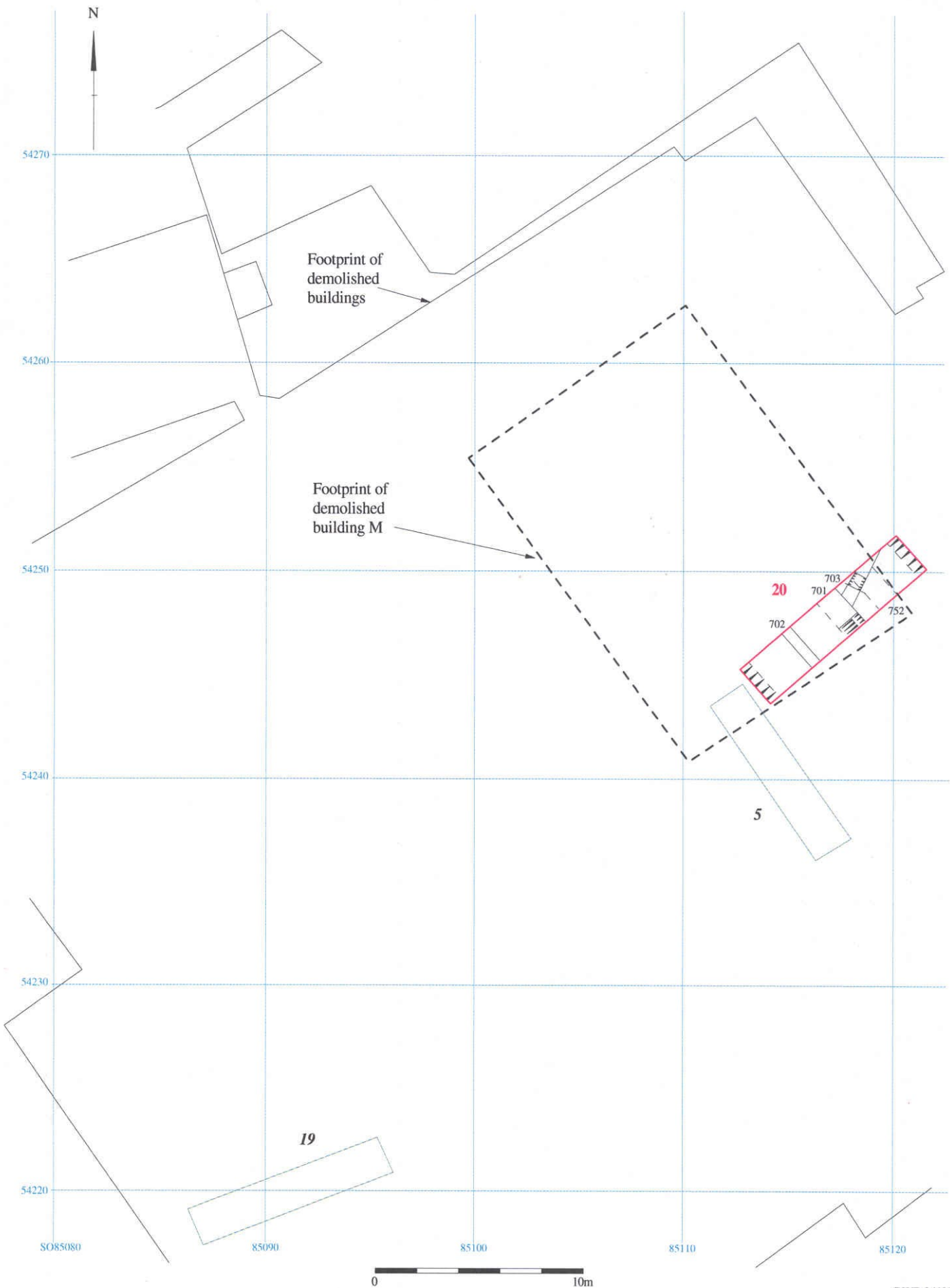


Figure 3: Detailed location of Trench 20 in relation to demolished buildings.

Royal Worcester Porcelain, Severn Street, Worcester, 2008

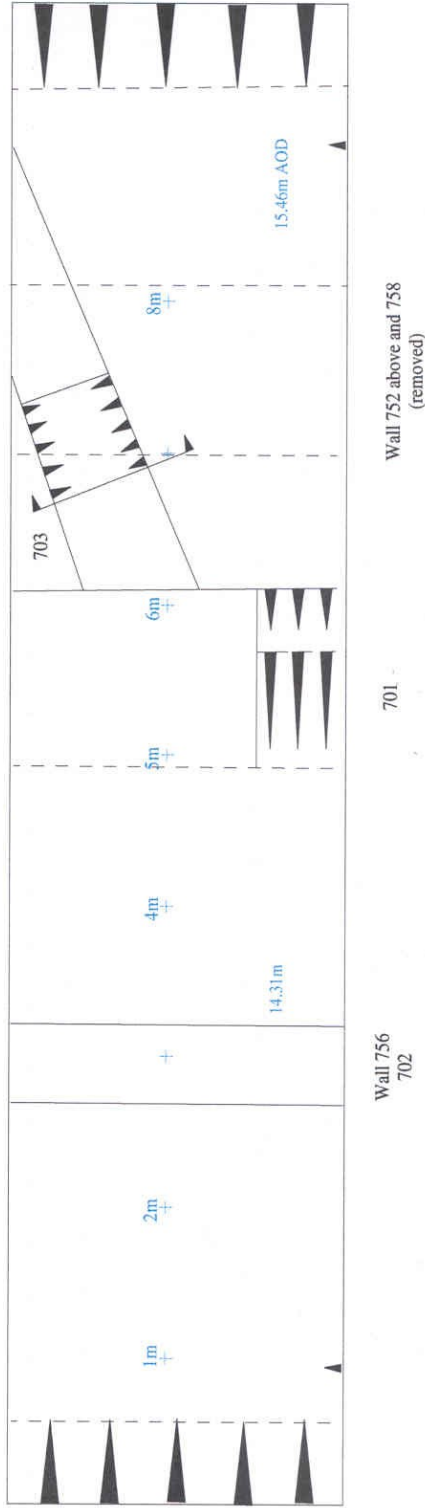


Figure 4: Detailed plan of trench.

Royal Worcester Porcelain, Severn Street, Worcester, 2008

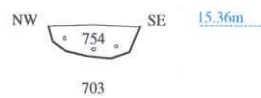
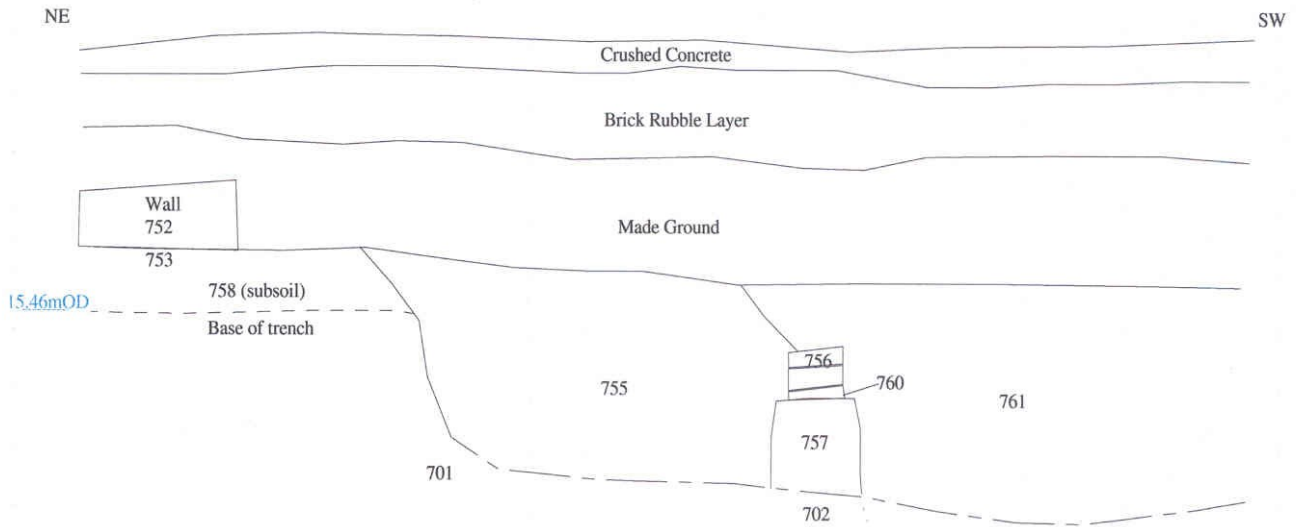


Figure 5: Sections.



Plate 1. Trench 20, looking north east. Scale 2m

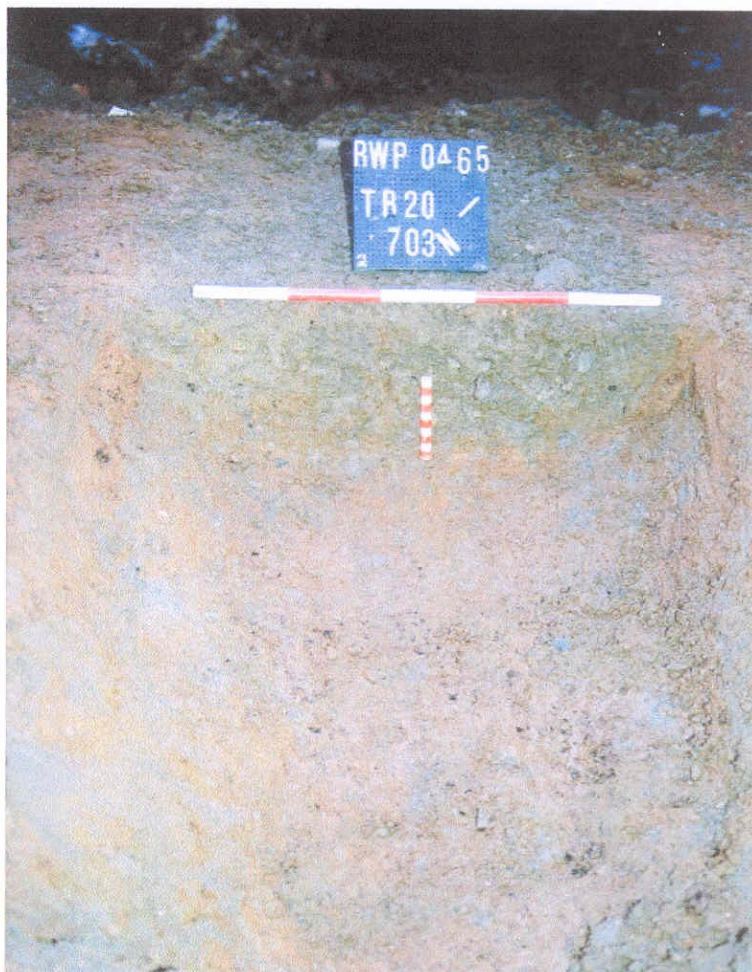


Plate 2. Trench 20, Gully 703, looking south-west, scales 0.5m, 0.1m.

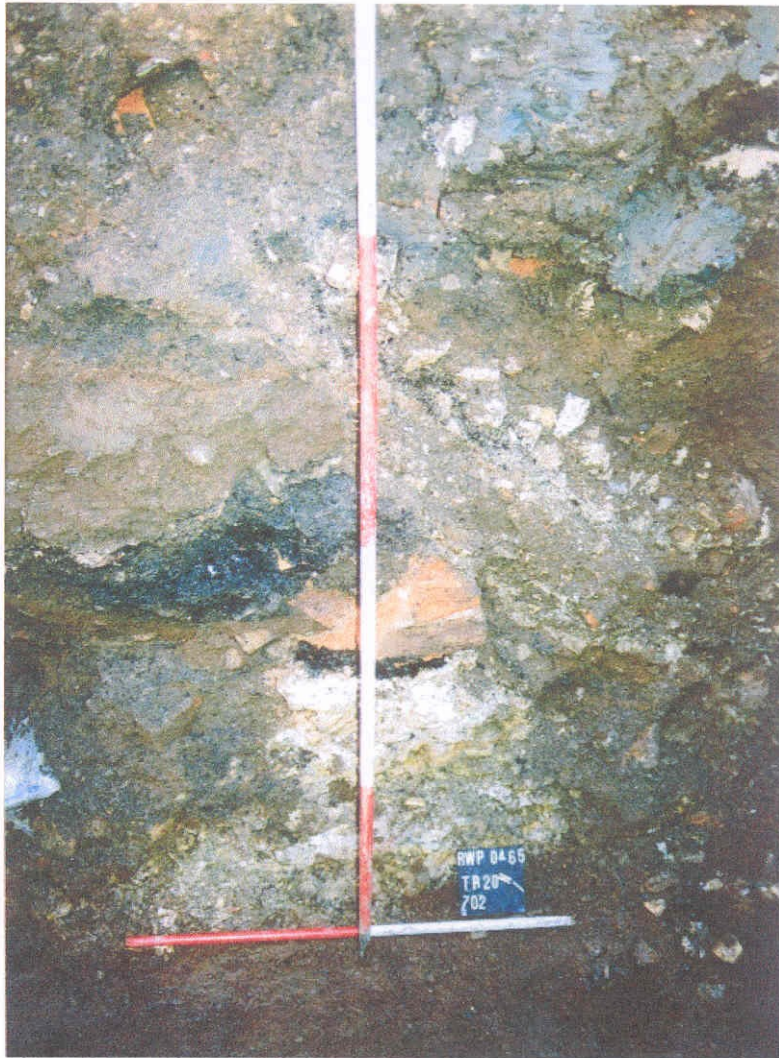


Plate 3. Trench 20, Wall 702, looking north-east, scales 2m and 1m.