

EXCAVATIONS ON A KILN SITE AT GRIMSTON, POTT ROW, NORFOLK

By HELEN CLARKE, B.A., PH.D.

INTRODUCTION

A RESCUE excavation was carried out on a supposed kiln site at Grimston, Pott Row (Map Reference TF 713217) for three weeks during September 1964 (Fig. 1). The work was undertaken for the Ministry of Public Building and Works by the author, at that time Director of Excavations for the King's Lynn Archæological Survey.

In the autumn of 1963 J. O. H. Nicholls excavated in the same field a single flue updraught kiln which had been dated by Dr. M. J. Aitken of the Oxford Research Laboratory for Archæology to the first half of the twelfth century.¹ This kiln had produced unglazed wares of the so-called "Developed Thetford" type, and as the field in which the kiln was situated contained a thick scatter of glazed ware including wasters and fragments of Grimston Ware face jugs² it was hoped that the site might produce a number of kilns which had been in production not only during the twelfth century but throughout the whole of the medieval period. The threat of deep ploughing made a preliminary investigation of a larger area advisable in 1964.

1. THE EXCAVATION

In 1963 a magnetometer survey had been conducted by Dr. Aitken in the southern area of the field under investigation and a further survey was carried out in 1964 over the remainder of the field, that is, mainly to the north and east of the original survey area. A grid of 25 ft. squares was laid down (Fig. 2) and the anomalies registered by the magnetometer were marked on the ground by means of pegs. The more promising anomalies were investigated, and this resulted in eight trenches being opened, only one of which, A5/2, warranted extensive excavation.

All the eight trenches produced traces of burning, with fragments of burnt clay in some areas. There were no features which could be identified as kilns and some of the trenches, for example B10/1 and C10/1, contained unbaked as well as baked clay; it seems possible that the anomalies recorded by the magnetometer represented accumulations of kiln refuse, rather than the remains of kilns themselves. Certainly, no traces of kiln walls or other kiln furniture could definitely be established.

TRENCH A5/2

This began as two trial trenches, A5/2 and A5/3, situated 10 ft. apart in square A5 (Fig. 2) and producing magnetometer readings of 280 γ and 400 γ

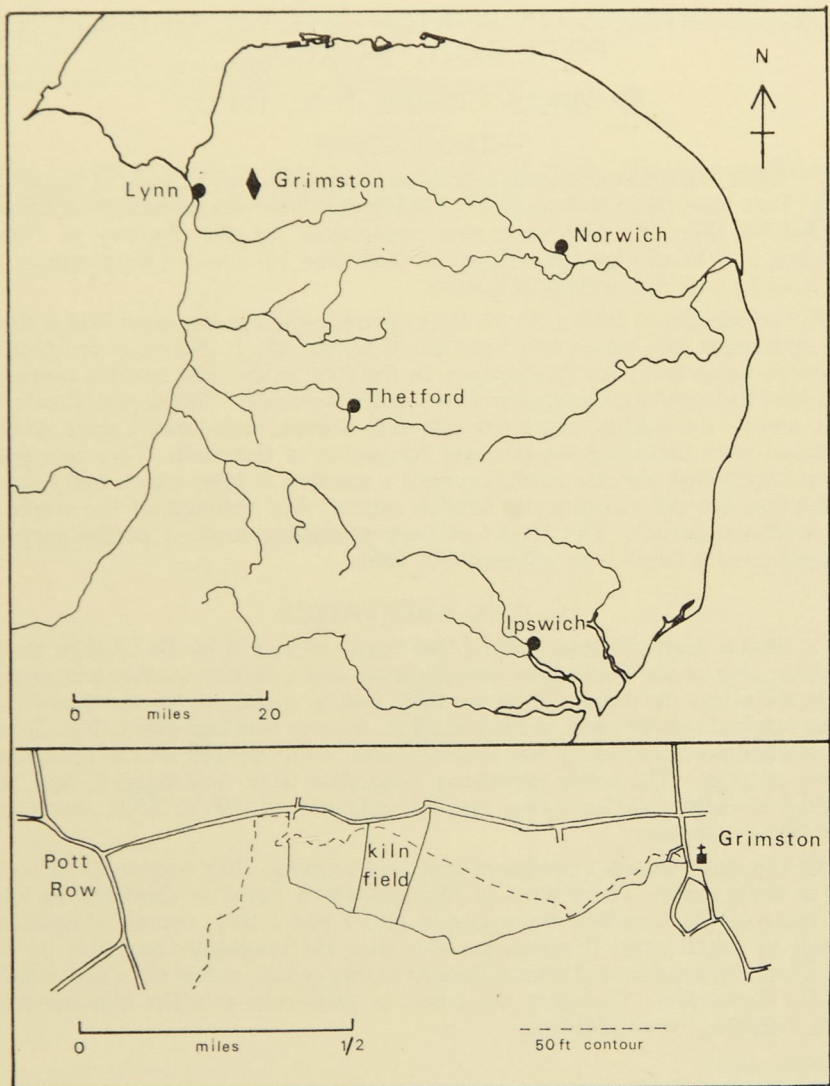


Fig. 1. Situation of the Site

respectively. It was hoped that these readings indicated the position of an east—west orientated kiln and initially promising results, in the form of burnt clay and general traces of burning, were found in both trial trenches. They were therefore incorporated into one large trench 25 ft. by 10 ft. in size. Subsequently, outliers a, b and c were opened in an attempt to trace any possible extensions of the features exposed within the main area, A5/2.

The features in Trench A5/2 suggested that a long hollow or pit had been dug into the yellow sand-with-flints subsoil and that this hollow had been filled with humus containing a high proportion of burnt earth and grey and red ash. In addition, a number of lumps of burnt clay lay in an irregular line along the longitudinal axis of the trench.

When extension trenches b and c were opened they produced nothing but undisturbed subsoil lying immediately beneath the ploughsoil; trench a, however, showed evidence of further grooves in the subsoil. These were filled with dark humus mixed with grey ash, but there was no trace of the more pronounced red and grey ash layers of the main area A5/2, nor were there remains of burnt clay, nor traces of burning.

The excavation of Trench A5/2 and its extensions did not provide sufficient evidence to postulate the existence of a kiln within the immediate area, but the large quantity of ash and burnt clay may suggest that kilns do lie in the vicinity, and the material from A5/2 may represent debris from them.

2. THE POTTERY

A large quantity of pottery (now stored in King's Lynn Museum) was discovered during the course of the excavation, both from the ploughsoil and from immediately above the subsoil. It was all of the Developed Thetford type (as produced by the 1963 kiln) which appears to have been common in West Norfolk in the twelfth century. The lack of kiln remains from the 1964 excavations makes it impossible to associate the sherds with any specific kiln, but the occurrence of wasters among the material strongly suggests the presence of kilns in the immediate neighbourhood.

All the pottery was fired under reducing conditions to produce a fabric with a light-grey or dark-grey core and a variety of surface colours: red-orange, orange-buff and grey are the commonest, but a cream-coloured surface is also found, although rarely. The ware is mainly coarse and sandy with the inclusion of both large and small grits; the quality is very variable, the finer ware being in the main confined to Spouted Pitchers (see below, Type 6) and the coarser used for the manufacture of Large Storage Jars (see below, Type 7).

A number of distinctive forms can be isolated from the excavated material; these are set out below as Types 1 to 10 and are listed in their relative frequency, with number 1 the commonest.

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|---------------------------------------|----------------|
| 1. COOKING POTS | Type 5, Fig. 6 |
| 2. SHALLOW BOWLS WITH OUT-TURNED RIMS | Type 1, Fig. 3 |

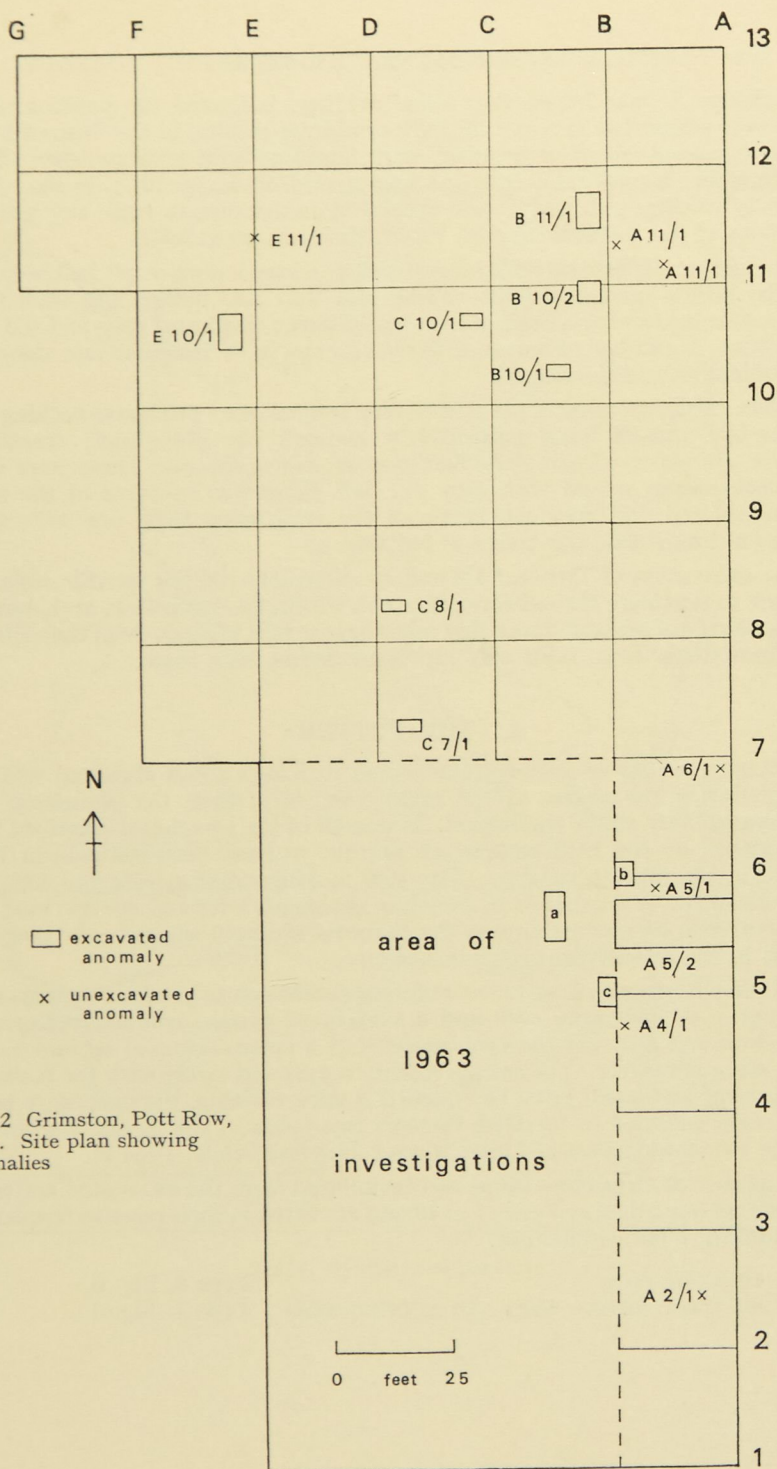


Fig. 2 Grimston, Pott Row, 1964. Site plan showing anomalies

3.	{	DEEP BOWLS WITH OUT-TURNED RIMS	Type 2, Fig. 4
		SPOUTED PITCHERS	Type 6, Fig. 7
		LARGE STORAGE JARS	Type 7, Fig. 8
4.		SHALLOW BOWLS WITH IN-TURNED RIMS	Type 3, Fig. 5
5.		BOWLS WITH INTERNAL FLANGES	Type 4, Fig. 6
6.	{	FINE BOWLS	Type 8, Fig. 9
		COSTRELS AND BOTTLES	Type 9, Fig. 9
		LIDS	Type 10, Fig. 9

The distribution of the various types of pottery over the Grimston, Pott Row field suggests that different pottery forms were produced in different parts of the field. Concentrations of Types 1, 6 and the coarser examples of Type 7 (Fig. 8, 7/1 and 7/2) were found in the area of Trench A5/2, as were most of the examples of Types 8, 9 and 10. The remaining types were found in the northern part of the field, mainly from Squares B10, C10 and E10 (Fig. 2). This might imply a certain specialization on the part of the kilns.

The wasters in the excavated material consisted largely of wares either incompletely fired or with cracked or flaking surfaces; they were particularly common among sherds of Type 7 which, presumably due to their extremely large size, seem to have presented the most difficulty in manufacture (p. 91). Type 1 also produced a high proportion of wasters which were mainly the result of the warping of bases during firing; this may again be attributed to the large size of the vessels (p. 84). Other waster sherds showed the presence of air bubbles in the body of the pots, and wastage was also closely related to the inclusion of excessively large grits in the fabric which caused splitting and cracking of the pots when fired.

In the following lists diameters are measured from the inner edge of the rim, unless otherwise stated, and the numbers in brackets indicate the find spots and catalogue numbers.

Type 1 SHALLOW BOWLS WITH OUT-TURNED RIMS (Fig. 3)

This is one of the most characteristic of all the products of the Grimston, Pott Row kilns and, apart from Cooking Pots (Type 5), the most common. The rim is usually rolled back and pressed closely against the body of the bowl, less commonly it is simply out-turned with a tapering or squared-off profile. All bases are sagging, usually with signs of knife trimming around the basal angle which occasionally is sharp and pronounced. The rim diameter varies between 10 in. and 12½ in., the depth averages 3½ in.

- 1/1 Grey core, orange-buff surface, prominent grits, indications of burnt-out organic material. Rolled-back rim with a distinct line between rim and body. Knife trimming around basal angle, some scratch marks on sagging base. Diam. 12½ in. (A5/2, 35).
- 1/2 As 1/1, but with cream-buff surface and slight external cordon around rim. Diam. 11½ in. (A5/2, 38).

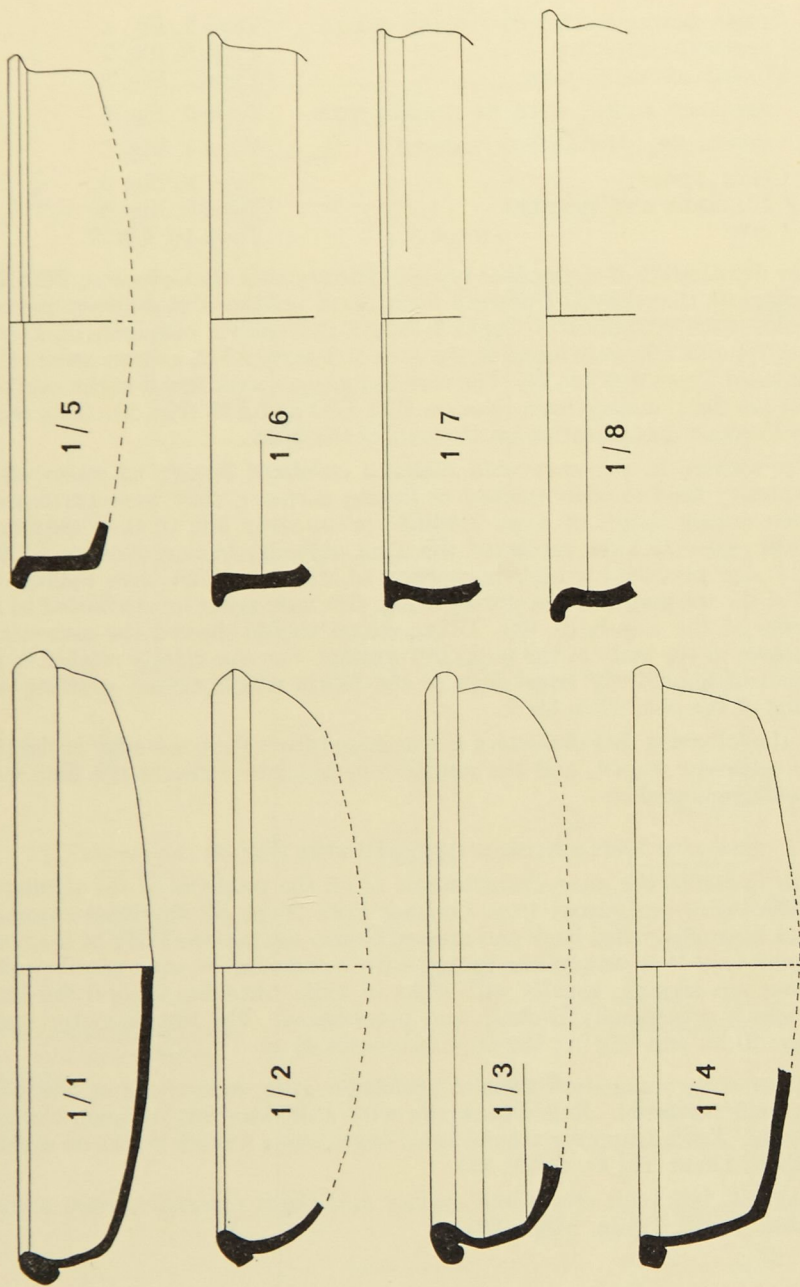


Fig. 3 Type 1, Shallow Bowls with out-turned rims ($\frac{1}{4}$)

- 1/3 Dark-grey fabric with fine grits. Rim rolled-back but not pressed against body. Distinct knife trimming to form thin body and thicker sagging base. Diam. 11 in. (A5/2, 41).
- 1/4 Grey core, orange-buff surface showing signs of differential firing. Rim rolled back and squared-off. Basal angle pronounced. Diam. $11\frac{1}{2}$ in. (A5/2, 36).
- 1/5 Grey core with buff surface roughened with fine grits. Simple everted squared-off rim and well-defined basal angle. Diam. 10 in. (C10/1, 47).
- 1/6 Light-grey throughout with surface roughened by fine grits. Simple everted slightly tapering rim. Well-defined basal angle. Diam. 11 in. (A5/2, 45).
- 1/7 Dark-grey core with orange surfaces, the exterior darkened by soot. Rim sharply turned back, tapering and flattened on top, with a slight internal beading. Knife trimmed basal angle. Diam. 11 in. (A5/2, 54).
- 1/8 Light-grey core with cream-buff surface roughened with fine grits. Simple everted rim, sinuous in profile. No trace of knife trimming on basal angle which may have been rounded. Diam. 12 in. (A5/2, 46).

Type 2 DEEP BOWLS WITH OUT-TURNED RIMS (Fig. 4)

The rims of this type bear some similarities to those of Type 1 from which they mainly differ in their depth. Their base form is unknown, but the most nearly complete vessel (Fig. 4, 2/1) gives the impression of its having had a sagging base. Decoration may be present on the rim, but is not common. Rim diameters vary between 8 in. and $12\frac{1}{4}$ in. and the maximum known depth is 6 in.

- 2/1 Dark-grey core with red-orange surface, large grits. Rim rolled-back and pressed against body, decorated with small finger-tip impressions on upper edge. No sign of differentiation between body and base. Diam. $11\frac{1}{4}$ in. (A5/2, 2).
- 2/2 As 2/1, but undecorated. Diam. 10 in. (A5/2, 6).
- 2/3 Brick-red throughout. Rim rolled-back, with pronounced cordon externally. Diam. $11\frac{1}{2}$ in. (B11/1, 1).
- 2/4 Light-grey throughout. Everted rim with flat upper surface decorated with rouletted diamond pattern. Diam. 8 in. (E10/1, 8).
- 2/5 Light-grey throughout. Simple everted rim with slight internal beading. Pronounced girth-groove around upper part of body. Diam. 8 in. (E10/1, 9).
- 2/6 Dark-grey core with orange-buff surface showing traces of soot. Prominent grits. Simple turned-out rim. Walls upright. Diam. $12\frac{1}{4}$ in. (B10/2, 84).
- 2/7 Dark-grey throughout. Smoothly everted and tapering rim. Trace of basal angle. Diam. $11\frac{1}{4}$ in. (A5/2, 7).
- 2/8 Red-orange throughout. Rim out-turned, tapering, with flattened upper surface. Diam. $8\frac{1}{2}$ in. (B10/1, 71).

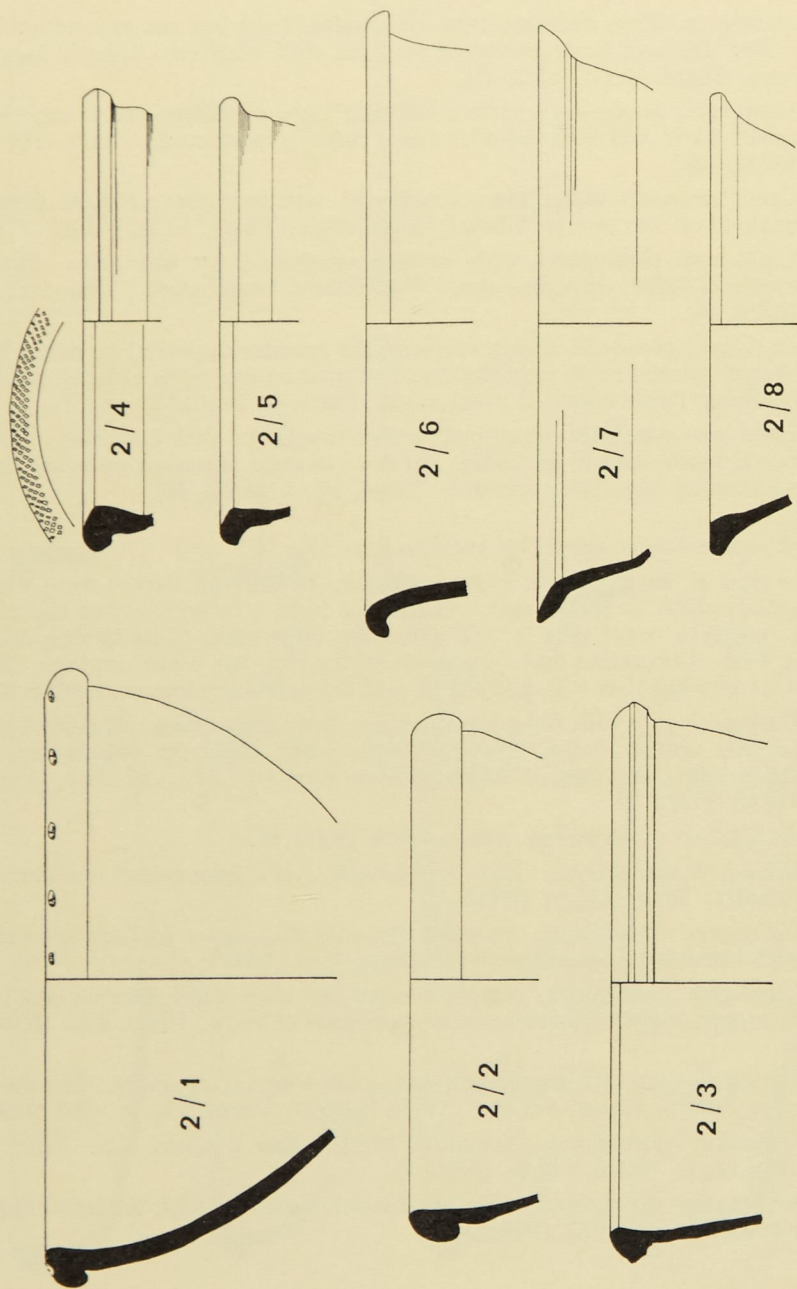


Fig. 4 Type 2, Deep Bowls with out-turned rims ($\frac{1}{2}$)

Type 3 BOWLS WITH IN-TURNED RIMS (Fig. 5)

The rims of this type are usually simply in-turned and rounded, sometimes with rouletted decoration on the upper surface. No bases are known, but the impression presented by the bowls is that they were fairly shallow, rather in the style of Type 1. The diameter, measured from the outer edge of the rim, varies from $7\frac{1}{4}$ in. to 15 in.

- 3/1 Light-grey core with dark-grey surface. Rim thickened and in-turned with rouletting on the upper surface. Diam. 12 in. (B10/2, 110).
- 3/2 As 3/1, but with sharp outer edge on the rim. Rouletting on upper surface. Diam. $10\frac{1}{2}$ in. (E10/1, 116).
- 3/3 Light grey-buff throughout, surface roughened with fine grits. Rim squared-off, with a fairly sharp outer edge. Diam. 14 in. (B11/1, 96).
- 3/4 Light orange-buff throughout, surface roughened with fine grits. Rim in-turned and thickened, with a fairly sharp outer edge. Diam. 12 in. (B10/2, 97).
- 3/5 Dark-grey core with dark-orange surface. Rim smoothly in-turned and slightly thickened. Diam. 11 in. (B11/1, 103).
- 3/6 Dark-grey core with orange-buff surface. Rim so sharply in-turned that the upper surface is almost flat. Diam. $14\frac{1}{4}$ in. (B10/1, 48).

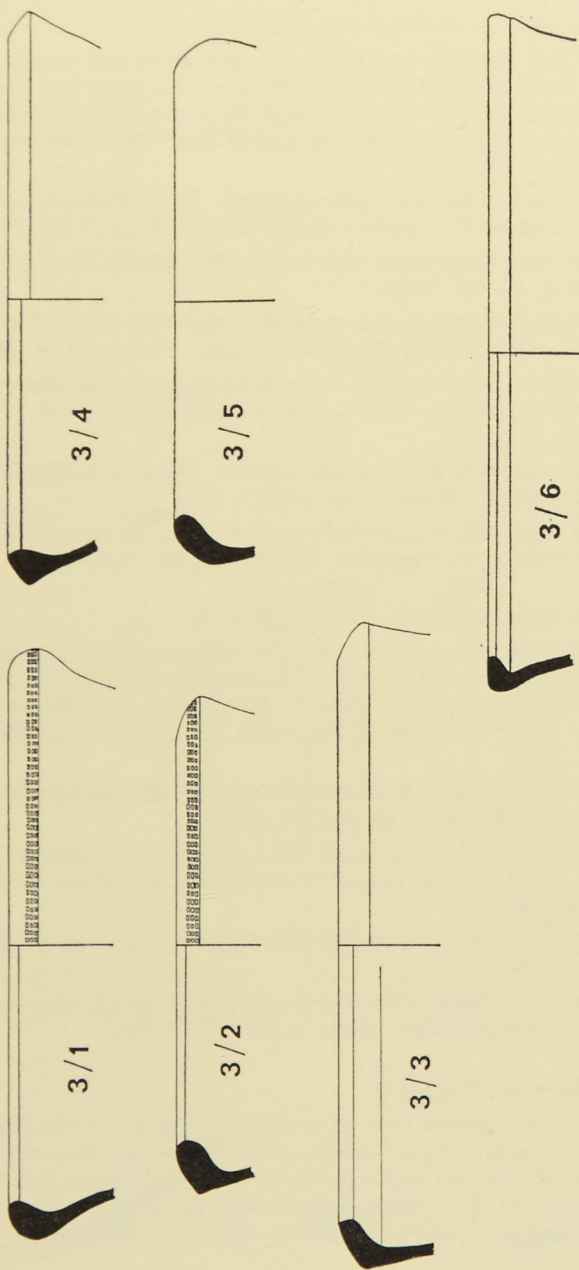
Type 4 BOWLS WITH INTERNAL FLANGES (Fig. 6)

The rims of all these vessels are upright with an internal flange to support a lid. No bases remain and it is impossible to assess their depth, although they appear to have been deeper than Type 1. In all cases their fabric contains fine grits so that the surface is rough to the touch. External rim diameter averages 8 in.

- 4/1 Light-grey throughout. Rim upright with an almost horizontal, tapering internal flange. Diam. $8\frac{1}{2}$ in. (B11/1, 65).
- 4/2 Dark-grey core with dark brick-red surface. Rim upright with almost horizontal, short internal flange. Diamond rouletting around body. Diam. $8\frac{1}{2}$ in. (B11/1, 60).
- 4/3 As 4/2, but with external cordon just below rim and undecorated. Diam. $7\frac{3}{4}$ in. (B11/1, 66).
- 4/4 Light-grey throughout. Rim short and upright, flange long and horizontal. Body apparently globular. Diam. 7 in. (B11/1, 62).

Type 5 COOKING POTS (Fig. 6)

This is the most common type of pottery produced by the Grimston, Pott Row kilns and displays a great variety of rim forms and diameters. The most frequently found shapes are illustrated and described below, but the list is by no means exhaustive. The fabric is generally fairly fine, and grey and buff occur in about equal quantities. Rim diameter varies between $4\frac{1}{2}$ in. and 8 in.

Fig. 5 Type 3, Bowls with in-turned rims ($\frac{1}{4}$)

- 5/1 Light-grey throughout. Simple everted rim, suggestion of globular body. Diam. 6 in. (C10/1, 73).
- 5/2 Dark-grey core with buff-grey surface. Rim squared-off and out-turned. Globular body. Diam. 7 in. (B11/1, 72).
- 5/3 Light-grey throughout. Rim out-turned with slightly hollowed surface. Globular body. Diam. $4\frac{1}{2}$ in. (B10/1, 64).
- 5/4 Core grey with brick-red surface. Large grits. Rim out-turned and squared-off. Globular body. Diam. 8 in. (A5/2, 86)..
- 5/5 Dark-grey throughout. Rim rounded, upright, thickened, with slight internal flange. Diam. 6 in. (B10/2, 67).
- 5/6 Grey throughout. Overhanging rim. Diam. 4 in. (E10/1, 87).

Type 6 SPOUTED PITCHERS (Fig. 7)

Spouted pitchers are one of the most characteristic forms of Developed Thetford pottery. Their fabric is generally fairly fine with a minimum of small grits; the most common surface colours are orange-buff and brick-red, with grey or cream only rare. The walls of the pitchers can vary from $\frac{1}{8}$ in. to $\frac{3}{8}$ in. in thickness. Bases are invariably sagging and knife trimmed, and at least one example (Fig. 7, 6/2) has a bung-hole just above the basal angle. Rims are mainly simply rolled out but may be upright or everted with a slight internal beading; the diameters vary between 4 in. and $6\frac{1}{2}$ in. Spouts are upright, cylindrical and slightly flaring out at the top. They are attached in the following way: a hole is pierced through the wall of the pot a little way below the rim and from the inside of the pitcher so that jagged edges appear on the outside of the vessel. The cylindrical spout is then placed over the hole and smoothed onto the body of the pot. It may be attached only around the hole and onto the rim (Fig. 7, 6/5) or pressed firmly against the pot (Fig. 7, 6/7). 75 per cent of spouts were *short* (average length $1\frac{1}{2}$ in.), 15 per cent were *medium* (average length $2\frac{1}{4}$ in.) and 10 per cent were *long* (average length $2\frac{3}{4}$ in.). No handles were found associated with spouts, but the pitchers were probably provided with at least one, and possibly three, strap handles placed around the rim (*Med. Archaeol.*, 1959, Vol. III, p. 37, fig. 13).

- 6/1 Body of pitcher, spout and handles missing. Core light-grey with orange-buff surface. Rolled-out rim with horizontal cordon on outer surface. Sagging base with knife trimmed basal angle. Diam. 5 in. Depth 10 in. (A5/2, 141).
- 6/2 Fabric as 6/1. Sagging base with bung-hole (A5/2, 27).
- 6/3 Fabric as 6/1, rim simple out-turned, short spout, $1\frac{1}{2}$ in., pressed against body. Diam. $4\frac{1}{2}$ in. (A5/2, 16).
- 6/4 Core light-grey with dark-grey surface. Rim out-turned and squared-off. Short spout, $1\frac{1}{2}$ in., pressed against body. Diam. 6 in. (A5/2, 19).
- 6/5 Core dark-grey with brick-red surface. Rim upright, thickened and slightly rounded. Spout medium, $2\frac{1}{4}$ in., attached to pitcher at top and bottom only. Diam. $5\frac{3}{4}$ in. (A5/2, 18).

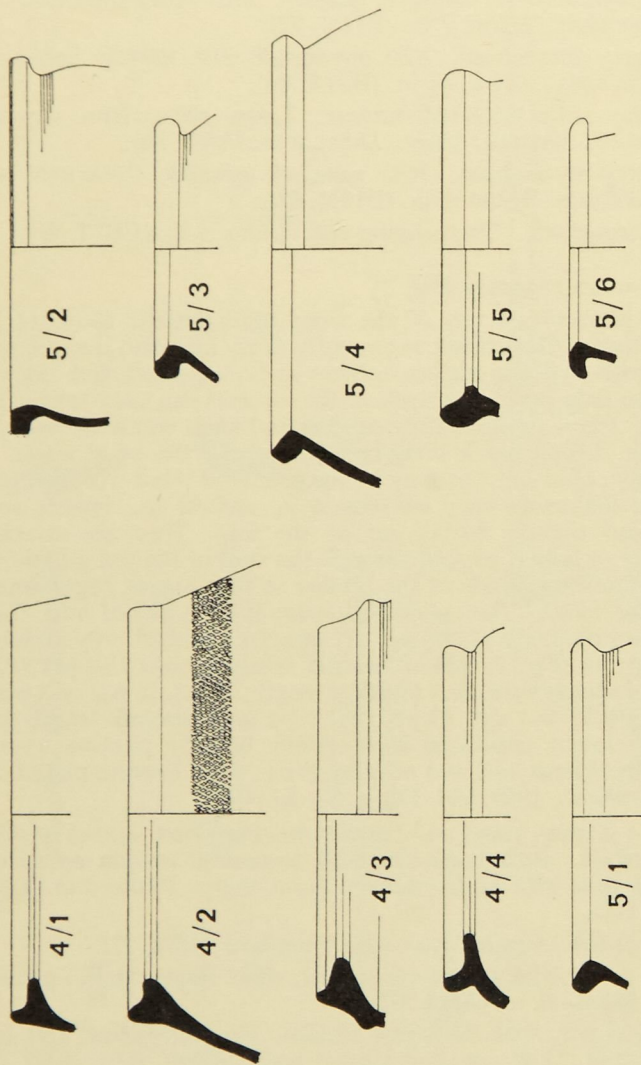


Fig. 6 Type 4, Bowls with internal flanges Type 5, Cooking Pots ($\frac{1}{4}$)

- 6/6 Fabric as 6/5. Rim flared out, slightly thickened, with trace of internal flange. Spout long, $2\frac{1}{2}$ in., pressed against body. Diam. 5 in. (A5/2, 23).
 6/7 Core light-buff, brick-red surface. Rim upright, slightly flaring. Spout long, 3 in., pressed against body. Diam. $5\frac{1}{4}$ in. (A5/1, 25).

Type 7 LARGE STORAGE JARS (Fig. 8)

The most characteristic large storage jar (Fig. 8, 7/1) is a globular vessel with a thick rim, small strap handles and applied strips of thumb-printed decoration on rim and body. Such jars are made of coarse ware, often containing very large grits, mainly orange-buff in surface colour but also, more rarely, grey. The rims are bulbous and upright, in some cases so thick that they are incompletely fired. Small strap handles are attached to the rim and body; bases are generally sagging and knife trimmed. The thumb-printed decoration is often of great size, coarsely designed and carelessly applied. A high proportion of the total number of Grimston, Pott Row wasters come from this type of pot and were mainly the result of splitting during firing because of the prominent grits, incomplete firing of the rims and distortion of the bodies of the pots because of their excessive size. Rim diameters vary from 7 in. to $16\frac{1}{2}$ in. and the depth measures up to 20 in. No complete example has been found from this site but comparison may be made with a jar from South Wootton in *Med. Archaeol.*, 1959, Vol. III, p. 38, fig. 14. There are also a number of examples made from a finer ware; these show no trace of handles, and appear to be of a deep bowl rather than a globular shape.

- 7/1 Core dark-grey with dark-buff surface. Rim upright, thickened, with large thumb impressions along its upper surface. Short, broad, strap handle with several longitudinal grooves and attached to body by shallow thumb impressions. Body decorated with applied vertical strips showing pinching with finger and thumb, the decoration nothing like so pronounced as that on the rim. Diam. 11 in. (A5/2, 126).
 7/2 Fabric as 7/1 but finer. Rim upright, rounded, with applied thumb-print decoration on upper surface. No sign of handles. Body decorated with applied vertical strips showing thumb prints. Body suggests globular jar in shape. Diam. $6\frac{1}{2}$ in. (A5/2a, 132).
 7/3 Dark-grey throughout, surface smoother and better finished than 7/1, finer ware despite its size and weight. Rim thick, out-turned, squared-off, decorated with large thumb impressions both on surface and side. Body decorated with applied vertical strips displaying thumb impressions of about same size as those on rim. No trace of handles. Diam. 16 in. (E10/1, 134).
 7/4 Fabric as 7/3. Rim turned-back, squared-off, with thumb impressions on surface. Body suggests deep bowl shape. Diam. 11 in. (E10/1, 133).
 7/5 Fabric as 7/3. Rim out-turned, tapered and decorated with thumb impressions. Diam. 9 in. (E10/1, 140).

Type 8 FINE BOWLS (Fig. 9)

These are very rarely found. In general they consist of a finer fabric than normal and are well thrown and neatly finished off.

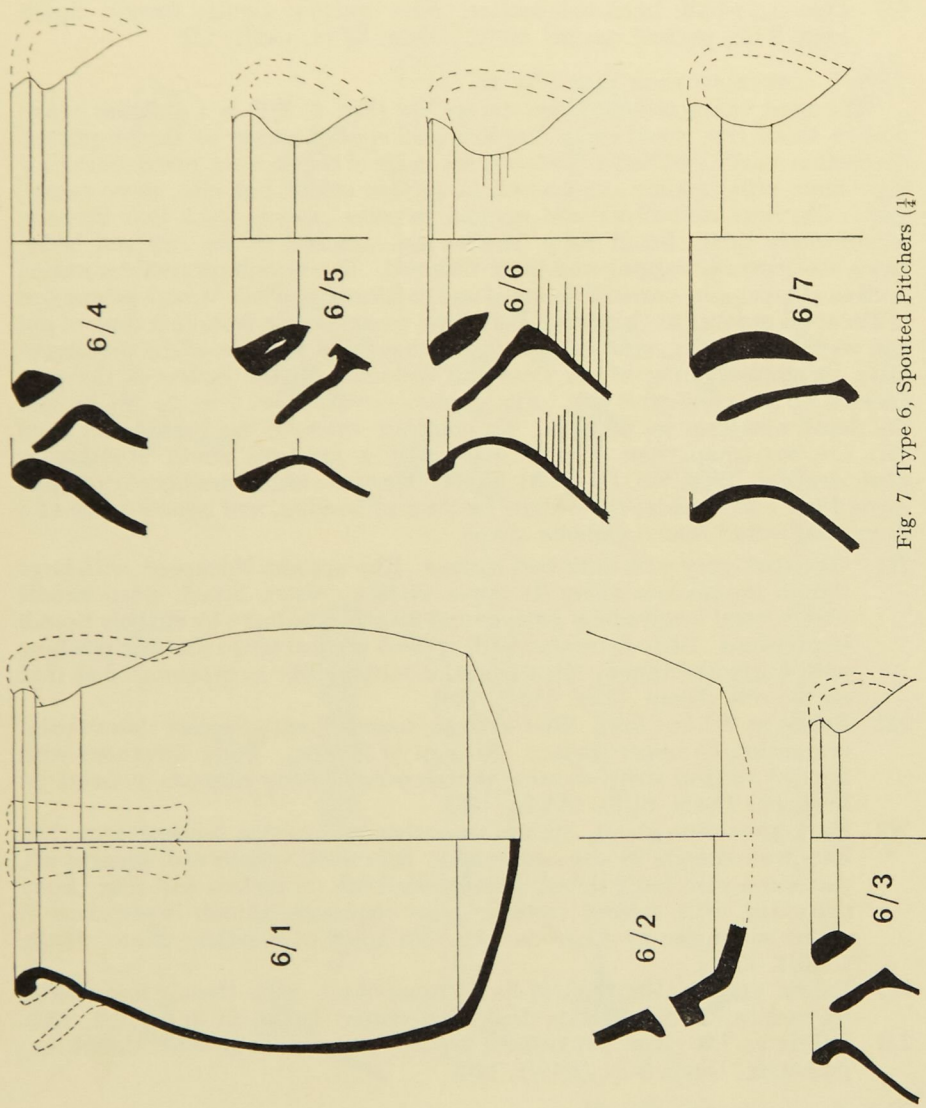


Fig. 7 Type 6, Spouted Pitchers (4)

- 8/1 Light-grey throughout with some grits. Simple dish with thickened foot showing scratch marks on base. Diam. $5\frac{1}{2}$ in. (A5/2, 33).
 8/2 Fabric dark-grey throughout. Hollow foot of a globular dish or jar (C10/1, 142).

Type 9 COSTRELS AND BOTTLES (Fig. 9)

These are rare. They are made either of a fine fabric or of the ware used in the Spouted Pitchers. Comparison may be made with the costrel illustrated in *Med. Archaeol.*, 1959, Vol. III, p. 36, fig. 12, number 13.

- 9/1 Fine buff fabric throughout. Rim out-turned, slightly tapered and squared off. No sign of handles. Represents the neck of a large pottery bottle. Diam. 3 in. (A5/2, 26).
 9/2 Grey core with buff surface. Fabric similar to that of the Spouted Pitchers (Type 6). Rim thickened with traces of three strap handles. Represents costrel. Diam. $1\frac{1}{2}$ in. (A5/2, 28).

Type 10 LIDS (Fig. 9)

Only three fragmentary lids were found, all of the type illustrated, with concentric ridges on the upper surface and a central knob. Their diameter varied from 7 in. to 11 in.

- 10/1 Fabric orange-buff throughout, similar to 9/2 in texture. Lower surface smooth, upper surface decorated with a number of concentric ridges surrounding a central handle. Diam. 11 in. (A5/2a, 34).

CONCLUSIONS

The 1964 investigations of the Grimston, Pott Row site did not produce evidence for preserved kiln structure, but the amount of ash, burning, burnt and unburnt clay found in all the trial trenches suggests that kilns other than the one discovered by Nicholls in 1963 (p. 79) may lie in this or adjacent fields. The area to the south of the Grimston to Pott Row road (Fig. 1), consisting of the field under investigation and a number of others, has produced a thick scatter of pottery including a fairly high proportion of wasters, and it appears that an area measuring at least 1 mile east to west (between the villages of Pott Row and Grimston) and $\frac{1}{2}$ mile southwards from the Grimston to Pott Row road was significant in the production of pottery in the Middle Ages.

The list of pottery types included in this paper is a tentative classification of the material found in the 1964 excavations, and it is hoped that it will prove useful as a basis for future work on the early medieval pottery of West Norfolk.

ACKNOWLEDGEMENTS

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¹*Med. Archaeol.*, 1964, Vol. VIII, p. 296.

²*Med. Archaeol.*, 1962-3, Vol. VI-VII, p. 348.

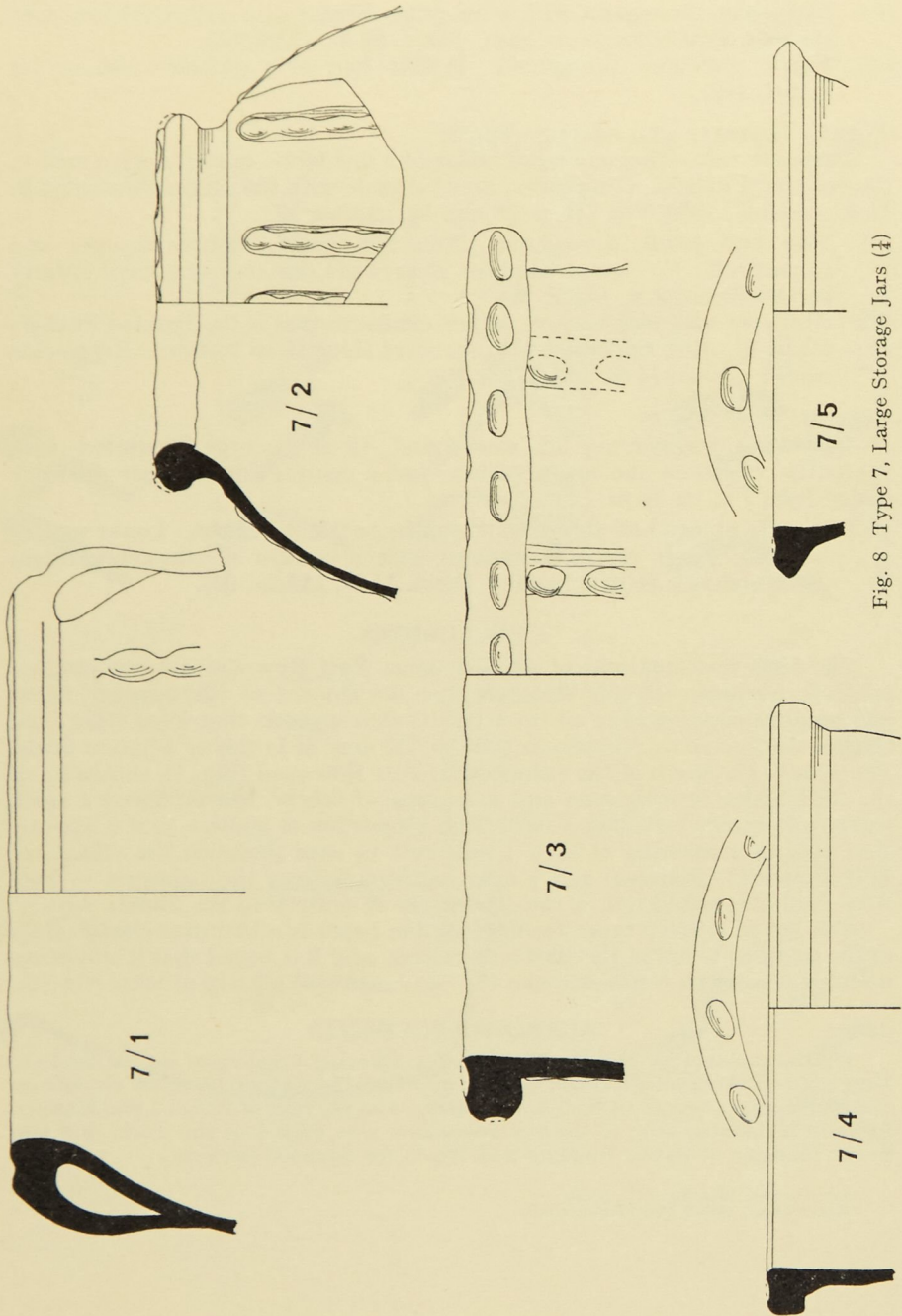


Fig. 8 Type 7, Large Storage Jars (4)

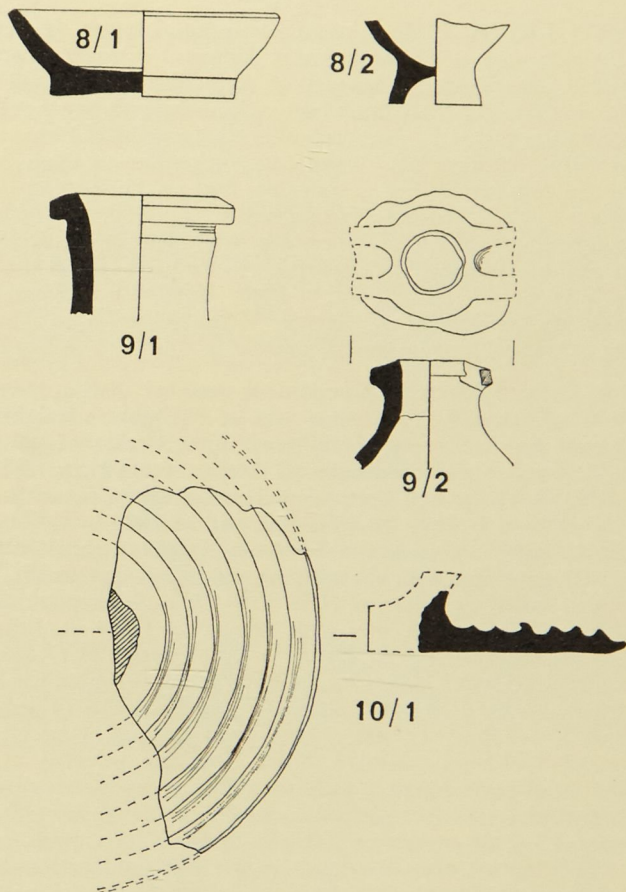


Fig. 9 Type 8, Fine Bowls Type 9, Bottles Type 10, Lids (4)