The Fenland Project Number 7: Excavations in Peterborough and the Lower Welland Valley 1960–1969

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Cover Illustration
3rd century AD burial from Plant's Farm, Maxey

Contents of Microfiche

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2. The Excavation of a Late Neolithic Settlement at Barholm, Lincolnshire

by W.G. Simpson

The Plough Furrows

(Figs 2 and 3; Pls I and V)

A summary of the ploughing episodes post-dating the Late Neolithic settlement at Barholm is provided in the main text.

The most recent series of plough furrows were the Y furrows (Fig. 3, Y1-3). These terminated on or just beyond the line of ditch D2 and were associated with a plough headland which covered the whole site (Fig. 2.2). It was visible as a low bank running east-west and extending in width from approximately just beyond D3, in the north, to just south of the modern hedgeline which marked the parish boundary and the southern limit of the excavation (Fig. 2.2).

The furrows are of a size and character similar to examples found on most other sites excavated on the Welland gravels (Simpson 1981) and may be identified from documentary evidence (John Catlin's map of Maxey Parish in Northants. Record Office. Fitzwilliam Miscellanea 99) as well as from the pottery found in furrows to the south of the river, which defined 'selions' of the open field just before their enclosure in the early 19th century. The width of the 'selion' or 'ridge', defined here by 'Furrows' Y1 and Y2, is the extent of the measurement between their centres; in this case 8.84 m. These 'furrows' are in fact the bottoms of a number of individual parallel furrows marking the lowest points between two 'ridges'. The two furrows at Y3 are individual plough markings within the selion. No other selion divisions contemporary with Y1 and Y2 were observed either to the east or west, but as selions up to 15.25 m wide and more are not uncommon elsewhere in the Weliand Valley they were not necessarily to be expected.

BARHOLM: PLOUGH FURROWS

The two G 'furrow' groupings (Fig. 3, G1 and G2) seem to belong to an older phase of cultivation and lie on an almost exact north-south alignment than the Y 'furrows' and seem to terminate about 3.05 m short of D2. They were recognisable as shallow gullies containing darker soil cut a few centimetres into the orange-brown subsoil. The individual furrows recognisable in places in the bottom of G2 confirmed their agricultural character. They were not identified in the bottom of G1 but their identical alignment and similar depth are probably sufficient indication of their same origin. The only dating evidence came from G1 which cut across the top of Feature 8 on its south side. A sherd of Romano-British colour-coated pottery was found in this area and the rim of an Iron Age vessel (Fig. 13, No. 56) came from a little to the south.

The grouping of furrows G2 and their downcutting to make a little gully in the subsoil is comparable, on a reduced scale, to the Y1-2 'furrow' groupings. It is suggested, therefore, that the G 'furrows' belong to an earlier layout of open field agriculture than that represented by the Y 'furrows' and that they defined a selion c.17.08 m wide, a width that is easily matched by others elsewhere in the Welland Valley. However, the possibility of an intervening 'furrow', all trace of which has been removed by the later Y2 furrow, must be borne in mind.

Another area of ploughing was found in the extreme north-west corner of the excavation, with the furrows running in an east-west direction (Pl. V). Another isolated furrow, probably belonging to the same series, was observed immediately west of post-hole v. There seems no possibility that these furrows are of recent date for they were buried well beneath the substantial overburden of the medieval plough headland. Otherwise there is not much evidence for their date

except that they cut across the Neolithic Features 24 and 25 and contained a Neolithic arrowhead (Fig. 9, No. 32) and a much abraded sherd of pottery, probably of Iron Age or Romano-British date. It should also be noted that they were not found closer than 1.52 m to the Romano-British ditch D2. They may therefore relate to the cultivation of the area at that time or they may be a result of later cross-ploughing at an early period of the open field cultivation before a substantial headland had built up, perhaps in the interval between the G and the Y layout of the selions.

Bone	Cattle			Sheep			Pig		
	L		R	L		R	L		R
Skull	6	4	4				1		4
Maxilla	2						1		4
Mandible	7		8	1			10		7
Scapula	8	2	7	1			4		7
Humerus	12	1	10				3	1	6
Radius + ulna	11	1	9	1	1	1	3	3	5
Metacarpal	7	6	5					4	
Pelvis	5	1	12	1			1		1
Femur	6	7	2	1			1	1	
Tibia	8		10	2			2		6
Astragalus	2		4				1		1
Calcaneum	2		2				1		3
Metatarsal	9	4	5			1			
Phalanx 1	6		7						
Phalanx 2	2		2				3		1
Phalanx 3	2		1						1

Horse: 2 teeth
Dog: Skull frags, R. mandible, R. scapula, R. ulna
Red deer: Large cast antler, antler tine frags, R. Radius, metapodial shaft frag.
Beaver: 2 teeth

Table 4 Barholm animal bone: Amalgamated figures (Pits 1, 2, 6, 9, 10, 12, 13, 23, 24 and Hollows 8 and 14) showing numbers of bones in Neolithic features.

Bone	Cattle			Sheep			Pig		
	L		R	L		R	L		R
Skull	1	3	1						
Maxilla							1		5
Mandible	4		2	1			5		6
Scapula	6		3		1	2	1	2	1
Humerus	4		4		1	2	1		3
Radius + ulna	6		3	1	1	2	4		2
Metacarpal	2	3	2		1				
Pelvis	7		7			1	3		1
Femur	2	4			2		4		1
Tibia	5	1	6	5	1		1		3
Astragalus			1	1			1		1
Calcaneum			2	1			5		1
Metatarsal	2	2	3		2		1		
Phalanx 1			2	1					1
Phalanx 2	1		1						

Dog: Skull
Red deer: Antler frag., L. radius, L. metatarsal
Fox: L. maxilla, L + R mandible
Cat: R. tibia
Human: Femur shaft

Table 5 Barholm animal bone: numbers of bones, Pit 4

Sample	1	2
Pinus	0	1.0
Ulmus	+	0
Quercus	3.3	1.0
Alnus	12.6	4.5
Salix	+	1.5
Corylus	11.3	4.5
Fraxinus	+	+
Total tree pollen	29.3	14.0
Gramineae	12.6	37.0
Cereals	+	8.0
Cyperaceae	+	0
Erica	+	0
Plantago	11.3	4.5
Rumex	0	+
Chenopodiaceae	0	5.0
Umbelliferae	+	2.0
Papilionaceae	+	0
Caryophyllaceae	+	1.5
Rosaceae	+	0
Ranunculaceae	0	4.5
Compositae - Tubiliflorae	+	1.5
Compositae - Liguliflorae	20.6	14.5
Damaged/unidentifiable	18.0	7.5

+ indicates pollen present at less than 1%

Table 6 Barholm: Pollen counts

3. A Double Pit-Alignment and other Features at Field OS 29, Tallington, Lincolnshire

by C.A.I.French, D.A. Gurney, F.M.M. Pryor and W.G. Simpson

III. Excavations at Tallington 1961

Section descriptions

Pit 2 (Fig. 19)

Description:

layer 1: light brown gravel fill.

layer 2: clay and gravel.

layer 3: clay lenses.

layer 4: fine gravel slip.

layer 5: clay.

layer 6: silt and loose gravel lens.

Interpretation: interleaving of layers (containing much gravel) is suggestive of backfilling. Feature very shallow.

Pit 3 (Fig. 19)

Description:

layer 1: clay.

layer 2: stony gravel lens.

layer 3: orange gravel lens.

layer 4: clay and gravel.

layer 5: gravel.

layer 6: clay.

Interpretation: initial rapid infilling from both sides of pit (with sand-silt, probably, not clay); thereafter slow natural filling.

TALLINGTON 1961: SECTION DESCRIPTIONS

Pit 4 (Fig. 20)

Description:

layer 1: gravelly fill.

layer 2: clay fill with occasional gravel pebbles and flecks of charcoal.

layer 3: gravelly fill.

layer 4: silt and loose gravel.

Interpretation: much truncated and hard to interpret, but probably naturally infilled (?).

Pit 5 (Fig. 20)

Description:

layer 1: clay with a few large pebbles.

layer 2: sandy clay.

layer 3: clay and gravel.

layer 4: gravel.

layer 5: pea-grit gravel.

Interpretation: some gravel slip from north side represented by layers 4 and 5; the overlying layers represent slow, natural, infill.

Pit 6 (Fig. 19)

Description:

layer 1: wet gravelly sand.

layer 2: wet sandy clay.

layer 3: lens of gravelly fill.

layer 4: clayey fill (with oxidation mottling).

layer 5: gravelly sand.

layers 6 and 7: not available.

Interpretation: waterlogged primary fill; possibly some deliberate backfilling, but this probably intermittent; layer 4 is oxidised and represents the upper limit of waterlogging at some point (?in antiquity); above layer 4, infilling is natural.

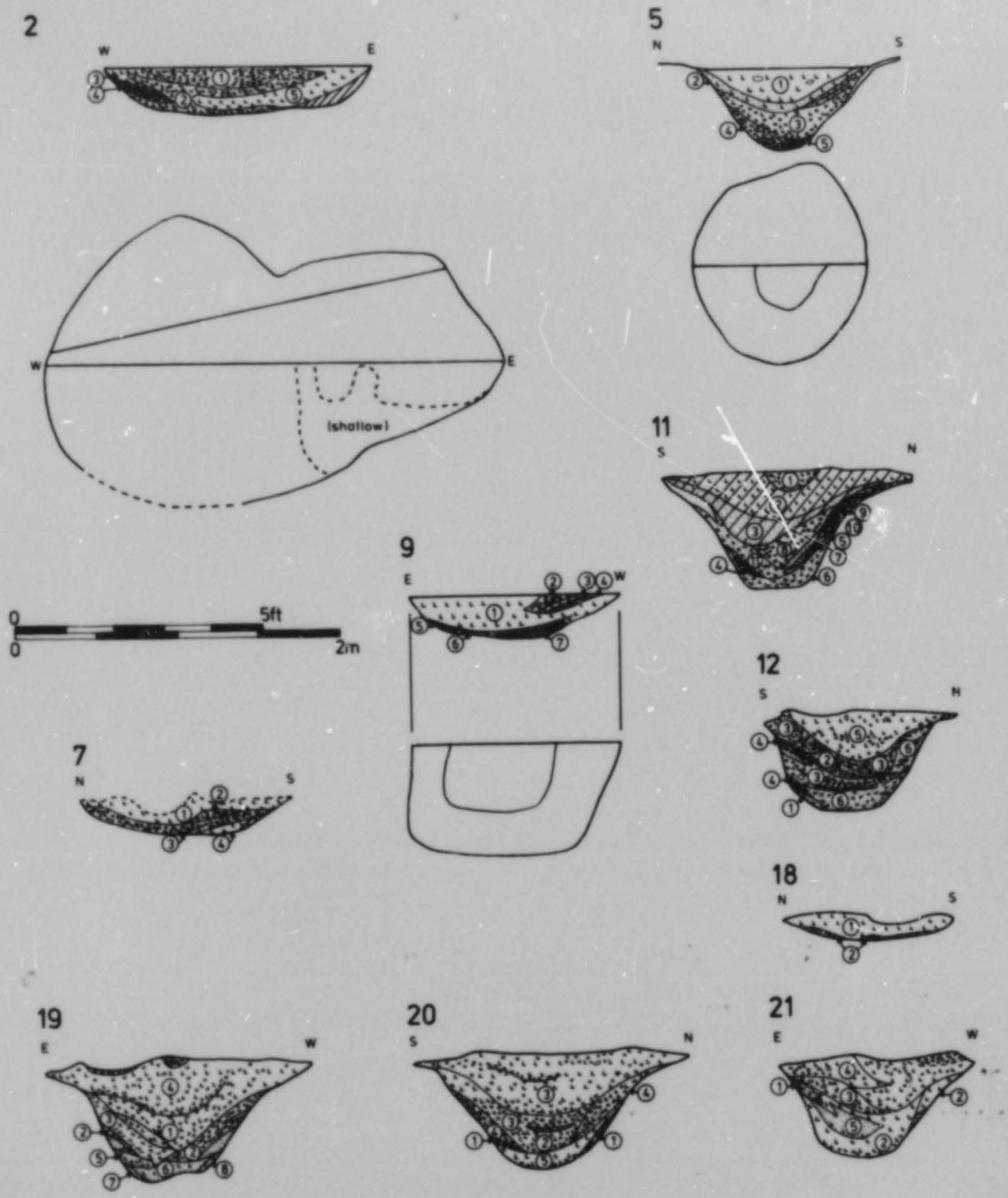

Fig. 20 Tallington 1961: Sections through pit-alignment pits. Scale 1:40

TALLINGTON 1961: SECTION DESCRIPTIONS

Pit 7 (Fig. 20)

Description:

layer 1: clay fill, disturbed by machines.

layer 2: clay and gravel.

layer 3: gravel fill.

layer 4: clay fill.

Note: west half of pit was completely infilled with gravel.

Interpretation: shallow; layers 3 and 4 may be deliberate backfilling; above is natural.

Pit 8 (Fig. 19)

Description:

layer 1: clay.

layer 2: sandy gravel.

layer 3: clay.

layer 4: gravel.

layer 5: sandy gravel.

Interpretation: layers 4 and 5 (gravel and sand) may represent initial, rapid erosion of pit sides; interleaving of layers 2 and 3 is suggestive of deliberate backfilling.

Pit 9 (Fig. 20)

Description:

layer 1: compacted clay containing occasional gravel.

layer 2: gravel lens.

layer 3: clay lens.

layer 4: fine gravel lens.

layer 5: gravel lens.

layer 6: gravel.

layer 7: gravel lens.

Interpretation: initial, rapid, erosion (layers 5 - 7); layer 1 could possibly represent infilling with topsoil; layers 2-4 are hard to explain by natural erosion alone.

TALLINGTON 1961: SECTION DESCRIPTIONS

Pit 10 (Fig. 19)

Description:

layer 1: gravelly fill - slip.

layer 2: dark clayey fill.

layer 3: dark sandy gravelly fill.

layer 4: clayey fill with some gravel.

layers 5-7: no descriptions available, but from photographs layer 5: clay and few pebbles; layer 6: sand and gravel; layer 7: clay.

Interpretation: ? deliberate backfilling from south side (lower layers).

Pit 11 (Fig. 20)

Description:

layer 1: small gravel in clay fill.

layer 2: clay silt with 'ginger' flecks of sandy silt.

layer 3: rusty buff sandy silt.

layer 4: lens of clean gravel.

layer 5: dark stained sand.

layer 6: gravelly sand.

layer 7: lens of yellow sand.

layer 8: gravel fill.

layer 9: clean gravel slip.

layer 10: clean gravel slip.

layer 11: sandy gravel fill intermediate between layers 3 and 8.

Interpretation: layers 4 - 11, probably backfilled - interleaving of layers of material from both sides of the pit; layers 2 and 3 are natural slow infilling.

TALLINGTON 1961: SECTION DESCRIPTIONS

Pit 12 (Fig. 20)

Description:

layer 1: sandy clay.

layer 2: gravel and 'ginger' sand.

layer 3: gravelly fill.

layer 4: clean gravel slip.

layer 5: clayey fill containing some gravel.

layer 6: sandy gravel.

Interpretation: all layers except layer 5 are probably backfilled.

Pit 14 (Fig. 19)

Description:

layer 1: sand.

layer 2: clayey fill.

layer 3: sandy clay fill.

layer 4: clayey gravel.

layer 5: sandy clay.

layer 6: 'ginger' stained sandy clay fill.

layer 7: gravelly fill.

layer 8: dark grey clay.

layer 9: 'ginger' clay.

layer 10: sandy gravel.

layer 11: gravelly fill stained by layer 6.

layer 12: gravelly fill.

Interpretation: the first pit (east side): possibly all layers backfilled. The second pit (west side): layer 4, initial, rapid, infilling; layer 1, sand washed-in; upper layers probably natural.

TALLINGTON 1961: SECTION DESCRIPTIONS

Pit 15 (complete profile at headland, Fig. 19)

Description (from surface down):

Overlying soil:

layer 1: ploughsoil (grey-brown).

layer 5: accumulated topsoil of ridge (pale buff).

layer 2: old topsoil, stone-free (pale buff).

layer 3: 'ginger' clay containing gravel ('hogging').

layer 4: intermediate between layer 2 and 3, buff/ginger containing a little gravel.

layer 7: 'ginger' clay with gravel and sand.

Buried pit filling:

layer 3: homogeneous clay fill.

layer 15: no description available.

Interpretation: naturally infilled.

Pit 16 (complete profile at headland, Fig. 19)

Description (from surface down):

Overlying soil:

layer 1: ploughsoil (grey-brown).

layer 2: pale buff soil, stone-free - old topsoil.

layer 3: hogging, ginger.

layer 4: buff/ginger containing a little gravel, intermediate between layers 2 and 3.

layer 5: ?accumulated topsoil, no buried turfline visible - compact ginger soil with very little gravel.

layer 6: similar fine, stone-free texture as layer 2, but colour almost same as layer 5.

layer 7: 'ginger' clay with gravel or natural solution pipes.

Buried pit:

layer 8: dark clay fill, similar in texture to layer 5, greyish brown, more humic than layer 5, has a white 'bloom' on exposure to air.

layer 9: humic, stained, sandy gravel.

TALLINGTON 1961: SECTION DESCRIPTIONS

Pit 16 (cont.)

layer 10: sandy gravel.

layer 11: greyish gravelly fill.

layer 12: 'ginger' gravelly fill.

layer 13: like layer 12, but less gravel.

layer 14: zone of colour change between layers 5 and 8.

Interpretation: layers 9-12 possibly backfilled or rapid erosion; layers 2-4, a buried soil profile.

Pit 17 (Fig. 19)

Description:

layer 1: clay with gravel.

layer 2: gravelly fill.

layer 3: small gravel and sand.

layer 4: sandy clay fill.

Interpretation: appears to have been deliberately backfilled from top to bottom.

Pit 18 (Fig. 20)

Description:

layer 1: clay fill.

layer 2: silt and sandy gravel.

Interpretation: naturally infilled.

Pit 19 (Fig. 20)

Description:

layer 1: 'ginger' sand/gravel with clay.

layer 2: gravelly fill.

layer 3: gravelly earth fill.

layer 4: clay with gravel.

layer 5: light clayey sand.

TALLINGTON 1961: SECTION DESCRIPTIONS

Pit 19 (cont.)

layer 6: clayey sand.

layer 7: sand slip.

Interpretation: interleaved lower layers (layers 1-3; 5-8) suggest deliberate backfilling and or rapid erosion.

Pit 20 (Fig. 20)

Description:

layer 1: slip of sand and gravel.

layer 2: 'ginger' sandy clay.

layer 3: clayey fill with some gravel.

layer 4: more gravel than clay.

layer 5: clayey fill.

Interpretion: layer 5, initial natural infilling; layer 4, gravel slip on each side; layer 3, natural infilling.

Pit 21 (Fig. 20)

Description:

layer 1: yellow sand and gravel slip.

layer 2: clayey fill.

layer 3: quite large gravel in clayey fill.

layer 4 clayey gravel.

layer 5 sandy fill, becoming clayey sand at bottom of pit.

Interpretation: deliberate backfilling from east side (layers 1-5).

TALLINGTON 1961: PIT DIMENSIONS

Pit	Length	Breadth	Diameter	Depth
2	2.29	1.65		0.30
3	2.14	1.83		1.00
4	1.52	1.22		0.18
5			1.37	0.52
6	1.12	1.17		c.0.72
7	1.55	1.30		c.0.25
8	1.67	1.30		0.65
9	1.22	1.22		0.28
10	1.67	1.37		0.77
11	2.14	1.60		0.72
12			1.67	0.58
13				Not available
14	3.19	2.28		0.80 (2nd phase)
15	1.37	1.22		0.37 (below soil)
16	2.03	?1.80		0.95 (below soil)
17	1.15	1.15		0.17
18	1.52	0.91		0.18
19	1.82	1.60		0.78
20	1.82	1.60		0.70
21	1.67	1.22		0.63
23	0.90	0.76		Not sectioned
24	0.95	0.76		Not sectioned
25	1.50	0.95		Not sectioned
26	1.22	0.45		Not sectioned

Table 7 Tallington 1961: Pit dimensions (metres)

TALLINGTON 1961: POTTERY

Pot No.	Pit No.	No. sherds	Weight (g)	Fabric	Date
1	2	2	1.00	1	Fine LBA
2	2	1	0.50	2	Fine LBA
3	3	1	3.00	3	BA
4	4	1	0.50	2	LBA
5	4	2	1.25	4	?
6	-	3	4.00	5	?
7	5	2	5.00	3	LBA
8	6	1	0.25	?3	?
9	6	1	13.00	LBA	
10	13	1	0.25	1	LBA
11	13	3	4.00	2	LBA
12	13	5+	5.00	4	?
13	13	3+	10.00	4	LBA
14	12	2	1.50	?	?
15	15	1	1.00	?	?
38	18	6	1.00	1	?
39	19	6	2.00	5	LBA
40	19	1+	10.50	4	?
41	14	5	6.00	4	LBA
42	19	2	7.00	4	?
44	21	1	0.50	5	LBA

+ indicates additional scraps of pottery

Table 8 Tallington 1961: Pottery from the pit-alignment

Pit No.	Total weight of pot (g)	No. sherds
2	1.50	2
3	3.00	1
4	1.75	2
5	5.00	1
6	13.25	2
12	1.50	1
13	19.50	4
14	6.00	1
15	1.00	1
18	1.00	1
19	19.50	3
21	0.50	1

Table 9 Tallington 1961: Pottery from the pit-alignment by weight and sherd count

TALLINGTON 1961: ANIMAL BONE

Bone	Cattle L	Cattle R	Sheep L	Sheep R	Human L	Human R
Skull					2	
Rib		1		1		
Humerus		2PEF				
Metatarsal		2				
Radius & ulna	1	1				
Femur		1				
Total	12 (92.3%)	9 (69.2%)	1 (7.7%)		2(15.4%)	
Unidentified	1 (7.7%)					

PEF = proximal epiphyses unfused

Table 10 Tallington 1961 animal bone: Bones from the pit-alignment

Bone	Cattle L	Cattle R	Sheep L	Sheep R	Pig L	Pig R
Skull	1					
Mandible	2	1			1	1
Rib	1		3			
Acessory Metapodial						1
Tibia		1			1	
Horn core	2	1				
Thorassic spine		1				
Humerus				1		
Metacarpal	1					
Astragalus	1					
Phalanx 1		1PEF				
Metatarsal	2					
Other			1			
Total	24 (60%)	15 (37.5%)	5 (12.5%)		4 (10.0%)	
Unidentified	16 (40%)					

PEF = proximal epiphyses unfused

Table 11 Tallington 1961 animal bone: Total number of bones from Pit 1

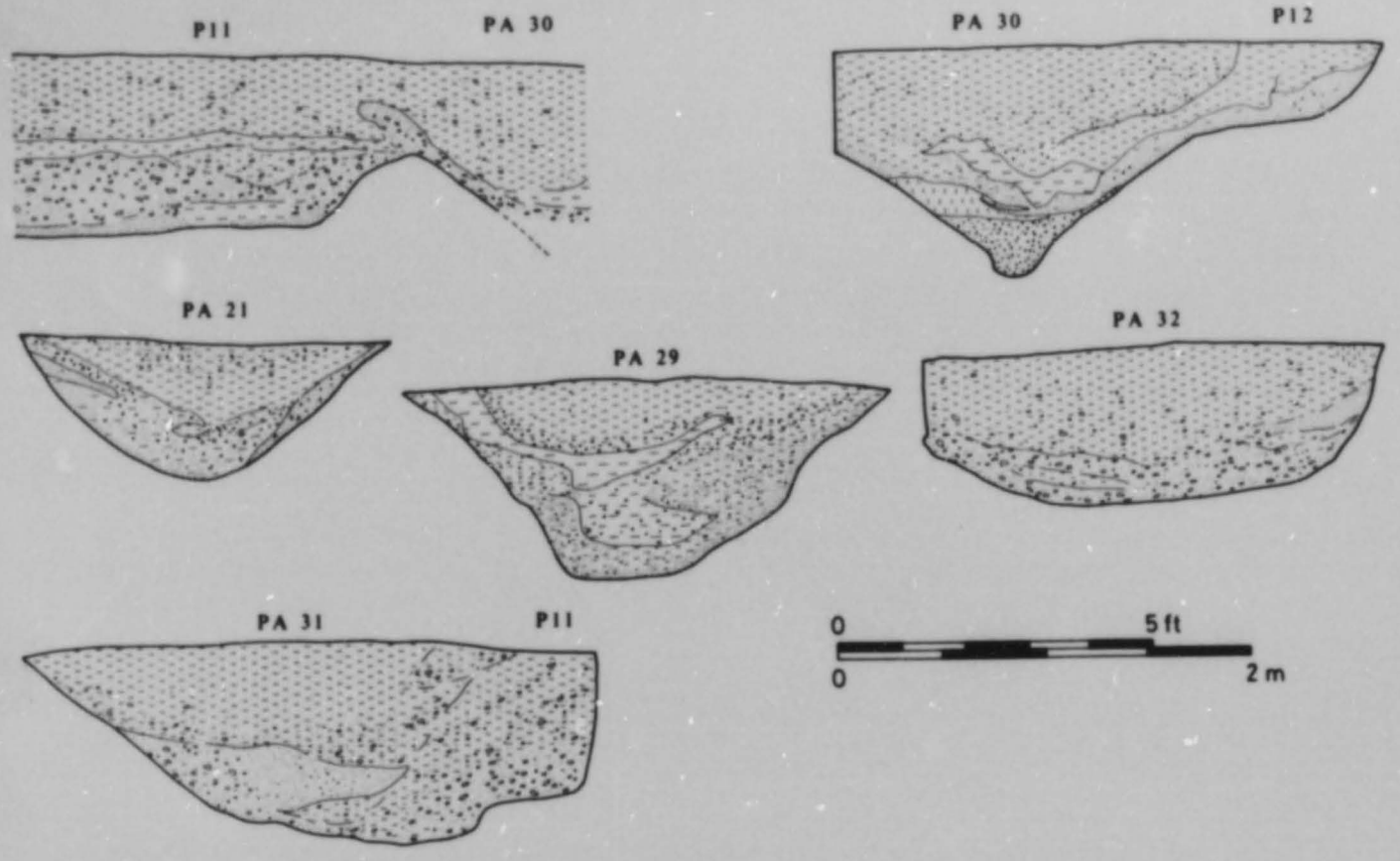

Fig 27 Tallington 1963-4: Sections through pit-alignment pits, for key see Figure 18. Scale 1:40

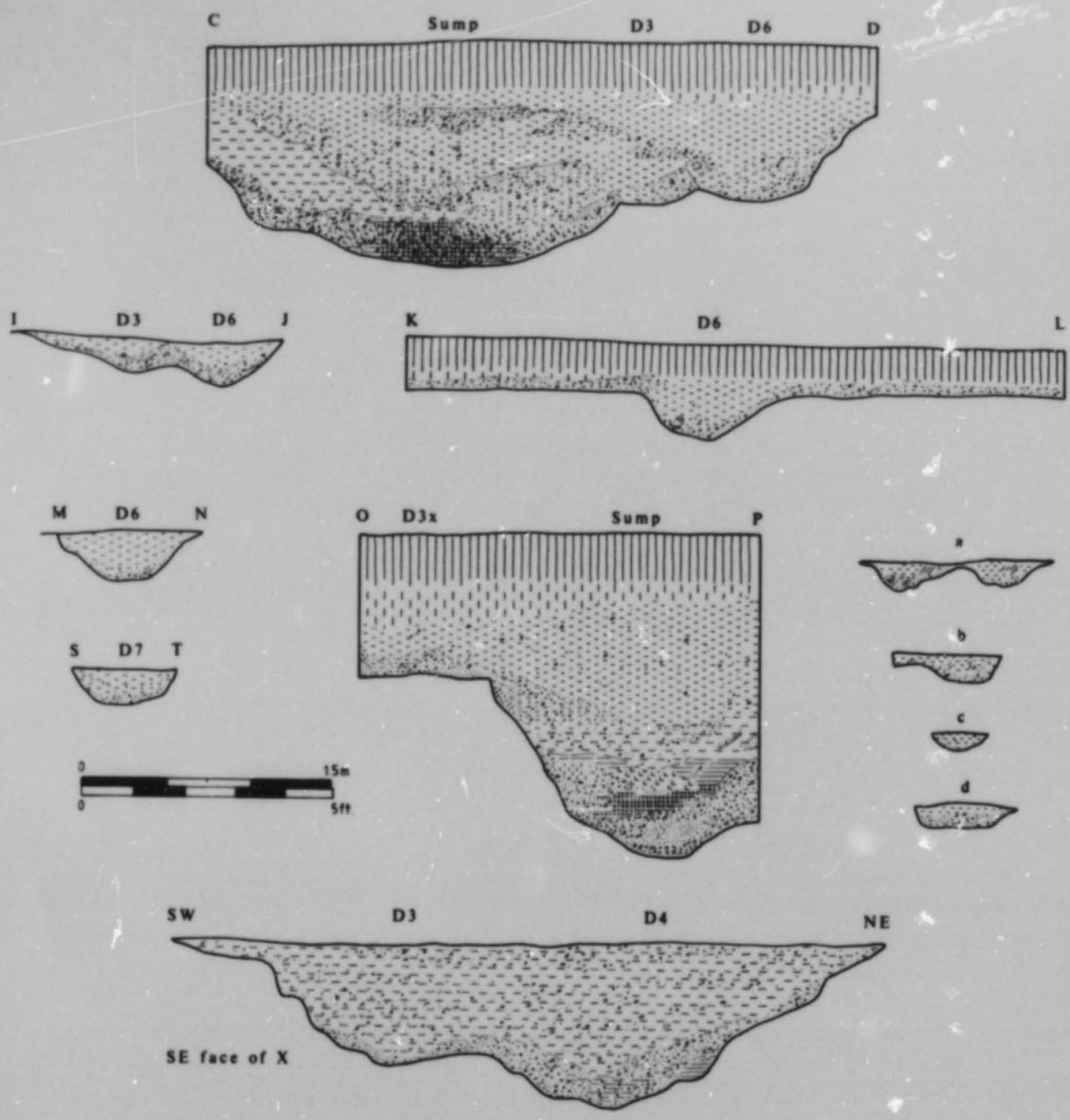

Fig. 33 Tallington 1963-4: Sections through the features at the entrance to the enclosure. Scale 1:40

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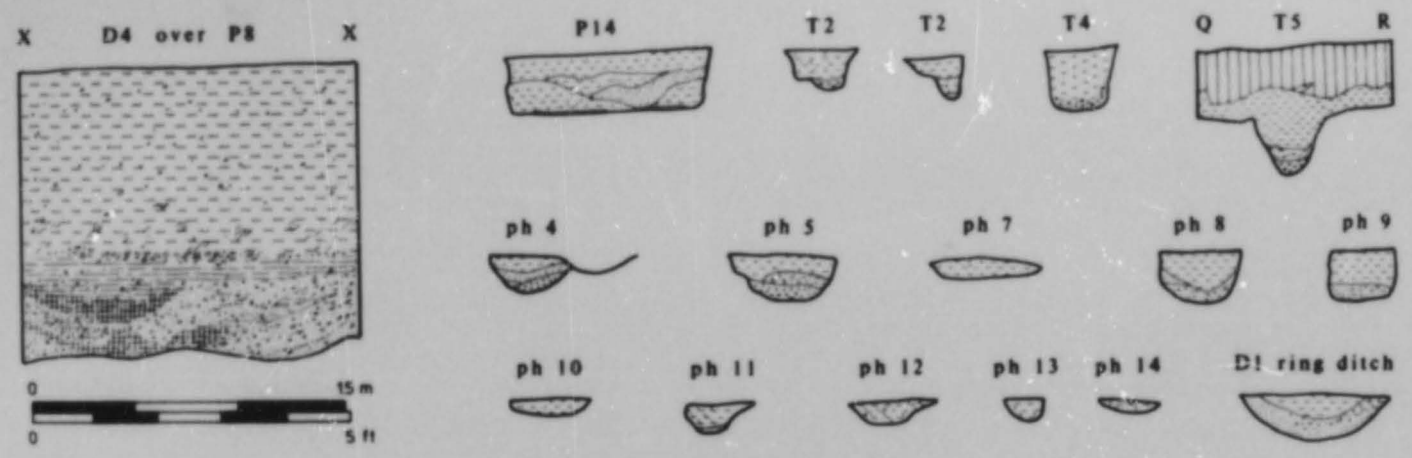

Fig. 35 Tallington 1963-4: Sections through pits and enclosure ditch near the south-east corner

B9

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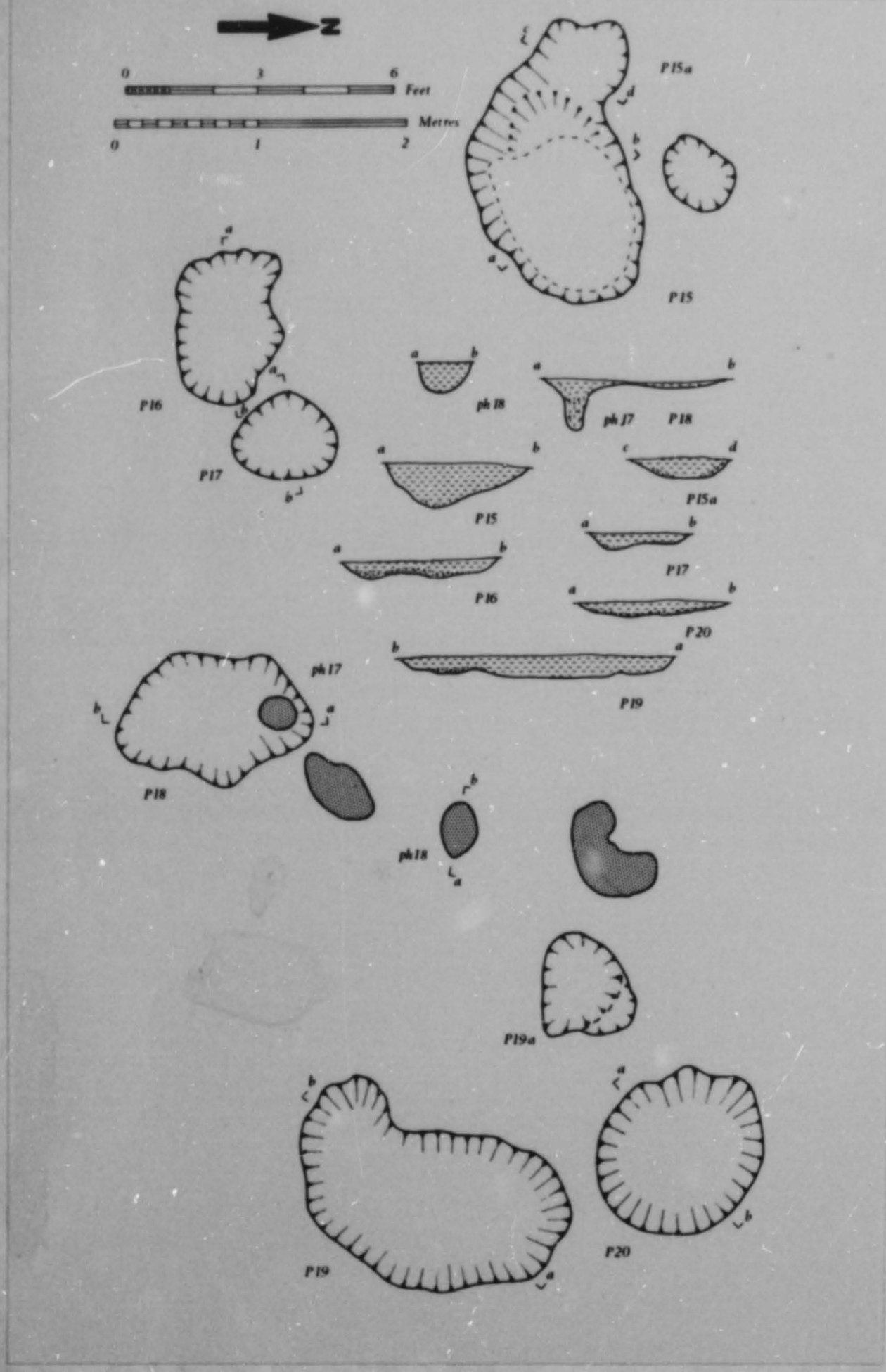

Fig. 36 Tallington 1963-4: Plan and sections through working area/pit cluster 3. Scale 1:40

B10

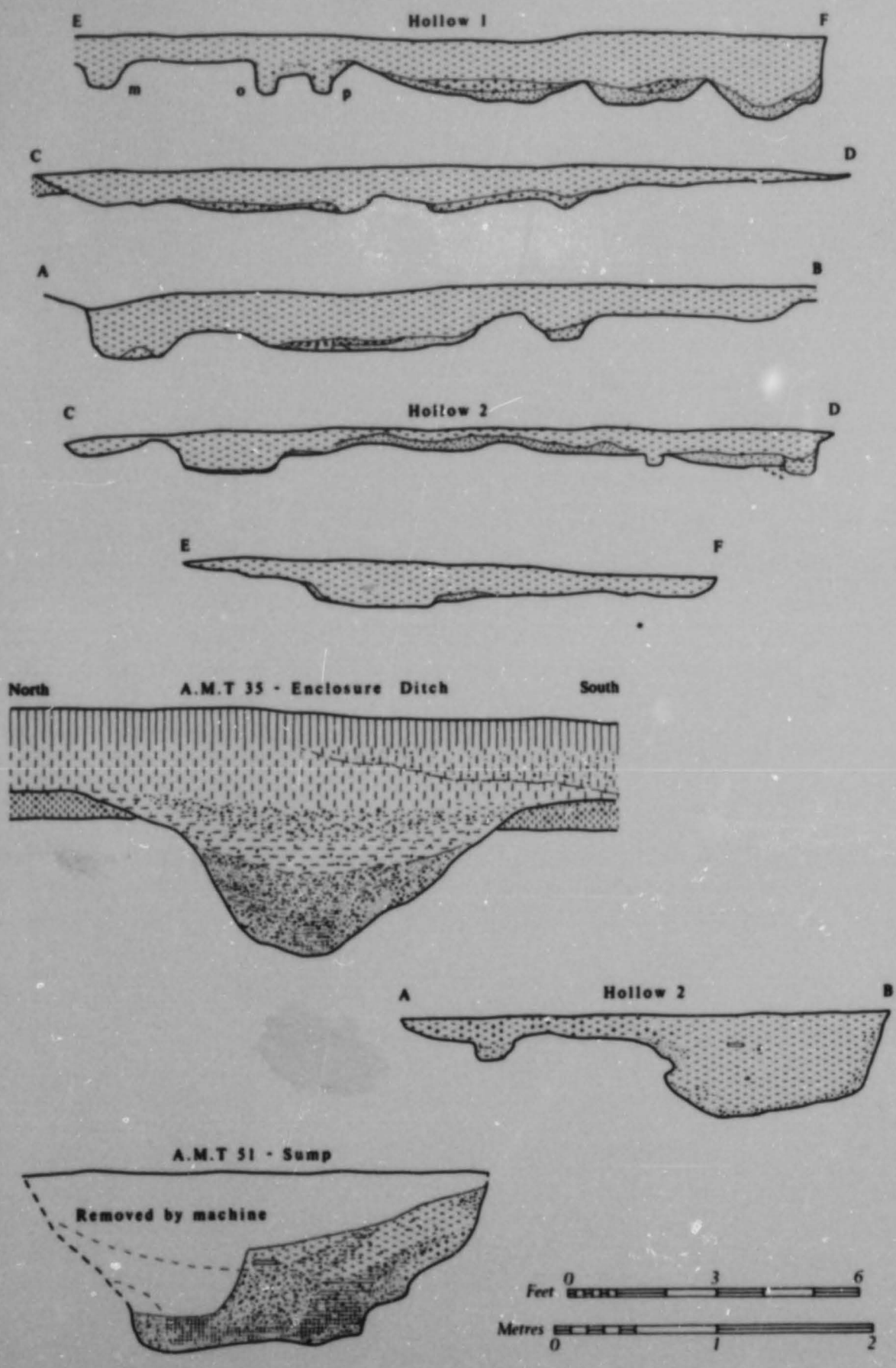

Fig. 38 Tallington 1963-4: Sections through 'Working Hollows' 1 and 2, and also the ditches of enclosures 35 and 51. Scale 1:40

explain by natural erosion alone.

A12

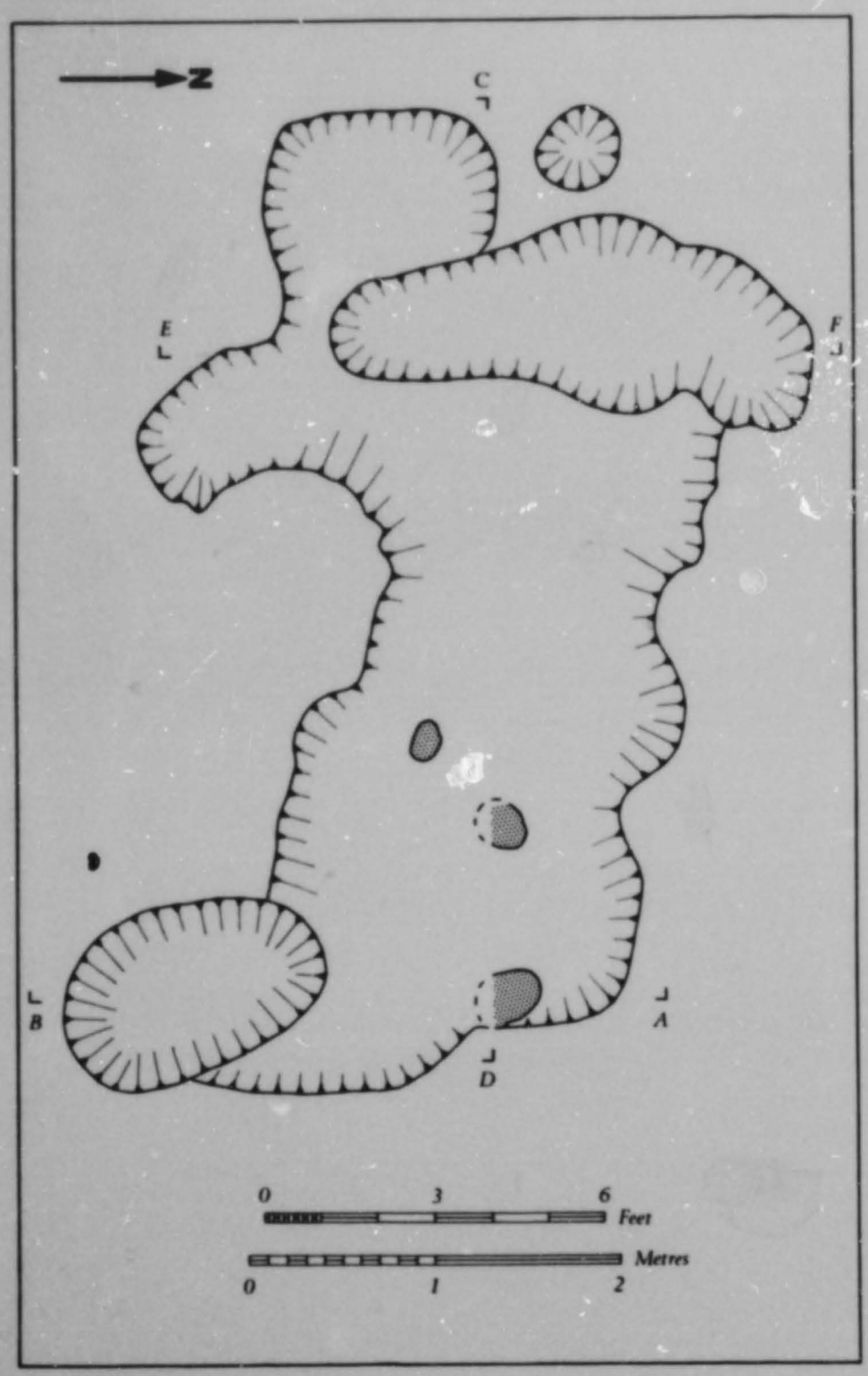

Fig. 39 Tallington 1963-4: Plan of 'Working Hollow' 2. Scale 1:40

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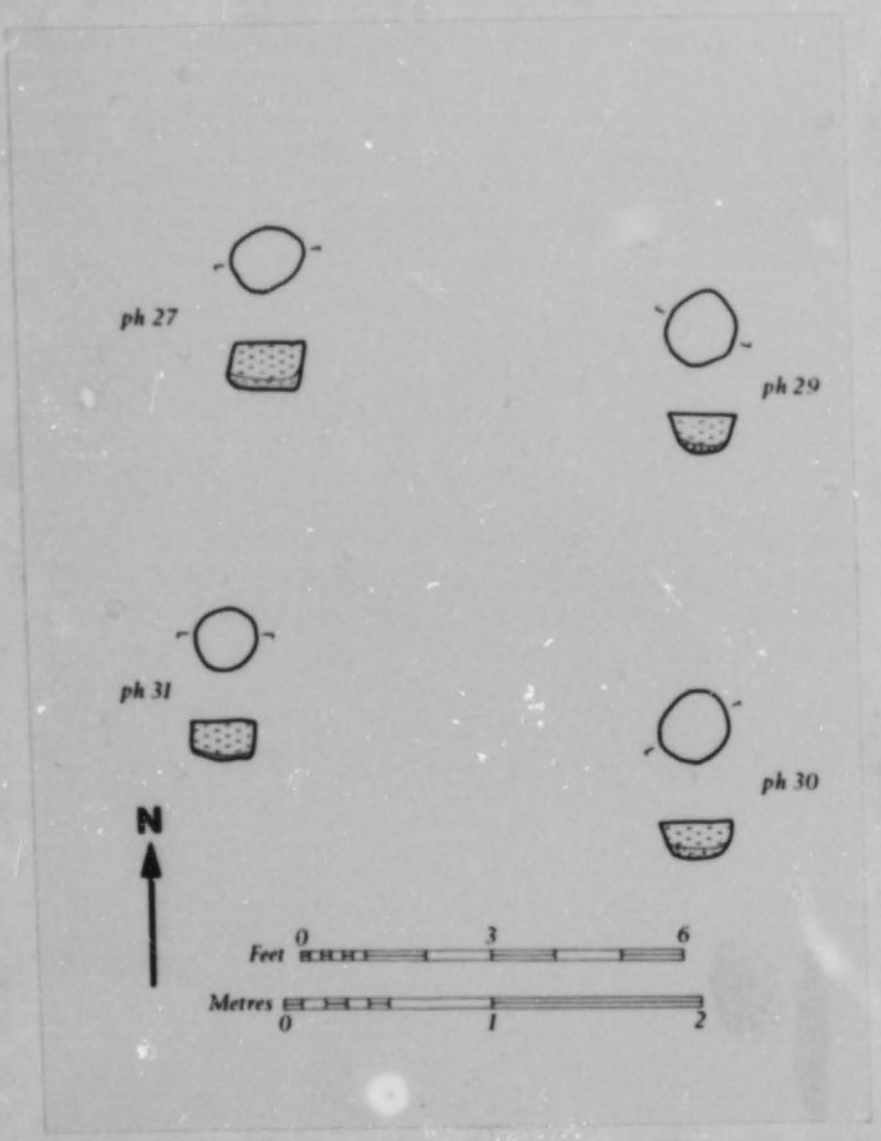


Fig. 40 Tallington 1963-4: Plan of four-post structure. Scale 1:40

B13

TALLINGTON 1963-4: ENCLOSURES 35 and 51

The large rectangular enclosure (Site 35)

(Fig. 24; Fig 45)

Stripping of topsoil in preparation for gravel quarrying exposed the south-west corner of the enclosure ditch (D2) and also a pit (P1) and a small ring-ditch (D1) inside (Fig. 45). It was hoped that excavation of these features would provide archaeological evidence of their date.

The south ditch of the enclosure was sectioned immediately west of the modern track which led to the barns in the north-east corner of the field. It was 2.75 m across at the top and 1 m deep from the old ground surface. There was a considerable depth of soil above as the line of the ditch at this point coincided with a medieval plough headland (Fig. 24). The primary fill of the ditch (Fig. 38) was clean sand and gravel interleaved with bands of dark organic clay (gley). The upper fill was brown soil and dark brown soil with gravel. There was no sign that the ditch had ever been recut and it was concluded that the lower part at least had filled by natural processes. The gravelly band across the top of the ditch however might have been a result of the levelling of a (?internal) bank. There appeared to be a gravel metalling on the southern lip of the ditch but it was possibly only a local variation in the natural subsoil. No finds came from the ditch or from the small pit (P1) which was completely excavated just inside the south-west angle of the ditch.

The ring-ditch (D1) was about 6 m in diameter overall and averaged 0.76 m across and 0.20 m deep at the level of the gravel surface (Fig. 45). Its upper fill was a grey-brown soil with a little gravel and contained animal bones, sherds of a Neolithic bowl (Cat. No. 139) and a fragment of a loomweight. When the soil was dug away a

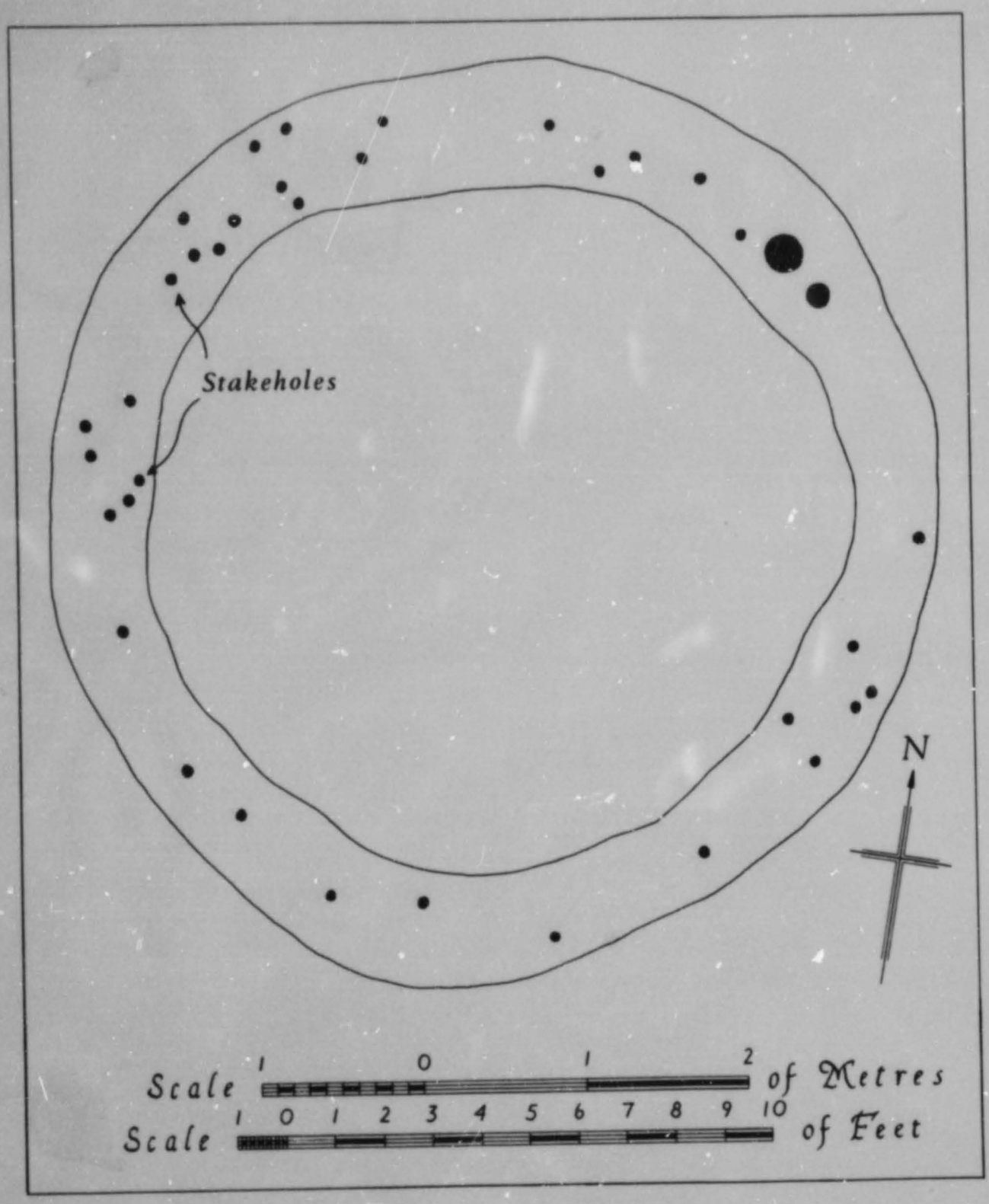


Fig 45 Tallington 1963-4: Plan of the ring-gulley in the south-west corner of Enclosure 35. Scale 1:40

series of stake-holes about 50-60 mm in diameter were observed in the gravelly soil filling the bottom of the ditch. Two larger post-holes (150-230 mm in diameter) were found at approximately the north-north-west bearing on the circumference.

Enclosure complex (Site 51)

(Fig. 24)

While the excavations described above were in progress at the Dow-Mac Quarry, a watch was kept on the stripping of topsoil and gravel quarrying at Pollard's Pit immediately north of the West Deeping cross-roads but still in Tallington Parish. It appeared from air photographs (Pls VI and X) that the density of prehistoric and Roman settlement had been much greater here and work by David Peacock in 1959 had revealed important finds of Bronze Age-Romano-British date sometimes associated with deep pits with waterlogged basal deposits which were rich in environmental data (Peacock 1962). Such features were particularly worthy of attention and when one was revealed in extending the quarry area westwards in April 1963, a few days were spent excavating it.

The pit was located within the enclosure complex 51 (R.C.H.M. 1960, fig. 7) immediately west of the south-west corner of the quarry area shown on the air photograph (Pl. VI, arrowed) and was a pit or sump in the north-west angle of the western enclosure. The ditch had been largely emptied of its filling by the dragline excavator but it seems to have been of similar profile and dimensions to those defining the two enclosures already described.

The top fill and much of the west side of the sump had also been removed by the dragline excavator and this had revealed waterlogged deposits below the modern water table in the bottom 0.15-0.30 m (Fig. 38). The upper levels, where they survived on the east side,

consisted of brown or dark brown soil mixed with varying amounts of gravel, and and snail shells too were numerous in places. Towards the centre there was a lot of fairly clean gravel which became increasingly mixed with dark, clayey deposits towards the sides. At the bottom the gravel was strongly coloured orange/brown from iron staining and merged with deposits which varied from a dark organic clay (gley) to partly rotted vegetation which was speckled with bright blue vivianite, an iron phosphate which is found under waterlogged conditions when iron is abundant, and particularly where wood, bark and animal products provide tannin and phosphate in the medium (Dimbleby pers. comm.; VCH Northants I, 30-1).

Particulars of some of the tree/shrub species which were identified in a sample of this material by D.G. Patterson are given below. At least two species of beetle were also identified by Dr A.J. Hayes and analysis of the pollen content of a sample from the bottom of the pit was carried out by Professor G.W. Dimbleby. The results have been published elsewhere (Simpson 1966). Tree/shrub pollen was only 7% of the total and grasses, a great variety of herbs and a high proportion of cereal pollen all indicate open, agricultural surroundings.

Litte pottery was recovered. It was all Late Iron Age or early Romano-British and many fragments of a wheel-thrown jar (Cat. No. 144) found on the bottom of the pit suggest that it should be dated not later than the mid-1st century AD. Unstratified pottery collected from heaps of material excavated by the dragline from the upper levels of this pit and adjacent features was all of similar date but also included one sherd which may be Ancaster-Breedon Ware and thus likely to be of Middle Iron Age date.

TALLINGTON 1963-4: ANIMAL BONE

The mammalian bones

(Table 14, text)

by Mary Harman

A summary of the mammalian bone information is given in the main text.

The site yielded only small quantity of bone, most of which was in reasonable condition, broken but quite sound: some had been preserved during excavation by an application of PVA. Most of the pieces were identifiable and were listed. The majority of the bones were regarded as belonging to the Early Iron Age; but Pit 13 was of an earlier period. The lists are summarised in Table 14 (text).

Pit 13 contained parts of the following:

Cattle: R mandible, R radius, R tibiae.
Sheep: 2 teeth, axis, L metacarpal, R tibia, R astragalus, L and R calcanea, L phalanx.
Horse: part maxilla, R innominate.

The intersection between Ditch 4 and Pit 13 contained bone fragments from the following species: Cattle (9), Sheep (3), Pig (1), and Dog (1).

Four pits in the pit-alignment contained single bones:

Pit 20: Cattle: R mandible
Pit 29: Sheep: R metacarpal
Pit 30: Sheep: tooth
Pit 31: Horse: most of the facial part of a skull, badly crushed.

Most of the cattle bones were from animals of full size though there were two mandibles from calves approaching the end of their first year, and a few other bones, though large, had unfused epiphyses. Several of the sheep mandibles still had the deciduous molars and some

of the postcranial bones were also from young animals. The pig remains were derived from both juvenile and mature animals. All the horse remains were from mature animals. All the animals were fairly small; the horse remains suggest they were from animals of small pony size.

There is an obvious preponderance of cattle bones, and though sheep appear to have been quite important numerically, they would have yielded far less meat than the cattle.

Butchery marks occur in three cattle bones, on one femoral head and on two metatarsal shafts, just below the proximal end, but the total number of bones is too small for any further useful comment.

The occurrance of two human infant bones in Working Hollow 2 is probably unremarkable; infant burials and disturbed remains are not uncommon on sites of this kind.

Analysis of beetles

by A.J. Hayes

Samples of beetle wing-cases were taken from the lower fill of a pit in the north-west corner of Enclosure 51, Tallington. At least two species are represented.

1. Possibly Geotrupes sp. (most likely to be Geotrupes stercorarius L.).

This is a common carnivorous ground beetle, occurring in a wide variety of habitats.

2. Possibly Anomala sp. - there is one British species, Anomala anaea (De G). This is one of the rarer cockchafers. Joy (1932) gives the habitats as sandy places chiefly on the coast.

TALLINGTON 1963-4: WOOD SAMPLES

Wood samples

by D.G. Patterson

The sample submitted consisted mostly of small twigs or branches, leaves and fruit from trees or shrubs preserved by waterlogging in the bottom 10-150 mm of the sump in the north-west corner of Enclosure 51 (Fig. 38), Tallington. A random selection of twenty-five samples for identification was made from the tin of material submitted. They were identified as follows:

8 pieces *Rosaceae* family, probably either *Malus* or *Pyrus* species (apple or pear).

7 pieces *Prunus* sp. (cherry).

4 pieces *Quercus* sp. (oak).

1 piece *Betula* sp. (birch).

1 piece *Tilia* sp. (lime).

4 pieces Unidentified - probably pieces of small shrubs rather than trees.

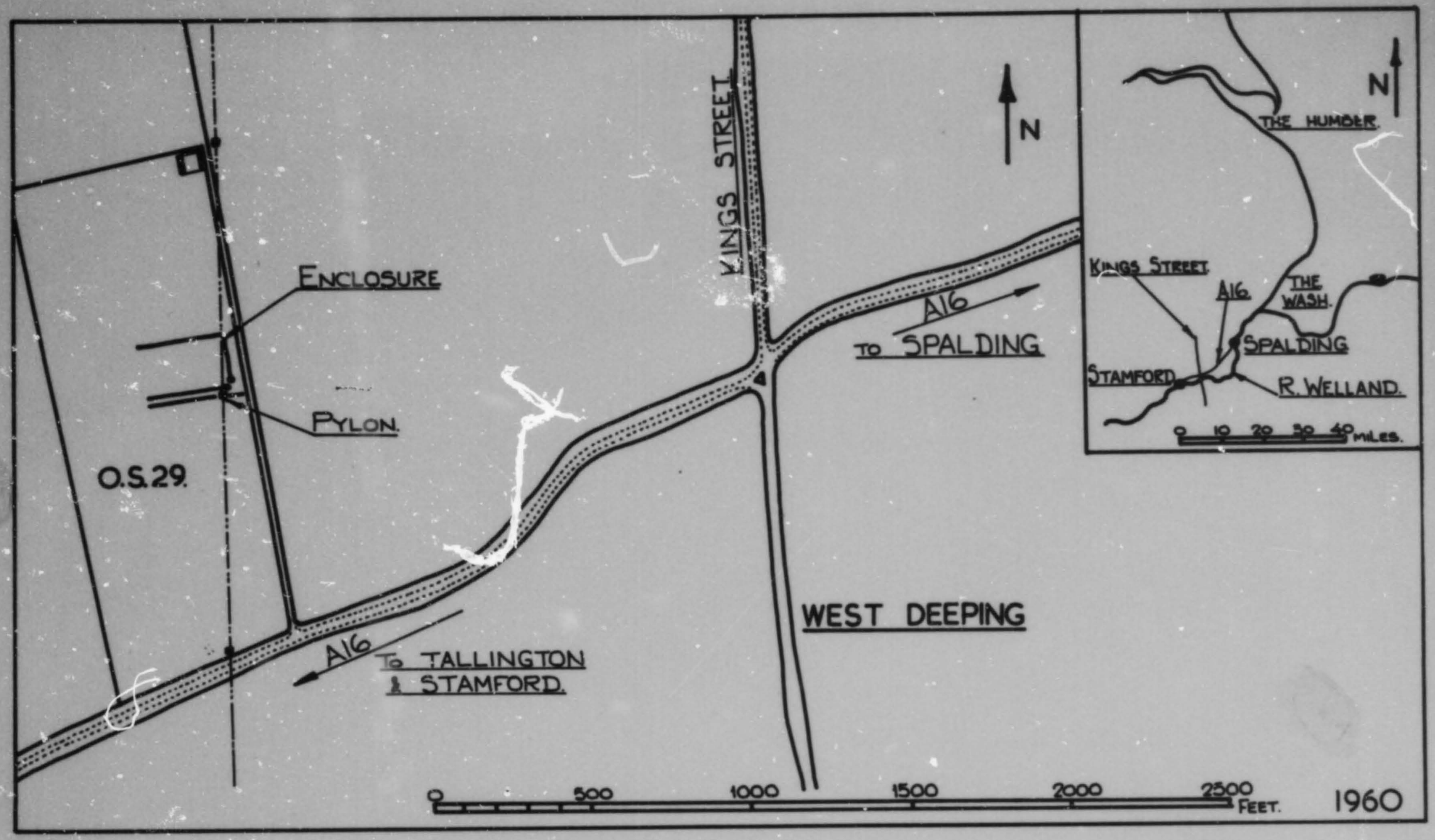


Fig. 46 Tallington (Fennell): Site location map. Scale 1:5000

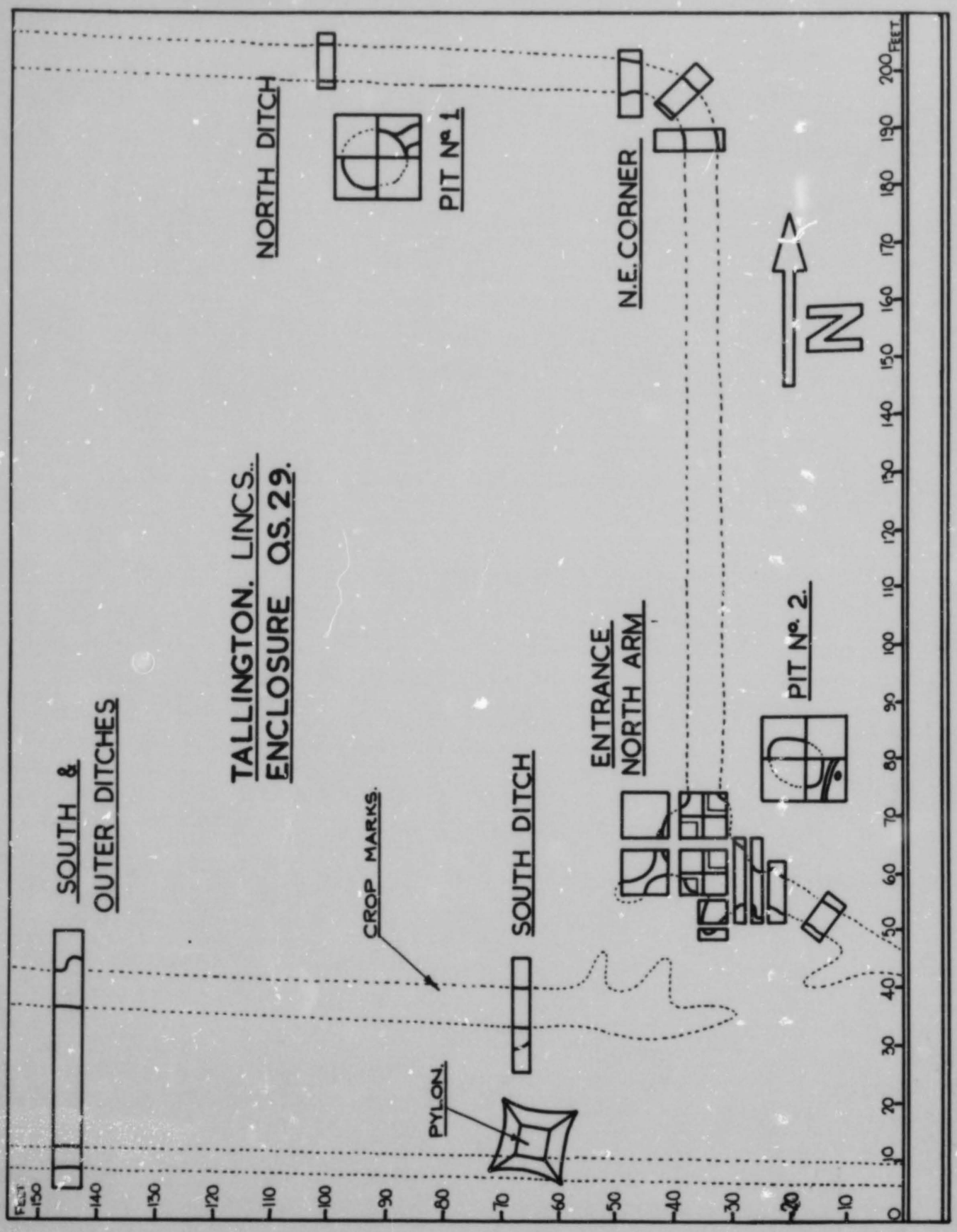


Fig. 47 Tallington (Fennell): Plan of the excavation trenches. Scale 1:250

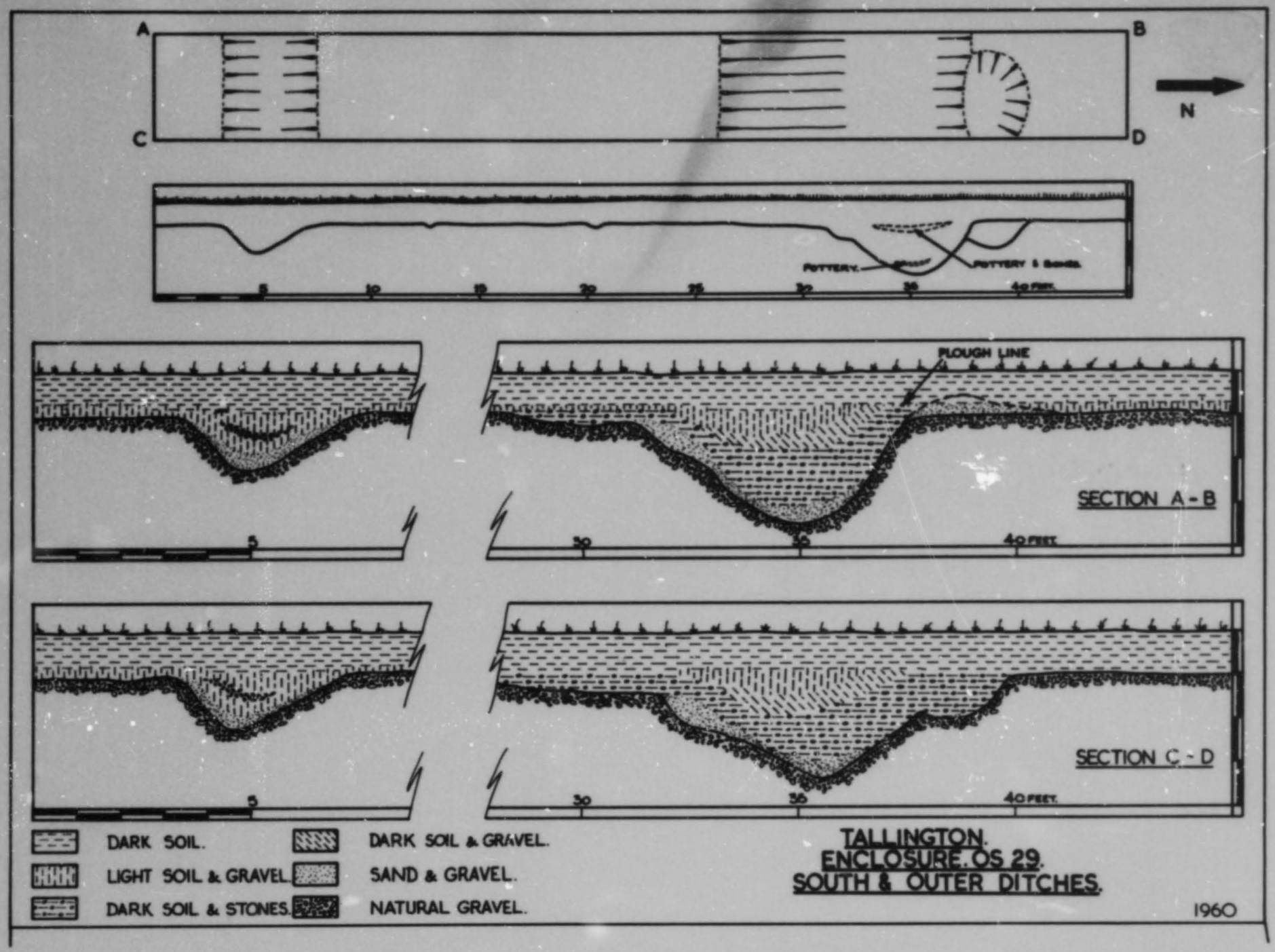
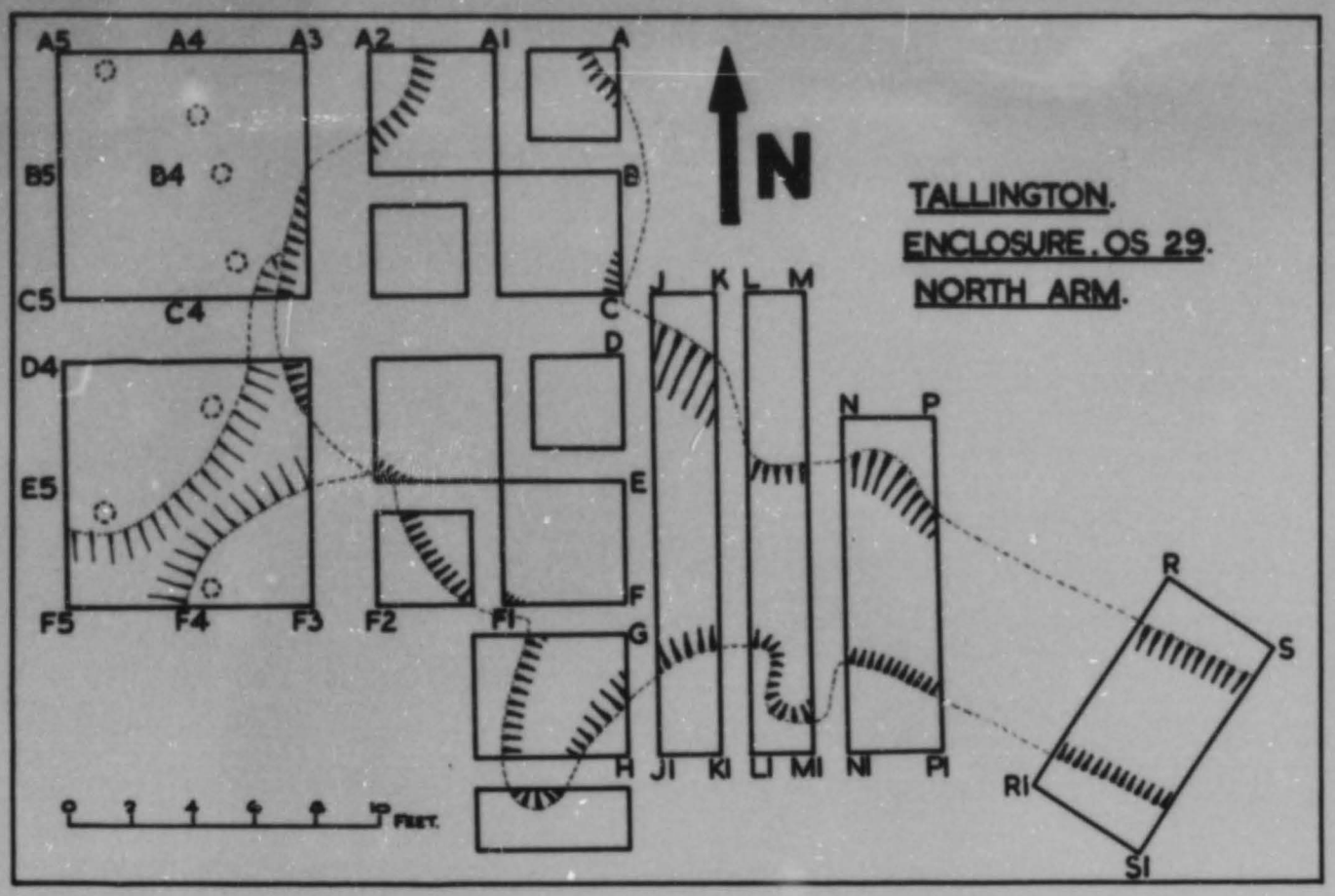


Fig. 48 Tallington (Fennell): Plans and sections of the roadway and enclosure ditch excavations. Scale 1:40



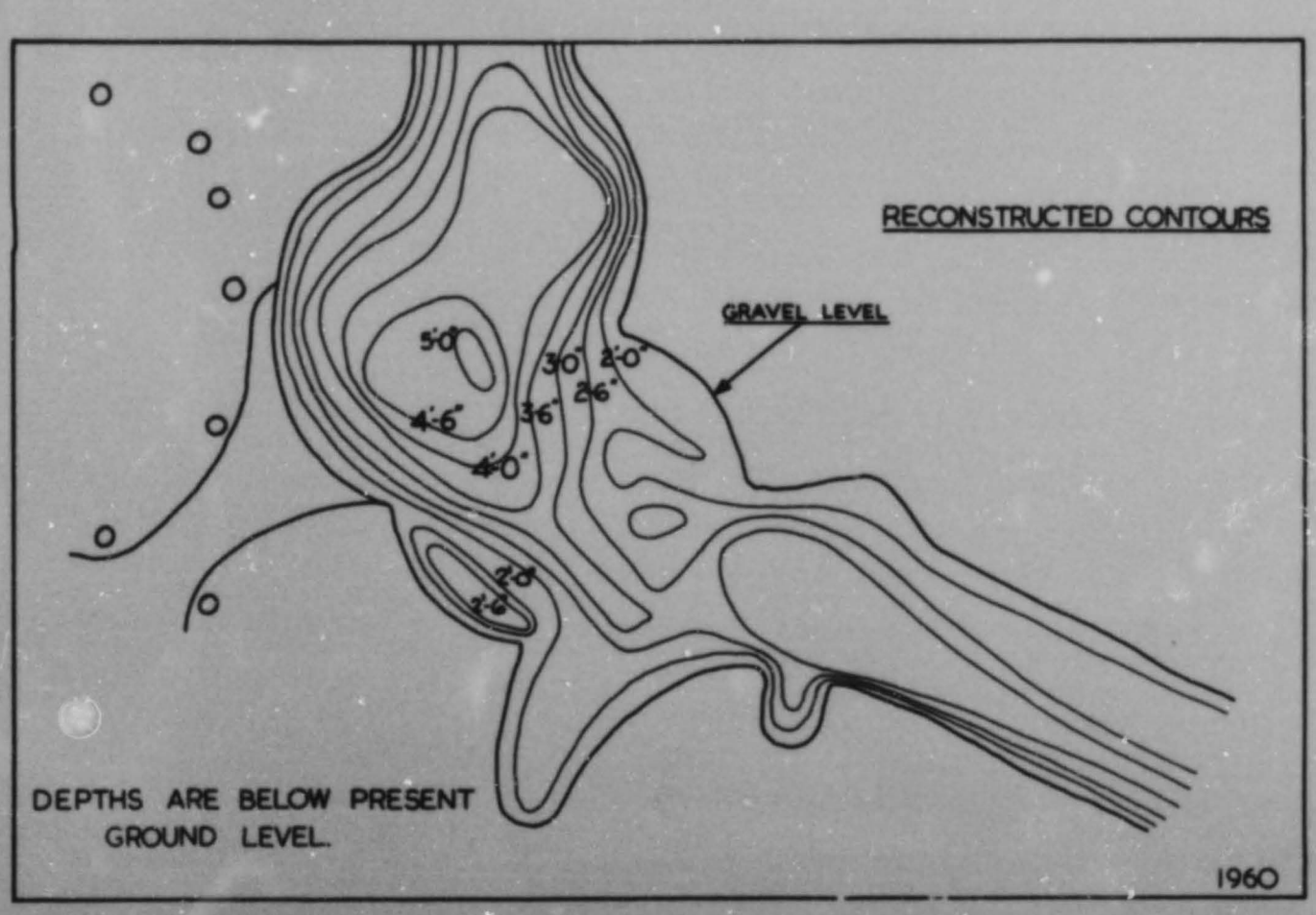


Fig. 49 Tallington (Fennell): Plan and contour survey of the north side of the enclosure entrance. Scale 1:80

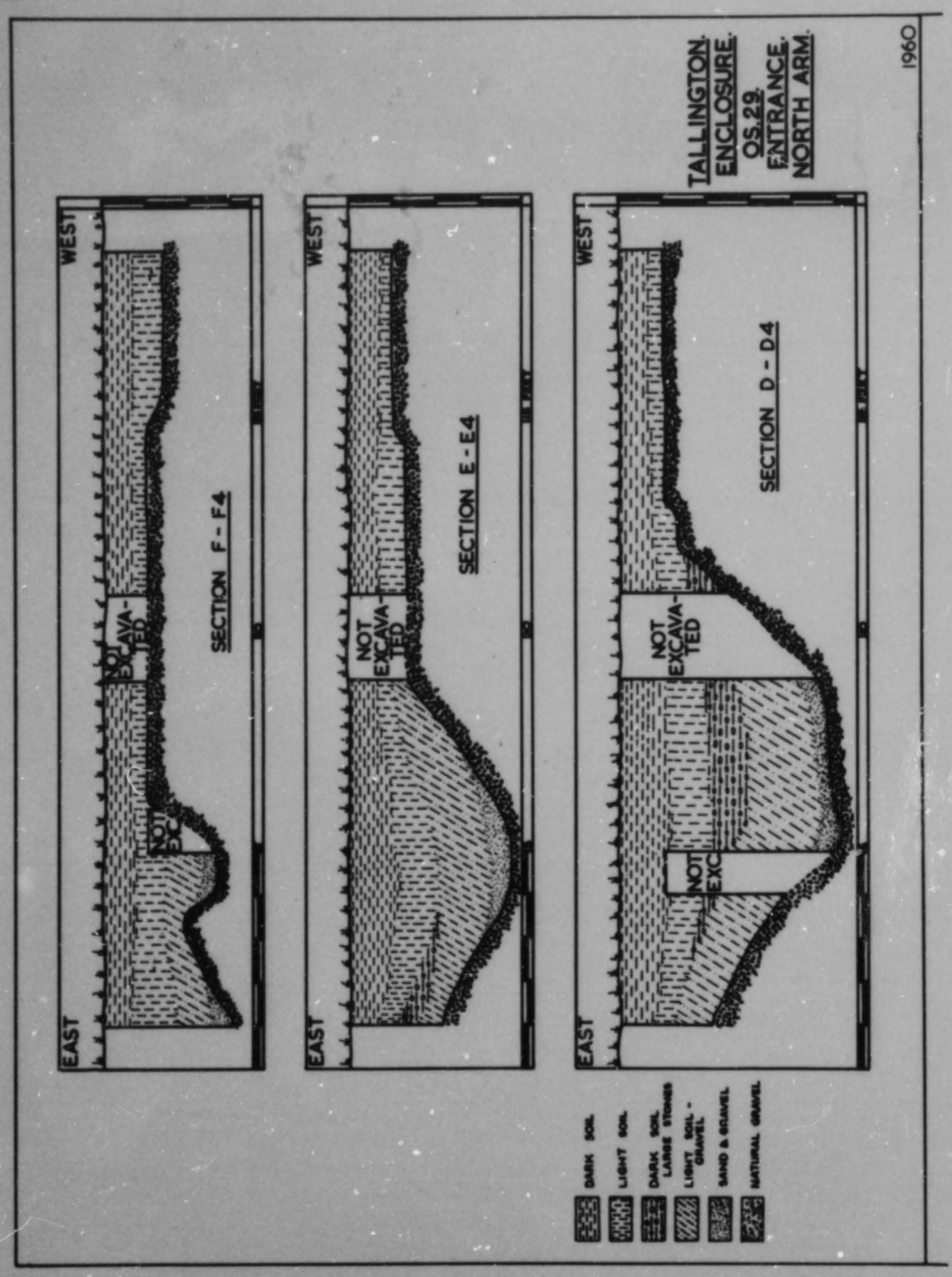


Fig. 50 Tallington (Fennell): Sections of the ditches on the north side of the enclosure entrance. Scale 1:40

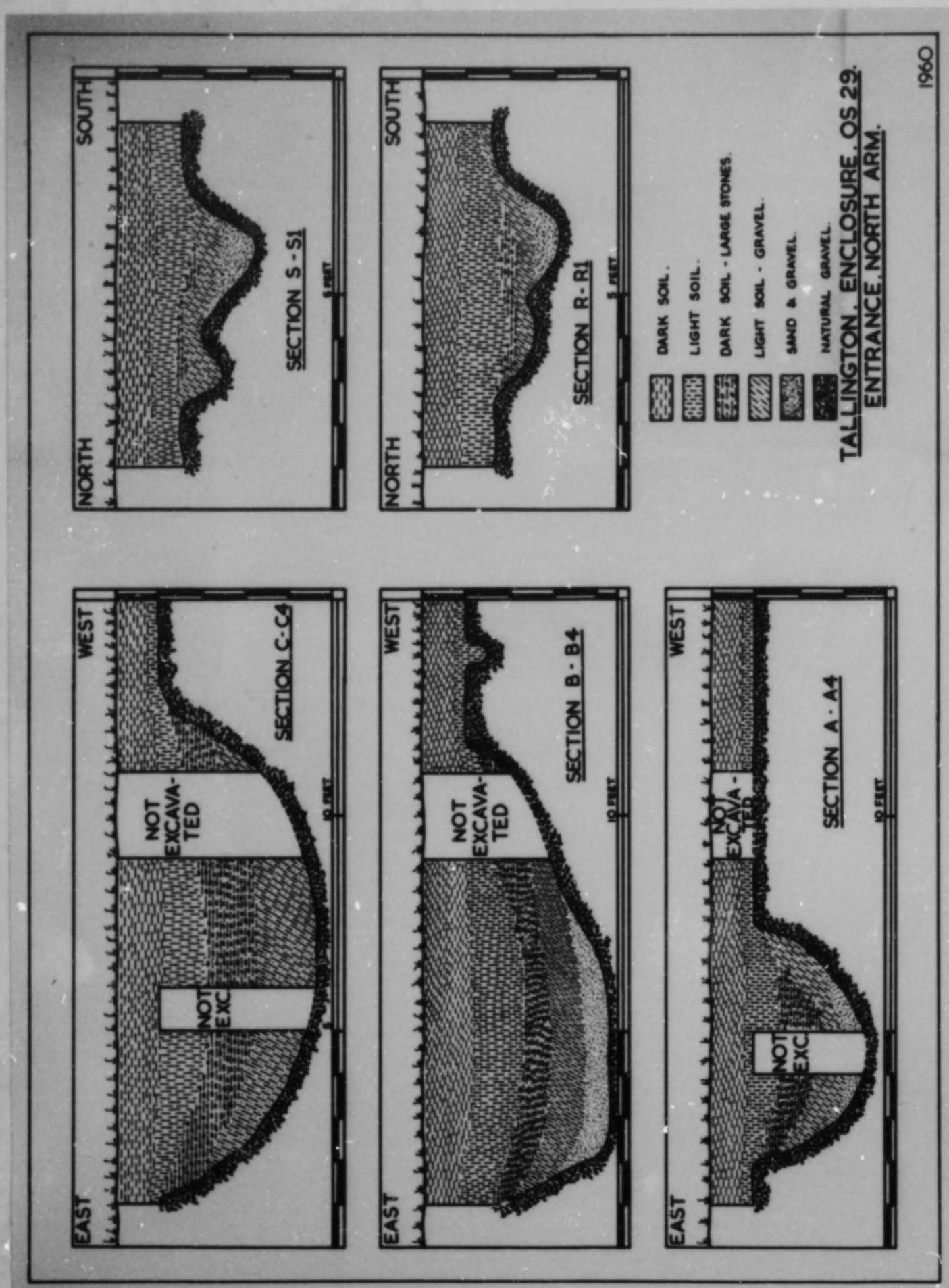


Fig. 51 Tallington (Fennell): Sections of the ditches on the north side of the enclosure entrance. Scale 1:40

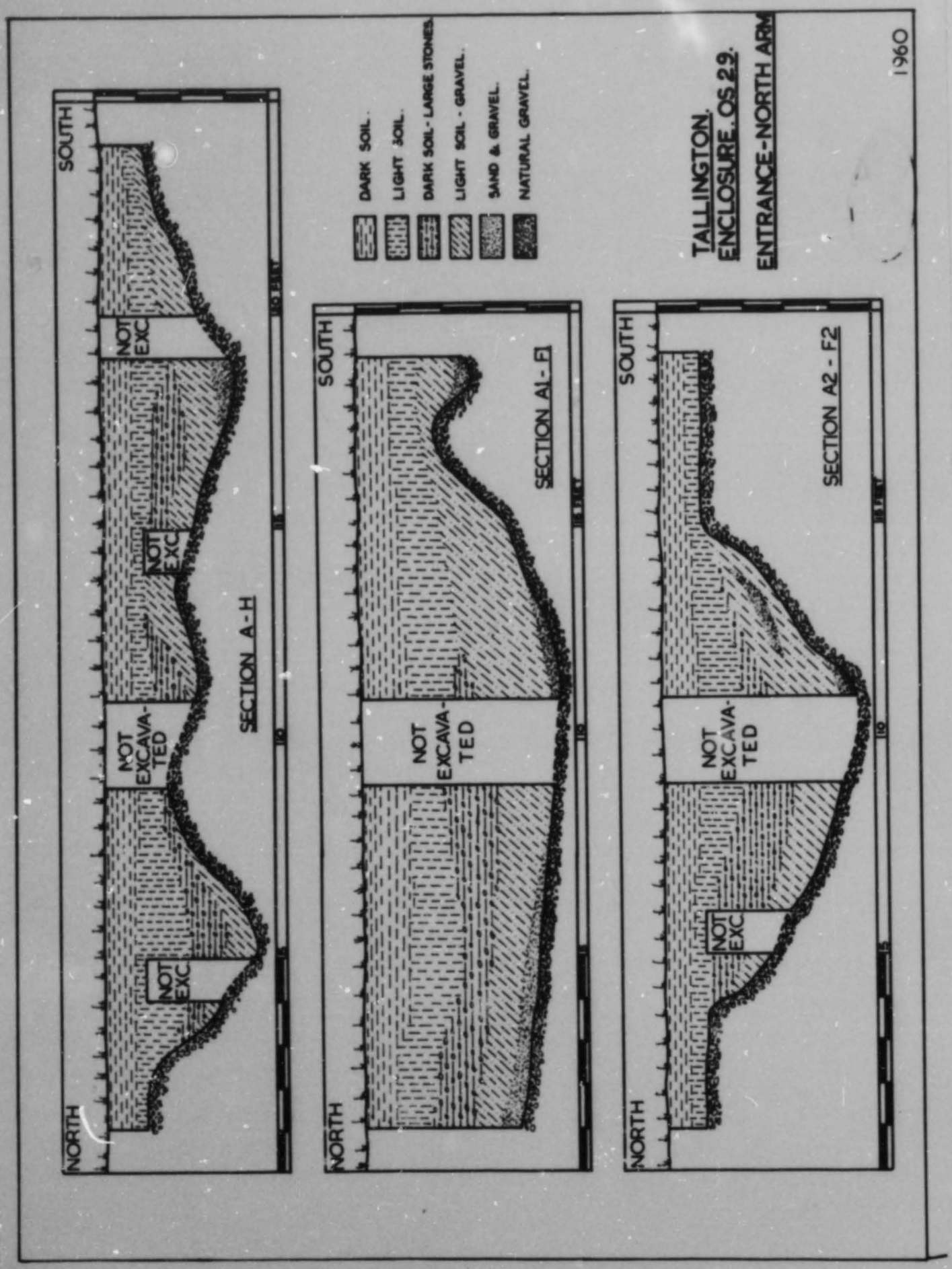


Fig. 52 Tallington (Fennell): Sections of the ditches on the north side of the enclosure entrance. Scale 1:40

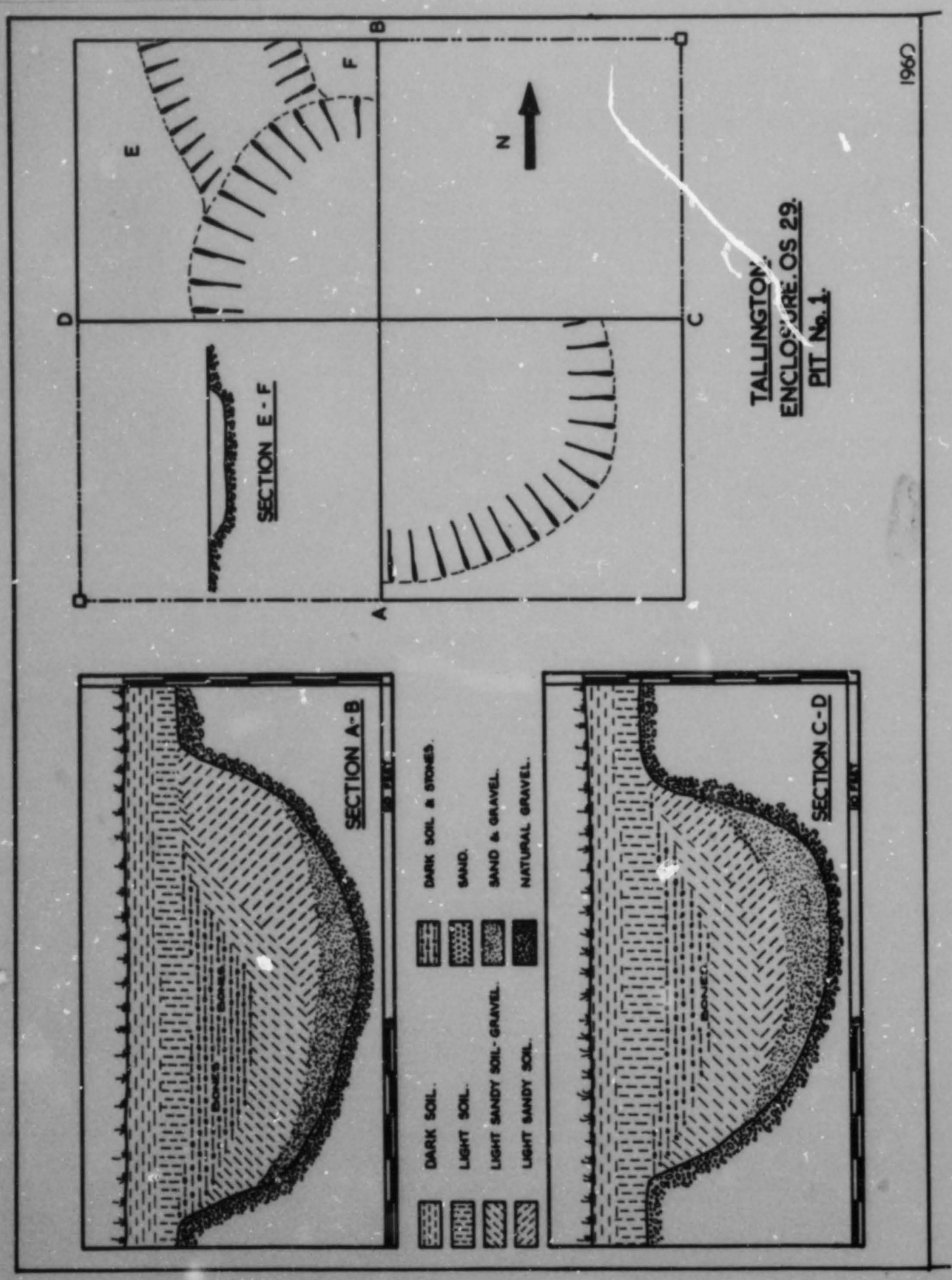


Fig. 53 Tallington (Fennell): Plan and sections of Pit 1. Scale 1:40

4. Excavations at Plant's Farm, Maxey, Cambridgeshire

by D.A. Gurney, J. Neve and F.M.M. Pryor

Pit No.	Diam.	Depth
PA3	2.40	0.82
PA7	2.30	0.77
PA12	2.40	1.10
PA13	2.10	0.82
PA14	2.30	0.77
PA19	1.30 x 2.40	1.12
PA20	1.90	0.40
PA22	2.25	0.45+

Table 16 Maxey, Plant's Farm: Dimensions of the pit-alignment pits

Section descriptions

(Figs 64-9)

The layer descriptions are quoted directly from the site notebooks, with further interpretations by Dr C.A.I. french

No. 1: section north-south through PA13 (Fig. 68)

Description

layer 1: light brown soil and gravel.

layer 2: compact gravel with some light brown soil.

layer 3: concentrated gravel and sand.

layer 4: light orange-brown soil and a little gravel.

layer 4a: dark brown loamy soil with a little gravel.

layer 5: white sand with yellow staining.

layer 6: dark brown sandy soil.

layer 7: light brown orangy soil and gravel.

layer 8: light brown sandy soil with some gravel.

layer 9: gravel and sand (natural).

layer 10: light brown soil and gravel.

PLANT'S FARM, MAXEY: SECTION DESCRIPTIONS, Section 1 (cont.)

layer 11: light brown sandy soil with some yellow staining.

layer 12: sand and gravel.

Interpretation: layers 2-11 either rapid infilling (with considerable influence of flowing water) and/or some deliberate backfilling.

No. 2: section south-west - north-east through PA3 (Fig. 66)

Description

layer 1: light/dark brown soil with patches of orange-brown subsoil, some gravel and flecks of charcoal.

layer 2: light brown soil with gravel overlying light brown/orange-brown subsoil mix.

layer 3: dark brown loam.

layer 4: light brown/orange-brown subsoil mix.

layer 5: concentrated dirty gravel.

layer 6: clean sand and gravel with some yellow staining.

layer 7: sandy brown soil.

Interpretation: layer 6 is the initial rapid infilling with sand from the feature sides and it (layer 6) has possibly been recut by an un-numbered layer. This was followed by considerable slip from the south-west side which was probably recut and became infilled with layer 1.

No. 3: section east-west through PA3, G3 and D6 (Fig. 68)

Description

layer 1: light and dark brown soil mix with charcoal flecks and some gravel.

layer 2: light and dark brown soil mix with gravel and patches of orange-brown subsoil.

layer 3: light brown gravelly soil.

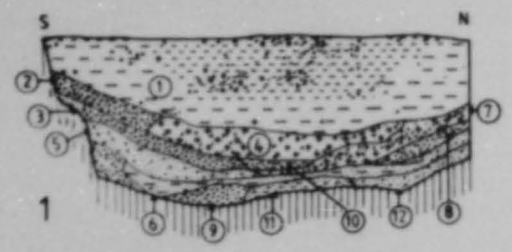
layer 4: very gravelly light brown soil.

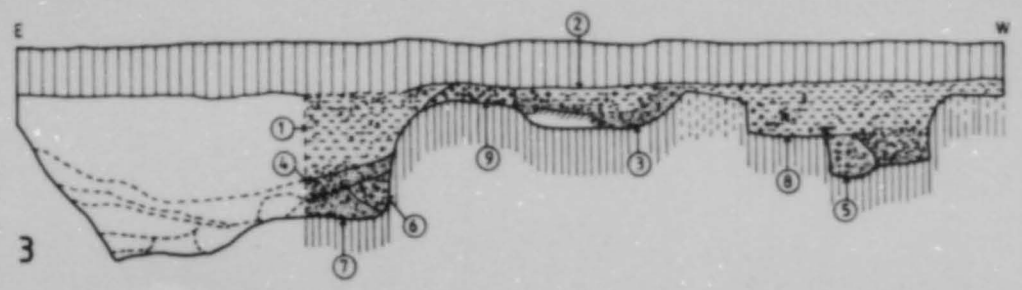
layer 5: dark brown soil.

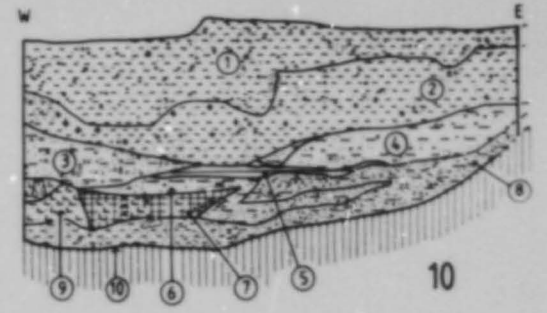
layer 6: dark brown loamy soil with a little gravel.

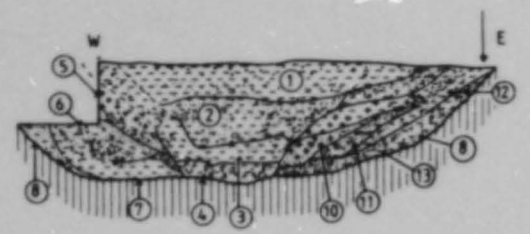
layer 7: gravelly white sand with yellow staining .

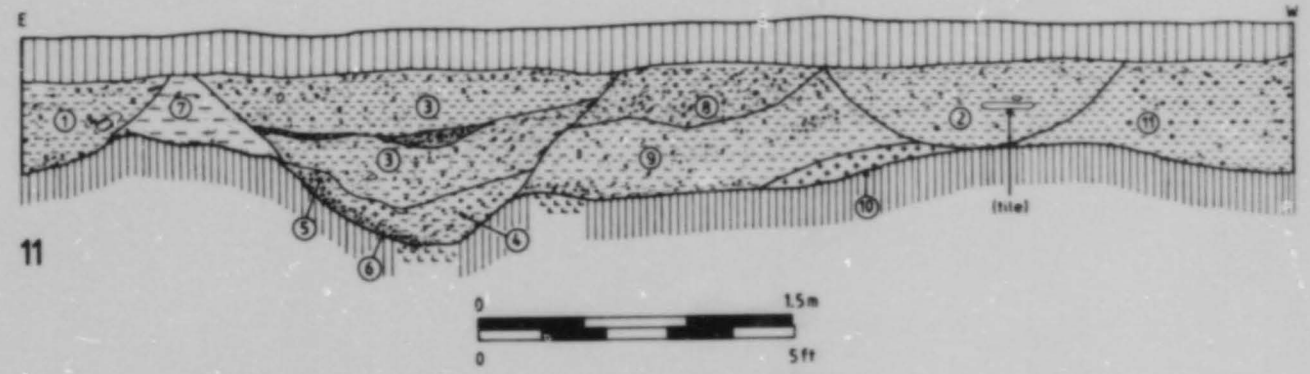
layer 8: orarge-brown soil.

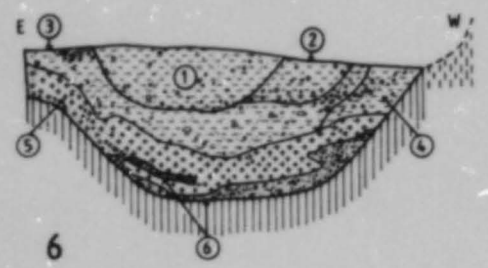


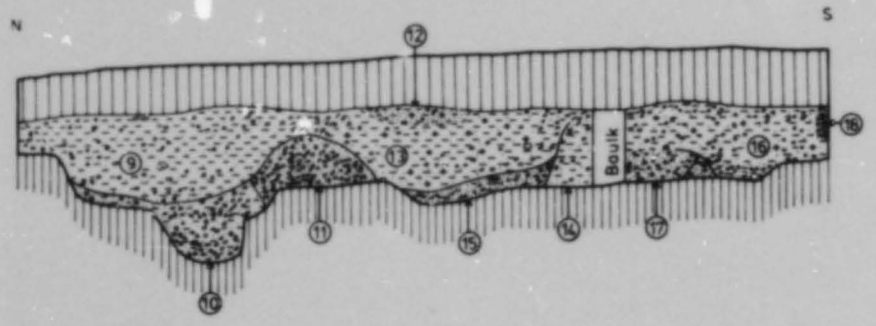












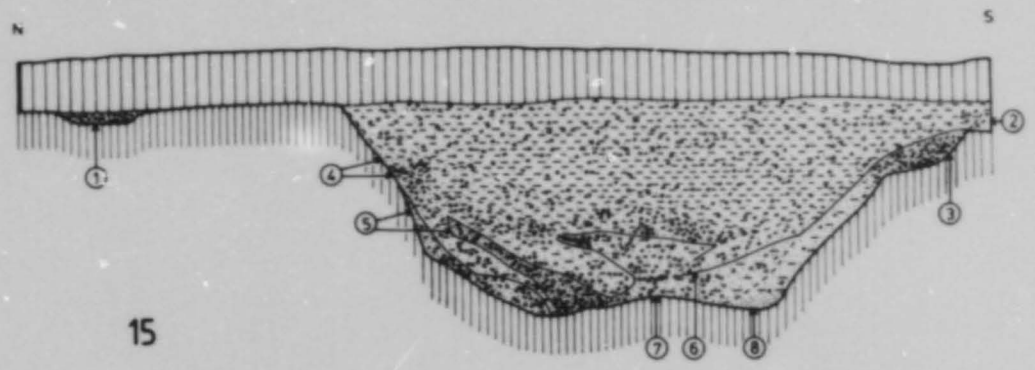


Fig. 68 Maxey, Plant's Farm: Sections 1, 3, 5, 6, 9-11, 15 (for locations see Figs 60 and 61). Scale 1:40

PLANT'S FARM, MAXEY: SECTION DESCRIPTIONS, Section 3 (cont.)

layer 9: light brown gravelly soil.

Interpretation: ditch sequence: centre ditch first; west ditch second; east ditch third. All the infills look naturally accumulated.

No. 4: section west-east through PA7 (Fig. 66)

Description

layer 1: light brown soil with some gravel.

layer 2: light and dark brown soil mix with orange concentrations and a little gravel.

layer 3: very gravelly light brown soil with orange subsoil inclusions.

layer 4: orange-brown soil with a little gravel.

layer 5: white gravelly sand with yellow staining.

layer 6: very gravelly light brown soil.

Interpretation: all the infills look naturally accumulated. The top of layer 6/base of layer 3 looks like a standstill horizon into which the feature (represented by layer 4) was cut.

No. 5: section west-east through PA12 and D8 (archive D24, D13) (Fig. 68)

Description

layer 1: light brown soil with little gravel.

layer 2: light brown soil with some gravel.

layers 3 and 4: brown soil, fine gravel and a little coarse sand.

layer 5: orange-brown soil with little gravel.

layer 6: orange-brown sandy silt with variable gravel.

layer 7: brown soil with more gravel.

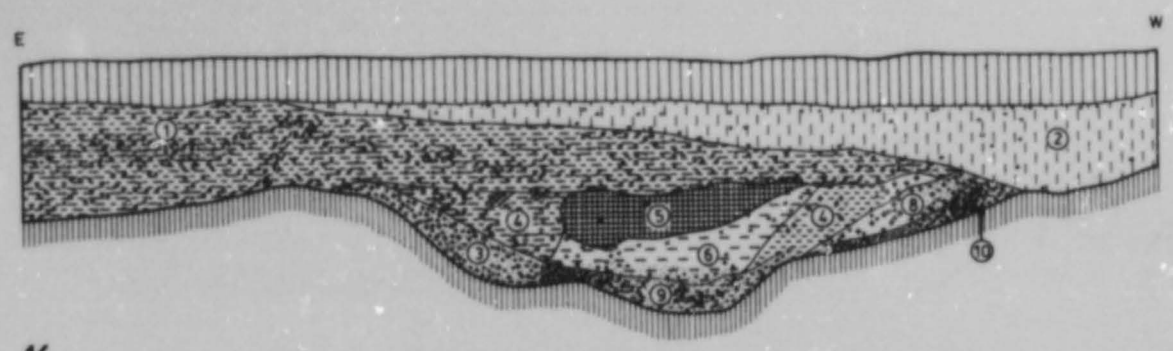
layer 8: yellowish-brown sandy soil.

layer 9: concentrated gravel.

layer 10: orange-brown soil with a little gravel.

layer 11: cleanish gravel of all grades.

layer 12: brown soil with a little gravel.



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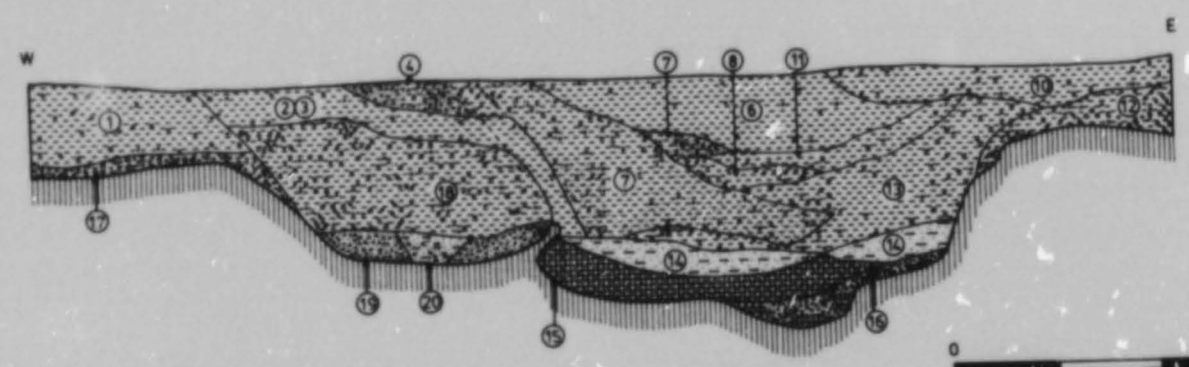

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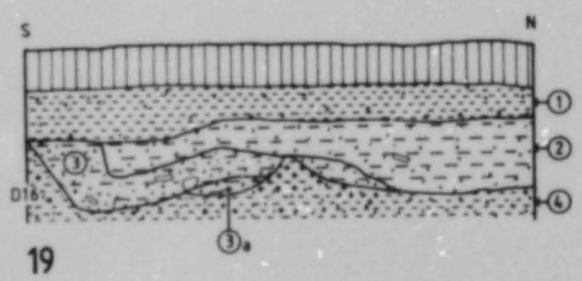

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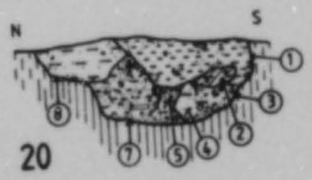

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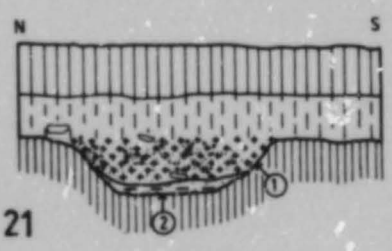

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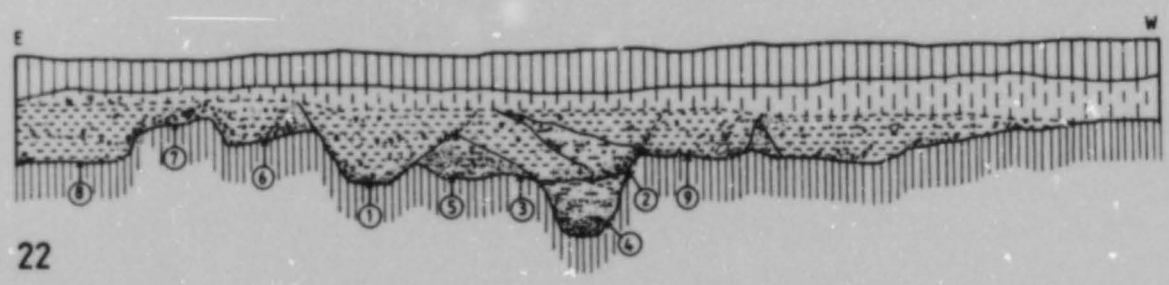

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Fig. 69 Maxey, Plant's Farm: Sections 16, 18-22, 24, 25 (for locations see Figs 60 and 61). Scale 1:40

PLANT'S FARM, MAXEY: SECTION DESCRIPTIONS, Section 5 (cont.)

layer 13: very dirty gravel with light brown soil.

Interpretation: the multiplicity and lensing of layers is suggestive of either rapid infilling and/or some deliberate backfilling. Layers 2 and 1 accumulated naturally.

No. 6: section east-west through PA20 and D22 (Fig. 68)

Description

layer 1: light brown fairly gravelly soil.

layer2: light brown orangy soil with little gravel.

layer 3: light brown soil with variable gravel.

layer 4: brown soil, a little orange subsoil and variable gravel.

layer 5: orange-brown soil with little gravel.

layer 6: concentrated dirty gravel.

Interpretation: naturally infilled. Layer 3 is oxidized which indicates seasonal waterlogging. Layer 6 may be slip or thrown in deliberately.

No. 7: section north-south through D4, D8 (archive D24), D5, and PA13 (Fig. 66)

Description

layer 1: robber trench, brown soil with small pieces of limestone.

layer 2: brown soil with some gravel.

layer 3: brown soil with some gravel, often large.

layer 4: light brown gravelly soil.

layer 5: light brown soil with some fine gravel and a few pieces of medium size.

layer 6: light brown soil with patches of fine and medium-sized gravel and orangy patches.

layer 7: sand with some gravel.

layer 8: light brown soil with sand and gravel.

layer 9: brown soil with sand and sparse gravel.

layer 10: orange-brown soil overlying brown soil and sand mix with some gravel.

PLANT'S FARM, MAXEY: SECTION DESCRIPTIONS, Section 7 (cont.)

layer 11: brown soil with some gravel.

layer 12: brown soil with sparse sand and gravel and orangy-brown inclusions.

layer 13: brown soil with some gravel.

Interpretation: the ditch (D8) has been recut possibly three or four times but does not look deliberately back filled.

No. 8: section west-east through D8(i) and (ii) (archive D24) (Fig. 68)

Description

layer 1: dark brown soil.

layer 2: dark brown soil with occasional gravel.

layer 4: light brown soil with occasional gravel.

layer 5: compact gravel.

Interpretation: naturally infilled and recut possibly three times. Layers 4-5 comprise the first ditch, layer 3 on the east is the second ditch, layer 3 on the west the third ditch and layer 2 the fourth ditch.

No. 9: section north-south through D5(ii), D19, D14 (Fig. 68)

Description

layer 9: light brown soil with occasional gravel.

layer 10: light brown soil, quite gravelly with orange tinge.

layer 11: light brown orangy soil with concentrated gravel.

layer 12: light orange-brown soil with some fine gravel.

layer 13: light orange-brown soil with some gravel.

layer 14: dark brown soil with some gravel.

layer 15: light brown very gravelly soil.

layer 16: light brown soil with occasional gravel and orange tinge.

layer 17: orange-brown gravelly soil.

layer 18: sandy gravelly soil.

Interpretation: layers 10 and 15 are possibly back-fill, but the other layers probably accumulated naturally.

No. 10: section west-east through P18 (Fig. 68)

Description

layer 1: light brown gravelly soil.

layer 2: light brown soil with some gravel, orange in places.

layer 3: brown gritty soil, gravel of fine grade, more clayey than layer 2.

layer 4: brown soil, a little fine and medium gravel.

layer 5: very dark brown gritty soil.

layer 6: dark brown gritty soil, small fragments of ochre merging with dark brown sandy soil with a little light brown clay beneath a dark grey layer.

layer 7: dark grey layer with tan streaks.

layer 8: light brown silt and gravel.

layer 9: dark brown clay with a tan colour just above.

layer 10: dirty concentrated gravel, less soil in places.

Interpretation: A very difficult section to understand. Layer 7 is gleyed but this is very difficult to reconcile with its position within the feature. Layer 5 - 'black soil', which may be very organic with comminuted charcoal (?) deliberately thrown in and/or turf thrown in (less likely). Layers 8 and 10 are suggestive of more rapid infilling.

No. 11: section east-west through D20, D21, D22 and D23 (Fig. 68)

Description

layer 1: light brown soil, some gravel.

layer 2: light brown soil, little gravel.

layer 3: light brown soil, some gravel.

layer 4: light brown soil, orange patches and some gravel.

layer 5: orange-brown soil, little gravel.

layer 6: gravelly rapid silt.

layer 7: brown soil, little gravel.

layer 8: light brown gravelly soil.

layer 9: light brown soil, little gravel.

layer 10: orange-brown soil with very little gravel.

layer 11: light brown soil, orange patches, little gravel.

PLANT'S FARM, MAXEY: SECTION DESCRIPTIONS, Section 11 (cont.)

Interpretation: all the layers look naturally accumulated, the gravelly lens in layer 3 possibly representing a standstill horizon in the accumulation of material in the ditch.

No. 12: section east-west through P16 and D29 (archive D8) (Fig. 66)

Description

layer 1: brown soil with some gravel.

layer 2: charcoal.

layer 3: light brown soil, occasional gravel.

layer 4: orange-brown soil, greyish tinge, some charcoal and occasional gravel.

layer 5: light brown soil with much gravel, thinning towards the east.

layer 6: light brown soil separated from layer 5 by some gravelly material.

layer 7: dirty gravel and sand.

layer 8: light brown soil, some gravel.

layer 9: light brown soil with a little gravel, but fairly stiff with a few flecks of charcoal.

layer 10: orange-brown stiff soil with some gravel.

layer 11: dirty sand and gravel.

layer 12: light brown gravelly soil with a greenish tinge and an inclusion of clay.

Interpretation: everything appears to have accumulated naturally except for layers 2 and 5 which look like they have been thrown in.

No. 13: west-east section through D16 and D7 (Fig. 66)

Description

layer 1: brown soil with some gravel.

layer 2: dark brown soil.

layer 3: light brown soil with some gravel.

layer 4: lighter brown soil, occasional gravel.

layer 5: light brown very gravelly soil with some coarse sand.

Interpretation: layers 2 and 3 are small recuts/features cut into the upper secondary filling. Layer 4 is natural infilling, and layer 5 is rapid infilling but probably natural.

PLANT'S FARM, MAXEY: SECTION DESCRIPTIONS

No. 14: section south-north through P11, G4 and D15 (Fig. 66)

Description

layer 1: dark brown soil with considerable medium and fine gravel.

layer 2: light brown soil, little gravel.

layer 3: light brown very gravelly soil.

layer 4: light brown soil, some gravel.

No. 15: section north-south through P4, D4 and D5(i) (Fig. 68)

Description

layer 1: light brown gravelly soil.

layer 2: light brown soil with considerable gravel.

layer 3: light brown gravelly soil.

layer 4: light brown fairly gravelly soil.

layer 5: concentrated dirty gravel with darker soil at its base.

layer 6: light brown fairly gravelly soil.

layer 7: dark brown soil with some gravel.

layer 8: dark brown loamy, quite sandy soil.

Interpretation: the ditch was possibly subject to erosion of material from both sides (layers 3-8), but the remainder of the infill looks naturally accumulated.

No. 16: section east-west through P16, D10 and D16 (Fig. 69)

Description

layer 1: brown soil and gravel.

layer 2: light brown soil and gravel - medieval plough furrow.

layer 3: orange soil and gravel.

layer 3a: light brown gravelly soil.

layer 4: light brown gravelly soil.

layer 5: ash and charcoal specks.

layer 6: dark brown soil with sparse gravel.

PLANT'S FARM, MAXEY: SECTION DESCRIPTIONS, Section 16 (cont.)

layer 7: light brown soil with a little orange inclusion.

layer 8: orange-brown soil with occasional gravel.

layer 9: compact gravel and sand with little soil except in the east.

layer 10: light brown soil and gravel.

Interpretation: layers 3 and 9 show signs of containing eroded material, eg. high gravel content. They also became dry enough for some oxidation to occur before the subsequent infill was deposited. Layer 5 from the section drawing apprears to be gleyed but this does not seem possible as the underlying layers exhibit little sign of permanent waterlogging. Possibly the excavator means 'reduction mottling' of the lower half of the profile.

No. 17: section south-north through D1, D2, D7, D8, and D16 (Fig. 67)

Description - no layers numbered

Interpretation: the ditch sequence would appear to be: D8, D16; D2; D7; D1. All the ditches look naturally infilled with the possible exceptions of the basal layers of D8 and D16, and most of the D2 infill which may have been subject to a greater degree of ditch-edge erosion by water. The small ditch/pit in the upper part of D7 was deliberately packed with stones.

No. 18: section west-east through D1, P9 and P10 (Fig. 69)

Description

layer 1: light brown soil, sparse gravel.

layer 2: light brown soil, sparse gravel.

layer 3: light brown soil with little gravel.

layer 4: light brown very gravelly soil.

layer 5: light brown soil with some gravel.

layer 6: light brown soil with little gravel.

layer 7: light brown fairly gravelly soil.

layer 8: light brown soil with a little medium and fine gravel.

layer 9: light brown soil with some gravel.

layer 10: darker brown, fairly gravelly soil.

layer 11: light brown soil with a little fine grade gravel.

PLANT'S FARM, MAXEY: SECTION DESCRIPTIONS, Section 18 (cont.)

layer 12: light brown gravelly soil.

layer 13: light brown fairly gravelly soil.

layer 14: dark brown sandy soil.

layer 15: coarse grey clay.

layer 16: rusty brown gravel and clay patches.

layer 17: light brown gravelly soil.

layer 18: light brown soil with some gravel.

layer 19: light brown sandy and gravelly material with little soil.

layer 20: dark brown soil with little gravel.

Interpretation: layers 16 and 19 suggest severe initial erosion of the ditch. Layer 15 is gleyed due to more or less permanent waterlogging since it became infilled, and the interleaving of higher layers: 13; 7; 11; 7; and 8 is suggestive of deliberate backfilling of the recut and enlarged ditch.

No. 19: section south-north through D7, D10(i) and (ii), and D16 (Fig. 69)

Description

layer 1: light brown soil and sparse gravel.

layer 2: dark brown soil and sparse gravel.

layer 3: dark brown soil with gravel.

layer 3a: dark brown soil with gravel.

layer 4: light brown soil and occasional gravel.

Interpretation: naturally infilled.

No. 20: section north-south through D40 (Fig. 69)

Description

layer 1: light brown soil with a little gravel.

layer 2: dark brown soil with grey ash.

layer 3: light brown soil, some gravel and orange patches.

layer 4: dark brown soil with a little fine gravel.

layer 5: light brown gravelly soil.

PLANT'S FARM, MAXEY: SECTION DESCRIPTIONS, Section 20 (cont.)

layer 6: dark brown soil with fine gravel.

layer 7: light brown gravelly soil.

layer 8: dark brown soil with a little gravel.

Interpretation: the ditch has been recut twice, layers 1-4 being the first recut and layer 8 the second recut.

No. 21: section north-south through D15 (Fig. 69)

Description

layer 1: orange-brown soil with occasional gravel.

layer 2: dark brown soil, little gravel.

Interpretation: layer 1 is oxidized sandy loam over ?organic loam (layer 2). All naturally accumulated.

No. 22: section east-west through D25 and G7 (Fig. 69)

Description - from section drawing only

layer 1: light brown soil with some gravel.

layer 2: dark brown soil with gravel.

layer 3: light brown soil with sparse gravel.

layer 4: dark brown gravelly soil.

layer 5: light brown soil with some sand and gravel.

layer 6: light brown soil with some gravel and charcoal flecks.

layer 7: light brown gravelly soil.

layer 8: light brown soil with sparse gravel and orange patches.

layer 9: light brown soil with some large gravel and charcoal flecks.

Interpretation: looks naturally accumulated, with a medieval plough furrow overlying a series of recut ditches.

C14

Nos 23(i) and (ii) sections north-south through P29 (Fig. 67)

Nos 23(iii) and (iv) sections east-west through P29 (Fig. 67)

Description - from section drawings only

layer 1: dark brown soil with sparse sand and gravel.

layer 2: dark brown soil with sparse sand and some large gravel.

layer 3: light brown soil with sand and sparse gravel.

layer 4: light brown soil with some sand and gravel.

layer 5: light brown soil with gravel.

layer 6: light brown soil with sparse gravel.

layer 7: light brown soil with gravel.

layer 8: dark brown soil with gravel and some charcoal flecks.

layer 8a: light brown soil with some gravel.

layer 9: light brown soil with gravel and some clay patches and charcoal flecks (No. 23(iv)).

layer 10: light brown soil with some gravel and patches of clay.

layer 11: light brown soil with some sand.

layer 12: dark brown soil with some gravel and flecks of charcoal.

layer 13: dark brown soil with gravel and some patches of clay.

layer 14: light brown gravelly soil with charcoal flecks.

layer 15: light brown sandy soil with charcoal flecks.

layer 16: dark brown clayey soil with gravel.

layer 16a: dark brown soil with sparse gravel and patches of clay.

layer 17: clay with some gravel.

layer 18: light brown sandy soil with sparse gravel and patches of clay.

layer 19: light brown soil with sparse gravel and patches of orange.

layer 20: light brown soil with gravel and sand, patches of orange and some charcoal flecks.

layer 21: light brown sandy soil with occasional gravel and charcoal flecks.

layer 22: light brown gravelly soil.

D14

PLANT'S FARM, MAXEY: SECTION DESCRIPTIONS, Section 23 (cont.)

layer 23: light brown soil with sparse gravel.

Interpretation: layer 18 is sandy rapid initial filling of the pit and layer 16 is the lower secondary filling. There has possibly been some washing in and settling out of finer material, ie. silt and clay. Layers 4, 7, 10, 8 and 2 may all be recuts but all probably naturally accumulated. Layer 20 is oxidized indicating periodic waterlogging. In section 23(ii), the southern ditch (D16 archive D43) was infilling while the northern area, the pit, was still open. The remainder of the layers look naturally accumulated.

No. 24: section south-north through D18 and D21 (Fig. 69)

Description

layer 1: brown soil with some gravel, becoming more gravelly at the bottom.

layer 2: light brown soil, sandy in places.

layer 3: dark brown soil.

layer 4: clean sand and gravel.

layer 5: darker brown soil.

layer 6: light brown soil, sandy in texture.

layer 7: light brown soil, sandy at bottom.

layer 8: orange-brown soil with a little gravel.

Interpretation: layer 1 is an off-centre(?) recut. All the layers look naturally infilled, except perhaps layer 4 which may represent rapid erosion and/or back-fill.

No. 25: section east-west through P1 (Fig. 69)

Description

layer 1: light brown soil with occasional gravel.

layer 2: light brown soil and gravel.

layer 3: orange soil and much gravel.

layer 4: brown soil - stake-holes.

layer 5: orange soil and little gravel.

layer 6: orange-brown soil and occasional gravel.

layer 7: orange soil and gravel.

layer 8: orange-brown soil and a little gravel.

PLANT'S FARM, MAXEY: SECTION DESCRIPTIONS, Section 25 (cont.)

layer 9: orange-brown soil, some gravel.

layer 10: light brown soil and occasional gravel.

layer 11: brown soil and gravel.

layer 12: light brown soil with much gravel.

Interpretation: the profile exhibits much oxidation mottling. The ditch was possibly deliberately back-filled with sandy loams and gravel, the post-holes being dug only after the pit was completely infilled.

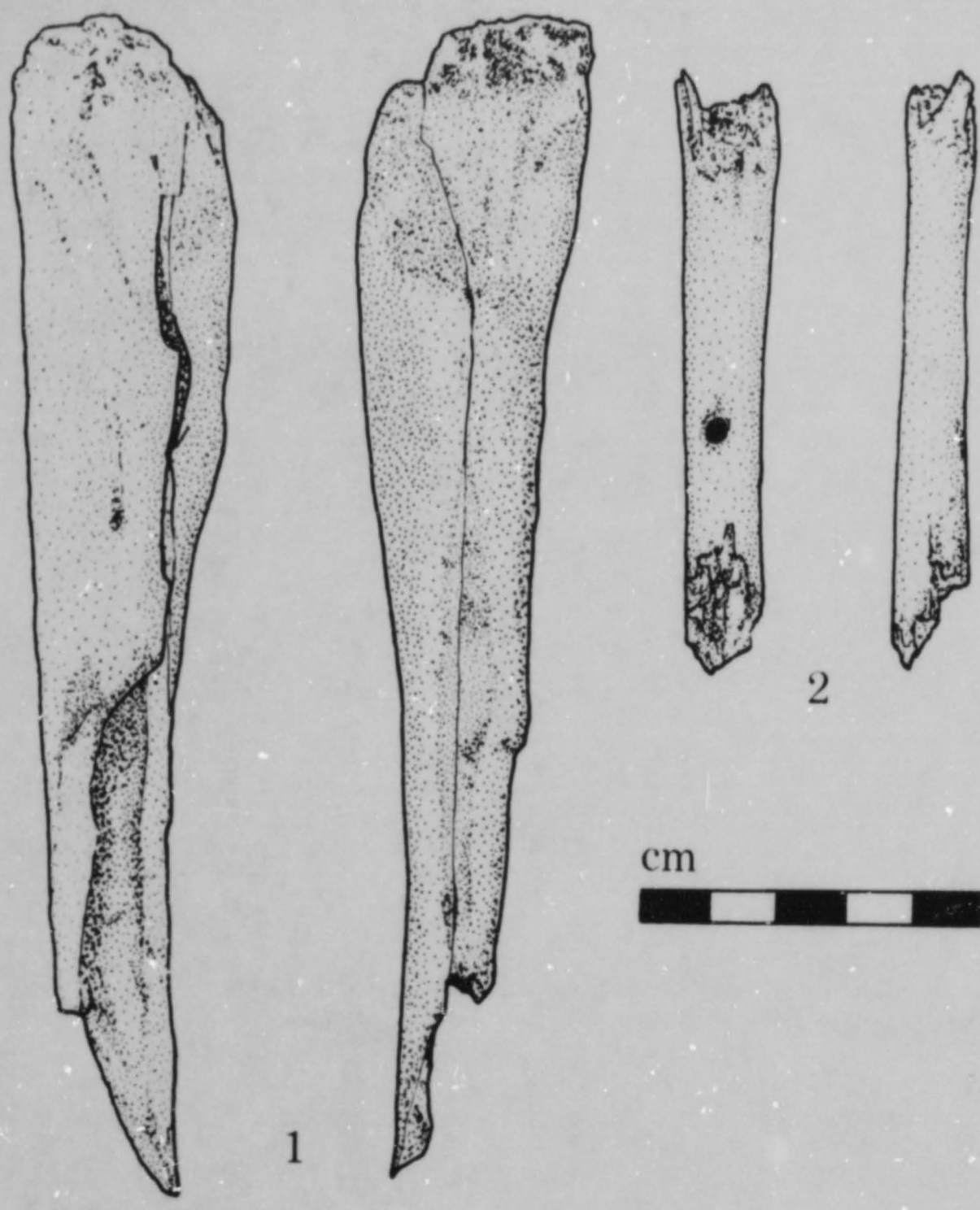

Fig. 71 Maxey, Plant's Farm: Worked bone. Scale 1:1

PLANT'S FARM, MAXEY: WORKED BONE, COINS

Objects of bone

(Fig. 71)

by Mary Harman

1. Red deer tibia, right shaft. Part of the crest whittled away, corners of the proximal end on posterior surface whittled off. On medial aspect part of the shaft whittled away.
2. Sheep metatarsal, right shaft. Slight flattening of posterior surface and polishing on surface. Hole drilled through posterior surface (diam. 4 mm) would be around mid-shaft, ends of which are broken.

(3) Pin shaft fragment.

(4) Pin shaft fragment with part of a hole drilled through the shaft at one end, diam. c. 2.3 mm.

(5) ?Bird bone, long bone shaft. One aspect worn, one end worn very thin. ?Part of tube.

(6) Cattle, femur head cut off straight across. Possibly unfinished spindle whorl or gaming piece?

Coins: Provenances

Phase 4.1

1 Ditch 2

Phase 4.2

2 Ditch 5

3 Ditch 38

4-5 Ditch 41

Phase 4.3

6-7 Ditch 1

8 Ditch 40

Phase not assigned

9 Ditch 62

Topsoil

10 Grid EIV

11-12 Grid EV

13 Grid FVI

14 Grid GIV

Human bone

(by C.B. Denston)

Skeleton 1

Sex: Female. A reliable assessment of the sex of this individual could be made by anatomical appreciation, the skull, pelvis and long bones being well enough preserved for this purpose. The teeth are small also, and therefore support this conclusion.

Age at death: The estimated age at death of 20-25 years is based upon the amount of sutural closure of the ecto-cranium, and upon the state of eruption and attrition of the teeth. No conflict occurred between these two estimates. Also taken into consideration was the fact that all the epiphyses of the long bones had united with the diaphyses. In addition, the secondary centres of the vertebrae had appeared, and were consolidated with the rest of the bone.

Stature: The estimated stature of approximately 1.56 m was calculated using the regression formulae of Trotter and Gleser (1952), for 'whites', and is based on the maximum length measurements of the long bones, nearly all of which were well preserved.

General pathology: A routine examination for pathological manifestations was made, with negative results.

Dental pathology: Post-mortem loss has accounted for one out of the thirty permanent teeth which were in situ at the time of death. The upper third molars had never formed. The two upper canines of the deciduous dentition persisted during life in the maxilla, causing the

permanent canines to erupt bucally to them. No caries or abscesses, or periodontal disease was noted, but slight degrees of calculus or tartar and enamel hypoplasia were observed on some of the teeth.

Non-metrical features: One wormian bone is present along the coronal suture, and four such bones along the lambdoid suture. Inspection of the skull for other such characters revealed only the occurrence of a slight degree of development of maxillary tori, bilaterally.

Skeleton 2

Sex: It is not possible to determine the sex of an infant at such an early stage of development.

Age at death: The infant probably died within two months of birth, this being suggested by a number of factors: the mandible was in two halves which suggests an age of less than six months; the crowns of the deciduous canine teeth were about fully formed, and the crowns of some deciduous molars were possibly about one-third formed. Judging by modern standards, this suggests an age of about birth; and the tympanic ring of the external auditory meatus had started to fuse with the petrous portion of the temporal bone, which suggests an age between birth and two months.

Pathology: There was no obvious evidence of disease or injury.

PLANT'S FARM, MAXEY: HUMAN BONES, ANIMAL BONE

Skeleton 3

Sex: The sex of the infant cannot be determined from the bones at such an early stage of development.

Age at death: The infant probably died within a few months of birth, and this is supported by certain skeletal features: the left half of the mandible was complete, and an examination of the symphyseal region suggested union had not taken place with the right half of the mandible. This suggests an age of under six months; also a petrous portion of a temporal bone of the cranium was present, and an examination of this bone revealed that the tympanic ring of the external auditory meatus had started to fuse with the main bone which suggested that death took place between birth and a few months.

Pathology: It is possible that some kind of disorder had affected the occipitidal bone of the cranium. The affected area was the inner surface of the bone and was centred around the area of the internal protruberance. A discription of the disorder would be that of a layer of new bone formation indated with minute foraminae and minute channels. The likeliest cause would be an osteitis (bone infection).

Animal bone

(Tables 17, 18 (text), 19)

by Mary Harman

All bones were examined and most could be identified. The age of animals was assessed from the state of tooth eruption and wear and of epiphyseal fusion: the former was recorded by the methods used by Ewbank et al. (1964) and by Grant (1975), and the ages are based on the figures published by Silver (1963), using his 'old' ages. Any

abnormalities and evidence of disease or injury observed were also recorded.

Though most of the features in which bones were found are of Roman date, a large proportion (probably at least 50%) of the pottery is Iron Age, and it seems likely that a similarly large proportion of the bones would also be residual. This detracts from the value of the information gained from the bones, which can thus really be considered only as generally Iron Age/Romano-British. While minor differences between the bone groups in Phases 2 and 4 can be observed, the presence of large quantities of earlier material may mask greater differences, or indeed be responsible for those noted.

Very few bones occurred in Phase 3 deposits, the totals being: cattle, 25; sheep, 24; pig, 1; horse, 10; dog, 1; and duck (mallard), 1. Tables 17 and 18 show the numbers of bones from the different species recognised in Phases 2 and 4. All parts of the body are represented, and while there are not enough skull fragments, vertebrae, ribs or small bones such as carpals and phalanges to go with the limb bones and mandibles of the larger domestic animals found, probably as a result of the collection methods employed, there is no clear evidence for the selection of particular cuts or joints and it seems likely that those animals which were eaten were killed and consumed locally.

While the relative proportions of numbers of pig and horse bones are the same in both phases, sheep were numerically slightly less important than cattle in Phase 4, but the difference is not very great, and sheep and cattle bones were both considerably more numerous than those of any other animals. The cattle, however, would have produced several times the amount of meat produced by the same number of sheep, further diminishing the importance of the differences in

relative quantities between the two species.

The number of horse bones is unusual; it is rare to find pig bones outnumbered by those of horse, and the latter are scattered throughout the features with no particular concentrations in any feature. If they are derived from horse burials these must have been extensively disturbed as there are no groups of horse bones which obviously belong together. More bones of horse than of other large domestic species are complete, but there is no evidence of defleshing, though one metacarpal was sawn across, probably in relation to bone working, and one second phalanx had cuts on it, possibly as a result of removing the hoof. Most of the horse bones were from mature animals but there were several with unfused epiphyses, and most of a skull from a foal of 6-9 months. Other jaw bones and odd teeth were from animals of about 5 years, 5-6 years, about 9 years, 10-15 years, and 15-20 years.

The ages of cattle, sheep and pig at death, based on mandibles and, for pigs, maxillae as well, are shown in Table 19. More bones were found in Phase 4 deposits than in Phase 2 deposits, but the difference between the two phases in the age at death of cattle is probably real, and not merely the result of varying quantities of bones. It is notable that in Phase 4 nearly a quarter of the mandibles were from animals which died at about 6 months or less, but this did not occur in Phase 2. Throughout, over half of the mandibles were from animals which survived to about 5 years or more. There is no obvious difference in the age of sheep at death between the two main phases, and again just over half had lived to about 3 or 4 years or more. There were very few bones from small piglets; two jaws from pigs of about a year old; five from animals in their third year; the same number aged three or a little

PLANT'S FARM, MAXEY: ANIMAL BONE

CATTLE																										
Phase 1														1						1	2			6	3	
Phase 3			3		2		2		1	1	1		1	1		1				1	1		2	11	1	
Barley stages	a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p	q	r	s	t	u	v	w	x	y	z	+
Silver's 'old' ages	0 -1 months				6 - 9 months							2 1/2 years							4 - 5 years							
SHEEP																										
Phase 1				1				1		1						1	1					3			4	4
Phase 3					1	1								1	4	3		1		1	5	5		1	6	3
Barley stages	a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p	q	r	s	t	u	v	w	x	y	z	+
Silver's 'old' ages	0-1 1/2 months					6 months						1 1/2 years							3 - 4 years							
PIG																										
Phase 1						1				1						2										
Phase 3								1				4				4				2						
Silver's	0					1				2				3						4	years					

Table 19 Plant's Farm, Maxey animal bones: Ages at death based on cattle and sheep mandibles, pig maxillae and mandibles

over, with the final molar just in wear; two survived for a considerable time beyond 3 years. Most of the older animals were probably used for breeding purposes as well as such things as producing milk (cattle and sheep), wool (sheep), and for traction (cattle). The relatively high proportion of calves dying in Phase 4 could be the result of either a preference for veal or possibly inadequate pasture.

Of six sheep frontal fragments five were horned, and one (from Ditch 38) was polled. Polled sheep are unusual at this time but are also known from a Romano-British site at Empingham, about 20 km away.

PLANT'S FARM, MAXEY: ANIMAL BONE

There are a number of scattered bones of dogs, from either disturbed burials or animals which had decayed in the open, the bones being scattered before being incorporated in various feature fillings. Three nearly complete burials were found: in Pit 26, Ditch 18, and Ditch 23; the shoulder heights , calculated using Harcourt's formulae (1974) being approximately 0.47 m, 0.58 m, and 0.48 m respectively. All three animals may well have been working dogs, used for herding or hunting; many of the other bones were from animals of a similar size, but there were also a few from considerably smaller dogs, more the size of a terrier. Wear on teeth is variable, suggesting that age at death was similarly variable, but there are very few bones with unfused epiphyses, showing that most of the dogs had survived for at least a year. Two radii from one of the smaller dogs, found in Ditch 10, had small cuts on them, one about midshaft, the other at the distal end. This could be evidence of defleshing, possibly for skinning.

A small number of cat bones were found, including a partial burial in Ditch 1 of an animal probably fully grown but not skeletally mature. None are of a size to suggest wild rather than domestic cat.

There are very few bones from wild animals; a few from red deer, including one from a well grown but immature animal. This may suggest small scale hunting. One tibia may be from a fox, or a dog of similar size.

A small number of bird bones were found, mostly fowl and goose, probably domestic. Several duck bones, from birds similar to mallard, may also be from domestic birds. A single bone from a species of dove could be from a wild bird - however, being immature, it might be evidence that doves were kept in limited numbers.

The other species represented are quail, crane and raven, and possibly jackdaw. The quail may have been eaten; the crane, a large

but young bird represented by a pair of legs, was probably eaten. Crane bones are known from medieval and earlier sites in southern England. All three raven bones are from an immature bird, probably the same individual - possibly a pet.

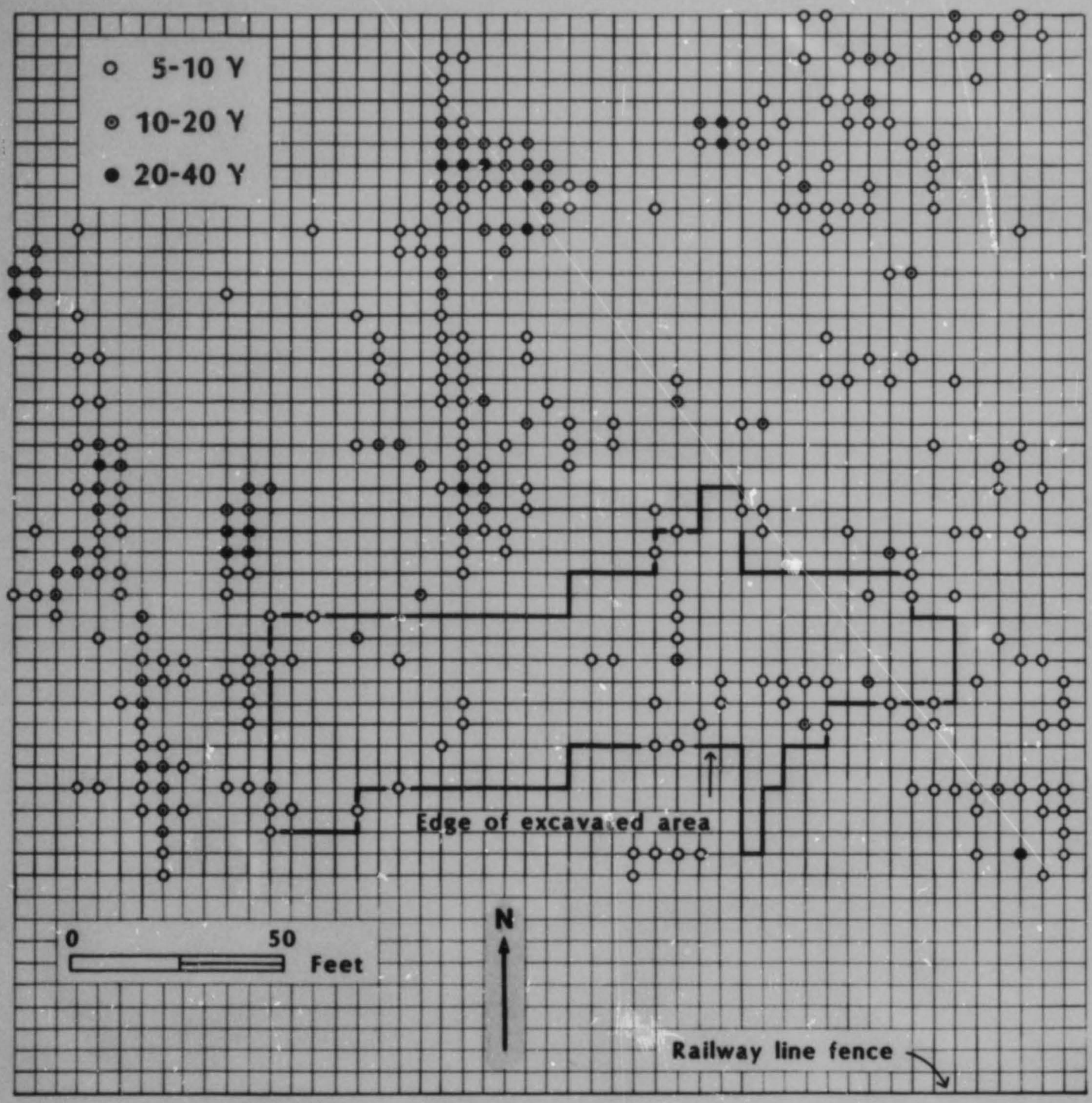

Fig. 80 Barnack: magnetometer survey in the vicinity of the aisled building. Scale 1:500

The Excavation of Romano-British Aisled Buildings at

Barnack, Cambridgeshire

by W.G. Simpson

D 14

BARNACK: HUMAN BONE

III. The Finds

The human remains

by C.B. Denston

The human remains from the grave (P9) cut into Ditch 5 (Period I), were in an excellent state of preservation, requiring only a small amount of repair work after cleaning. The skeleton is that of a female individual, though the cranium has well developed supercillary ridges and large mastoid processes which are normally characteristic of an adult male. All the bones are very light in weight, the bone of the body of the scapulae being very thin and brittle, ante-mortem distortion having taken place in the right scapula in the form of flattening, and spreading laterally of the acromion process and spine. The ilia of both innominate bones are also very thin, as are the clavicles, and a high degree of resorbtion of the fibulae has taken place. No other bones are affected in this way, but the right tibia has three small localised areas of solid bone formation along the lateral surface of its shaft, and the left tibia has a similar raised area on the medial-posterior border. A similar area of bone formation is also present on the popliteal surface of the right femur.

Fractures have occurred during life at the distal extremity of the right ulna, and across the nasal bones of the cranium. On both sides of the cranium starting from near the spheno-frontal suture, crossing the coronal suture onto the parietal bones, are grooves in the bone approximately 50 mm in length and several millimetres in width. There is also a small hump nearly midway of the right parietal bone near the sagittal suture. Signs of osteo-arthritis are also present on various post-cranial bones, the mid-section of the thoracic vertebrae being the most affected. Exhibited on the femora is the feature known as platymeria, (excessive antero-posterior flattening of

E14

the shaft just below the greater trochanter). Conclusions as to what all this mosaic of pathological evidence indicates has not been determined and will require fuller examination including x-rays, but old age could be a predisposing reason or vitamin or mineral deficiency, or it could be the result of disease. The standard biometric measurements have been taken on the skull and long bones wherever possible, and are filed with the laboratory archives.

Sex

Female, though the cranium displays large mastoid processes, heavy supercillary ridges, and a frontal bone which slopes backwards, these being more characteristic of a male, the cranium is not large, and other anatomical features are indicative of a female. The mandible also supports this assessment of sex. The pelvis, long bones, and other post-cranial bones, all confirm the assessment of sex.

Age at death

The estimated age of death, at 50+, is based upon three different sets of criteria: the amount of sutural closure of the ecto-cranium; the degree of attrition of the teeth; and the state of the pubic symphyses of the innominate bones. No conflict occurred between these three sets of criteria. Also taken as a sign of advanced age was the fact that the body of the sternum and manubrium had become ankylosed.

Stature

The estimate of 1.59 m was calculated using the regression formulae of Trotter and Gleser (Trotter and Gleser 1952) for 'Whites', and is based on the maximum length measurements of the long bones, all of which were utilized. The estimate may be taken, therefore, as reliable.

General pathology

A mention has been made of general pathological manifestations, so this is more of a list: thinning and resorption of certain bones; osteo-arthritis in the vertebral column, the thoracic vertebrae most affected and also some long bones; and signs of fractures of one ulna and nasal bones.

Dental pathology

Post-mortem loss accounted for one tooth, twenty-one teeth were lost ante-mortem, leaving in situ, six teeth in the maxilla, and four teeth in the mandible. There is an abscess cavity at the apical region of the socket of the upper right lateral incisor, the anterior wall of the socket having been eroded by pus action. The lower first left premolar has been reduced to the level of the root by the action of decay. Resorption of the alveolar borders due to ante-mortem loss of teeth is prevalent, but where teeth are present, there is the possibility of the cause being periodontal disease.

Non-metrical features

A routine examination of the skull for such features revealed a right parietal notch bone, one epipteric bone, and a palatine torus of medium degree of development. Three vascular, or cortical grooves or lines, were observed on the shaft of the right tibia in the proximal half of its length.

Coal from Ditch 1

by R. Neves and G. Clayton

Coal Type: Durain

Palynological Assemblage:

Apiculatisporis spinosaetosus
Calamospors microrugosa
Cristatisporites connexus
Densosporites anulatus
D. sphaerotriangularis
Florinites mediapudens
F. pumicosus
Laevigatosporites vulgaris
Lycospora pusilla
L. cf. orbicula
Punctatisporites sinuatus
P. minutus
Raistrickia fulva
Savitrisporites nux
Schulzospora rara
Secarisporites labatus
Vestipora costata
V. tortuosa
Stratigraphic age

Table 23 Barnack: reference collection for palynological assemblage in coal from Ditch 1

The assemblage is distinguished by a high frequency of the monolete genus Laevigatosporites and the presence together of species of the genera Vestispora and Schulzospora. The assemblage is clearly of Carboniferous age and these particular features indicate the coal was obtained from the upper part of the Lower Coal Measures, ie. upper Westphalian A.

Possible source

The nearest outcrop of rocks of this age is to be found in the South Derbyshire and Leicestershire Coalfield in the region of Swadlincote-Ashby. The most likely seam would be the Little Woodfield or Main Coad Rider.

Excavations at Site 11, Fengate, Peterborough, 1969

by F.M.M. Pryor

Feature No.	Archive	Notes
1	I/20-4, 36-54; II/7,8,18,22; III/5-10,14 15,18,25,48,51, 52,55-7,61-4, 70-1;V/26-8,30-2; VI/5-8	Enclosure ditches
2	I/7,25	Hearth
3	I/9-11	Hearth
4	III/28,42	Hearth
5	VII/12,13,36-9	Poss. round building wall slot/post-holes
6	VII/9?	Post-hole
7	VII/7	Poss. round building eaves-drip gully
8-10	VII/35,49-52	Poss. round building eaves-drip gully
11	VII/55?	Post-hole
12	VII/18	Post-hole
13	VII/60?	Pit
14	VII/19	Pit
15	VII/20	Stake/post-hole
16	VII/21	Stake/post-hole
17	VII/22	Stake/post-hole
18-25	VII/23-34	Stake/post-holes and small pits
26	?	Hollow (?natural)
27	I/33	Post-hole
28	I/26	Post-hole
29	I/30,31	Pit
30	I/30?	?Pit
31	I/12	?Post-hole (burnt)
32	III/43	Post-hole
33	III/44	Post-hole
34	III/38	Post-hole
35	III/47	Post-hole
36	III/32	Post-hole
37	III/30,31	Right-angled gully
38	III/28	Collapsed oven/hearth
39	III/20	Post-hole
40	III/19	Post-hole
41	III/33	Post-hole (?contemporary with the ditch)
42	III/41	Post-hole
43	III/39	Post-hole
44	III/34	Post-hole (with post 'ghost')
45	III/35?	Post-hole
46	III/26	Post-hole
47	III/43,44?	Post-hole concordance possible
48	III/54	Post-hole concordance doubtful

Table 25 Fengate Site 11: concordance between Feature numbers used in the text and archive

FENGATE, SITE 11: SECTION DESCRIPTIONS

Note for conventions used in the section drawings see Figure 96. The layer descriptions are from the site notebooks, verbatim, except for interpretation and remarks by the present author which appear within square brackets.

Layers 1 and 2 were removed by machine.

Section 1: Enclosure ditch at north side of trench I (Fig. 97)

Layer 1: turf and topsoil.

layer 2: grey clay.

layer 4: silt.

layer 20: brown iron-stained silt - enclosure ditch top fill.

layer 21: silty gravel.

layer 22: grey-brown iron stained silt - some pebbles.

layer 23: heavily iron stained orange-brown silt band - some pebbles.

layer 24: mixed buff and grey-brown pebbly, very iron stained, silt - very compacted.

Section 2: Trench I, cutting through enclosure ditch at hearth (F3 = layer 9). (Fig. 97)

layer 9: (hearth - F. 3) shallow pit with charcoal/burnt clay and spread of charcoal flecked ash overlying [it].

layer 35: iron stained buff silt.

layer 36: iron stained greasy grey silt.

layers 37-41, 46 and 49: [various bedded layers of sand, gravel and silt; almost certainly terrace gravel 'natural'].

layer 48: grey brown clay. [Could be natural].

Section 3: Enclosure ditch at north face of Trench II [note: the bedded gravelly layers below layers 4, 7, 18, 22 and 26 are almost certainly 'natural' terrace gravel]. (Fig. 97)

layers 1 and 2: turf and topsoil.

layer 4: buff iron stained silt and pebbles.

layer 7: ditch fill: dark grey brown iron stained silt.

layer 18: very dark blue-grey silt and clayey ccnsistency.

FENGATE, SITE 11: SECTION DESCRIPTIONS (Section 3, cont.)

layer 22: hard, very iron stained, dark blue-grey silt fill of ditch - pebbles, charcoal.

layer 26: dark blue-grey gravelly silt...bottom fill of ditch.

Section 4: Enclosure ditch at east face of Trench V (Fig. 98)

layers 1 and 2: turf and topsoil.

layer 4: grey silt and pebbles, some iron staining and charcoal flecking - same as layer 5.

layer 5: grey iron stained silt - pebbles - same as layer 4, but overlying ditch.

layer 25: grey brown iron stained silt [probably a buried soil, closely related to layer 4, above it].

layer 26: gravel spill over inner (north-east) edge of enclosure ditch [later bank collapse following erosion of the ditch sides?].

layer 27: dark grey iron stained silt.

layer 28: dark reddish-brown silt - very iron stained band.

layer 29: post-hole cut into NE side of enclosure ditch. Fill: dark brown iron stained silt [not on plans; shows cut line passing through layer 25/27? If so, must be later than ditch, despite gravel capping of layer 26].

layer 30: buff iron stained, rather pebbly silt - top silt of enclosure ditch [the relationship of layers 26, 30 and 27 is puzzling; at all events they must considerably post-date the enclosure ditch's initial use].

layer 31: dark grey-brown iron stained silt - bottom fill of enclosure ditch

layer 32: brown pebbly iron stained silt [same as layer 31?].

layer 34: reddish orange 8i.e. iron stained silt - ? natural [almost certainly].

Section 5: North-south section at angle of enclosure ditch, Trench III [location of section line not precisely established]. (Fig. 98)

layers 1 and 2: turf and topsoil.

layer 4: grey, heavily iron stained silt and some pebbles - overlying whole site.

layer 5: grey silt - some iron staining, much less than layer 4 - top fill of enclosure ditch.

layer 6: gravel in grey iron stained silt.

FENGATE, SITE 11: SECTION DESCRIPTIONS (Section 5, cont.)

layer 7: dark grey-brown silt - iron staining.

layer 8: hard orange-buff sandy silt - iron stained.

layer 9: dark grey-green clayey silt.

layer 10: dark yellow sand - pebbly.

layer 11: dark grey iron stained (not as much as layer 4) silt. [Directly under ploughsoil: almost certainly same as layer 4].

layer 21: buff iron stained silt [most probably same as layer 4].

layer 22: very iron stained orange brown sandy silt - probably natural. [B/C horizon].

layer 23: very iron stained orange gravel - ? natural [natural].

Section 6: Enclosure ditch at west face of Trench V [layers 1 and 2 removed by machine]. (Fig. 98)

layer 3: brown and grey mixed (very iron stained) silt. [Same as layer 4 elsewhere].

layer 25: grey brown iron stained silt. [Same as layer 4]

layer 27: dark grey iron stained silt.

layer 28: dark reddish brown silt - very iron stained band. [Interface of layers 27 and 28 probably marks transition from secondary to tertiary infilling].

layer 30: buff iron stained, rather pebbly silt - top of enclosure ditch.

layer 31: dark grey-brown iron stained silt - bottom fill of enclosure ditch.

layer 32: brown pebbly iron stained silt.

FENGATE, SITE 11: FLINTS

	0-10	11-20	21-30	31-40	41-50	51-60	Total
Enclosure ditch	-	-	8	2	1	1	12
Other features	-	12	14	3	1	1	31

Table 26 Fengate, Site 11: Lengths of flint flakes

	6-10	11-15	16-20	21-25	26-30	31-35	36-40	41-45	Total
Enclosure ditch	1	1	5	3	-	-	1	1	12
Other feature	2	3	10	6	7	1	2	-	31

Table 27 Fengate, Site 11: Breadths of flint flakes

E9

10 PT. ABCDEFGHIJKLMNOPQRSTJVWXYZ
abcdefghijklmnopqrstuvwxyz
1234567890
8 PT. ABCDEFGHIJKLMNOPQRSTUVWXYZ
abcdefghijklmnopqrstuvwxyz1234567890
6 PT ABCDEFGHIJKLMNOPQRSTUVWXYZ
abcdefghijklmnopqrstuvwxyz1234567890
4 PT ABCDEFGHIJKLMNOPQRSTUVWXYZ
abcdefghijklmnopqrstuvwxyz1234567890

2.5 lp/mm

2.5 lp/mm
2.0 lp/mm
1.5 lp/mm
1.0 lp/mm

100mm

10 PT. ABCDEFGHIJKLMNOPQRSTUVWXYZ
abcdefghijklmnopqrstuvwxyz
1234567890
8 PT. ABCDEFGHIJKLMNOPQRSTUVWXYZ
abcdefghijklmnopqrstuvwxyz1234567890
6 PT
4 PT

1.0 lp/mm

1.0 lp/mm

IMAGE SYSTEM
TEST TARGET
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