Excavations Along the Route of the Dorchester By-pass, Dorset, 1986–8

by Roland J.C. Smith, Frances Healy, Michael J. Allen Elaine L. Morris, I. Barnes and P.J. Woodward

Wessex Archæology

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Frontispiece The Dorchester By-pass under construction in late summer 1987. The view is from east to west, with St Georges Road (Site 2) and Flagstones (Site 3) in the bottom right, around to the Bridport Road Ridge (Site 9) in the top right. Conquer Barrow is hidden in the clump of trees at bottom centre. Maiden Castle and Maumbury Rings are clearly visible.
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Front cover: The Bronze Age enclosure at Middle Farm (Site 8) during excavation. This typical view of the Dorchester landscape is looking south-east, with the excavations on the Romano-British settlement and cemetery at Maiden Castle Road (Site 6) in the distance and the South Dorset Ridgeway on the skyline

Back cover: The Neolithic enclosure at Flagstones (Site 3) during excavation. The view is from the east. Thomas Hardy's house, Max Gate, is in the bottom right. (Photograph by John Boydon)

Contents

List of Illustrations

List of Tables

Contents of Microfiche

Acknowledgements

The programme of archaeological work undertaken along the route of the Dorchester By-pass between 1986 and 1988 had taken many decades to come to fruition. Many people and organisations, since the 1950s, made important contributions, ensuring first that the archaeological implications of the proposed road scheme were always considered, and secondly that an archaeological project was implemented.

The Dorset Natural History and Archaeological Society, the Dorset Archaeological Committee (which commissioned an implications survey), and the Dorchester Excavation Committee must take much credit for ensuring that the archaeological implications of the By-pass were considered throughout several Public Inquiries. Much early groundwork and the ultimate initiation of the project would not have been possible without the contributions of Mr S. Dunmore, the late Mr R. W. Smith, Mr D. Morgan Evans and Mr P. Gosling, Inspectors for the Department of Environment (Ancient Monuments Inspectorate), now English Heritage, and of Dr G. J. Wainwright, Chief Archaeologist, English Heritage; of Mr L. Keen, County Archaeological Officer and Mr D. Fowler, Dorset County Council; Mr T. McCaw, Duchy of Cornwall Office; Dr A. Woodward and Mr P. Fasham for the Wessex Archaeological Committee, now Wessex Archaeology, and of Mr A. Lawson, Director, Wessex Archaeology.

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The fieldwork for the A35 Southern By-pass was directed and managed by Peter J. Woodward for Wessex Archaeology. The field evaluations were supervised by Peter Bellamy, Mark Fletcher, and Martin Trott. Individual excavations were supervised by Roland J.C. Smith (St Georges Road and Maiden Castle Road), Martin Trott (Flagstones), and Mark Fletcher (Middle Farm), with assistance from Peter Bellamy, Chris Copson, Sarah Donovan, Gill Gasgoyne, Paul Pearce, Mick Rawlings, Gill Roberts, Ruth Soames, Nigel Tyndall, and James Wright. Observations during road construction were supervised by Roland J.C. Smith. Many others, both paid and unpaid, carried out the fieldwork, unfortunately too many to name here, but their contribution is gratefully acknowledged.

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Abstract

This report presents the results of archaeological survey and excavation works undertaken between 1986 and 1988 prior to and during construction of the A35 Southern By-pass and the A37 Western Link Road, which together by-pass the town of Dorchester, Dorset. The aims of the archaeological programme were not only to rescue and record the archaeological features and deposits to be disturbed or destroyed by road construction but also to present the results as an overall study of the landscape development of Dorchester and its environs.

Part 1 describes the geomorphological, archaeological, and developmental background to both road schemes. This is followed, in Part 2, by the description of the site data and material evidence for the excavations along the A35 Southern By-pass; in Part 3 by the results of the excavations on the A37 Western Link Road; and concludes, in Part 4, with an overall discussion of the landscape development of the environs of Dorchester. The earliest features recorded were two pits at Flagstones. The pits, one of which produced a radiocarbon date in the early 4th millennium cal. BC, contained pottery, struck flint, and food remains. The pits were excavated in an area of recently cleared secondary woodland. Scattered findspots of earlier Neolithic material were recorded at various locations along the route. This material included sherds of Neolithic bowl pottery, struck flint, and charcoal in the posthole of a probably Bronze Age building at Middle Farm, which produced a radiocarbon determination in the mid 4th millennium cal. BC.

The principal feature at Flagstones was a Neolithic enclosure dug as a series of pits and radiocarbon

dated to the late 4th–early 3rd millennia cal. BC. The enclosure was constructed in grazed grassland. The monument was one in which child inhumations and an adult cremation burial were placed. A later Neolithic flint industry was recovered from the primary fills together with, probably residual, Neolithic bowl sherds and shed red deer antlers including picks. Four engravings were recorded on the walls of the ditch segments.

The original form of the monument was uncertain but there may may have been banks or dumps on the interior and exterior of the pit segments and at least two particularly wide gaps between segments may have been original entrances. A number of broadly contemporary pits contained slabs of sarsen, limestone, and other rocks, some used to cover burials, and may have indicated the presence of a primary stone monument.

Two later Neolithic pit-rings were recorded at Conygar Hill, producing struck flint, animal bone, and Grooved Ware. They were constructed in well-established ungrazed grassland.

Four ring-ditches, the ploughed out remnants of a Bronze Age linear barrow cemetery, were excavated at Maiden Castle Farm. A round barrow was also built in the middle of the Flagstones enclosure, over a burial, sealed by a sarsen, and dated by radiocarbon to the early 2nd millennium cal. BC. This barrow was one of at least seven, including Conquer Barrow and the Fordington Farm barrow, sited along the ridge between Mount Pleasant and Maumbury Rings to form a pronounced linear cemetery.

An arc of three post-holes containing Beaker pottery was recorded at the base of a colluvial sequence at Middle Farm. Two ditches sealed below colluvium in Fordington Bottom may be of a similarly early date.

In the mid 2nd millennium BC settlements comprising post-built structures within ditched enclosures surrounded by fields were recorded at Middle Farm and possibly at Fordington Bottom and Bridport Road Ridge. A sub-rectangular ditched enclosure at Middle Farm was of late Early or Middle Bronze Age date. A post-built round-house and a small number of pits con-taining small quantities of settlement debris lay within the enclosure. A substantial linear ditch was subsequently established along the west and south limbs of the enclosure. A *terminus ante quem* for the date of construction of the linear ditch was provided by a mid 2nd millennium cal. BC radiocarbon determination from one of at least three crounched or flexed inhumation burials in the secondary ditch fills.

These settlements lay within an open landscape thoroughly occupied and used. Traces of certainly or possibly Bronze Age field ditches were widespread and recorded at Conygar Hill, Bridport Road Ridge, and Fordington Bottom. Evidence for lynchets, tillage, pasture, and colluviation were recorded in sequences at Middle Farm and at Fordington Bottom.

Evidence for Late Bronze Age activity was limited to a handful of pottery sherds. There was no evidence for settlement from the earliest Iron Age to the 1st century BC, when there may have been large scale occupation of the Maiden Castle and Poundbury hillforts. There is evidence for increased alluviation on the floodplain of the River Frome. This is in marked contrast to the absence of recognisable Iron Age activity on the downland along the By-pass between the two hillforts, in the form of either new field boundaries or evidence for the use of existing field systems, or for material, deposits, and erosion events within the colluvial sequences at Middle Farm or Fordington Bottom.

Late Iron Age features, including an enclosure ditch, storage pits, burials, and a ditched field system, were recorded at Flagstones. These features date from the 1st century BC and, along with a number of other Late Iron Age settlements around Dorchester, add to the evidence for the re-emergence of settlement outside the hillforts by the 1st century BC. The Late Iron Age inhumations at Flagstones comprised three pit burials and four 'Durotrigian' burials in shallow graves. A number of the pits also contained deposits of partly disarticulated horse and cattle limbs.

The *civitas* capital of *Durnovaria* was founded in the late 1st century AD, probably no earlier than AD 65. The By-pass crossed the route of all the known and conjectured Roman roads leading to *Durnovaria*. The line of the Roman aqueduct in Fordington Bottom was preserved *in situ* beneath an embankment.

At least four rural settlements existed within 2 km of *Durnovaria* by the end of the 1st century AD. Excavations on two of these settlements were undertaken as part of the By-pass project. At Maiden Castle Road a ditched trackway was set out in the 1st century AD. The trackway ditches were recut at least once and the feature probably influenced the layout of the settlement into the 4th century. Sporadic activity from the late 1st century to the early 3rd century was represented by a series of features including quarry pits, a square burial enclosure, and a semi-cellared building. By the late 3rd or 4th centuries settlement features included domestic and storage buildings, and an inhumation cemetery. The buildings comprised simple, rectangular structures with low, unmortared, flint walls or cill-beams supporting a timber frame. The 4th century cemetery included the inhumed burials of at least 16 adults and 6 children. All were probably buried in simple wooden coffins, some accompanied by personal ornaments, pottery vessels, hobnails, and/or joints of meat. The range of burial pratcices and grave goods is similar to other late Romano-British cemetery groups on the outskirts of *Durnovaria*.

The Fordington Bottom settlement was established during the 1st century AD. Sporadic 1st and 2nd century AD activity was recorded, consisting of an inhumation cemetery containing 'Durotrigian' burials, an enclosure ditch, a working area, two ovens/driers and two sunken-featured buildings. Twenty-five 'Durotrigian' inhumations were recorded, many accompanied by joints of meat and some with pottery vessels and personal objects. In comparison with other 'Durotrigian' cemeteries in the Dorchester area, the Fordington Bottom burials are considered modest and relatively humble. By the late Roman period the scale and density of activity was greatly increased. A working area, comprising a yard surface, cistern, and corndrier, was established and at least eight timber-framed structures were built. A considerable number and range of artefacts was recovered including pottery, worked stone, and an impressive collection of iron agriculture tools.

The late Roman period probably witnessed an intensification of cereal production and an increase in the areas around *Durnovaria* turned over for arable cultivation. A farmyard, with associated buildings, corndrier, enclosures and fields, was established at St Georges Road. Further corndrying ovens were recorded at Fordington Field and the Bridport Road Ridge and there was a considerable depth of Roman ploughwash in the valley bottom at Middle Farm.

The Roman settlements at Maiden Castle Road and Fordington Bottom were probably not occupied into the 5th–6th centuries AD. There was some evidence for continuity of settlement into the post-Roman period at St Georges Road. An undated, sunken-featured building and a rectangular post-built structure are comparable to structures of 6th or 7th century AD date at Poundbury.

Three ditched field systems were established at St Georges Road over the abandoned late Roman enclosures. The earliest field system may possibly be of middle Saxon date; the latest probably dates to the 14th century. Several further medieval field ditches were recorded throughout the By-pass route and the alignment of most of them conforms to the known arrangement of the open field system of the Parish of Fordington. A late medieval agricultural building was recorded at St Georges Road.

Part 1: Introduction

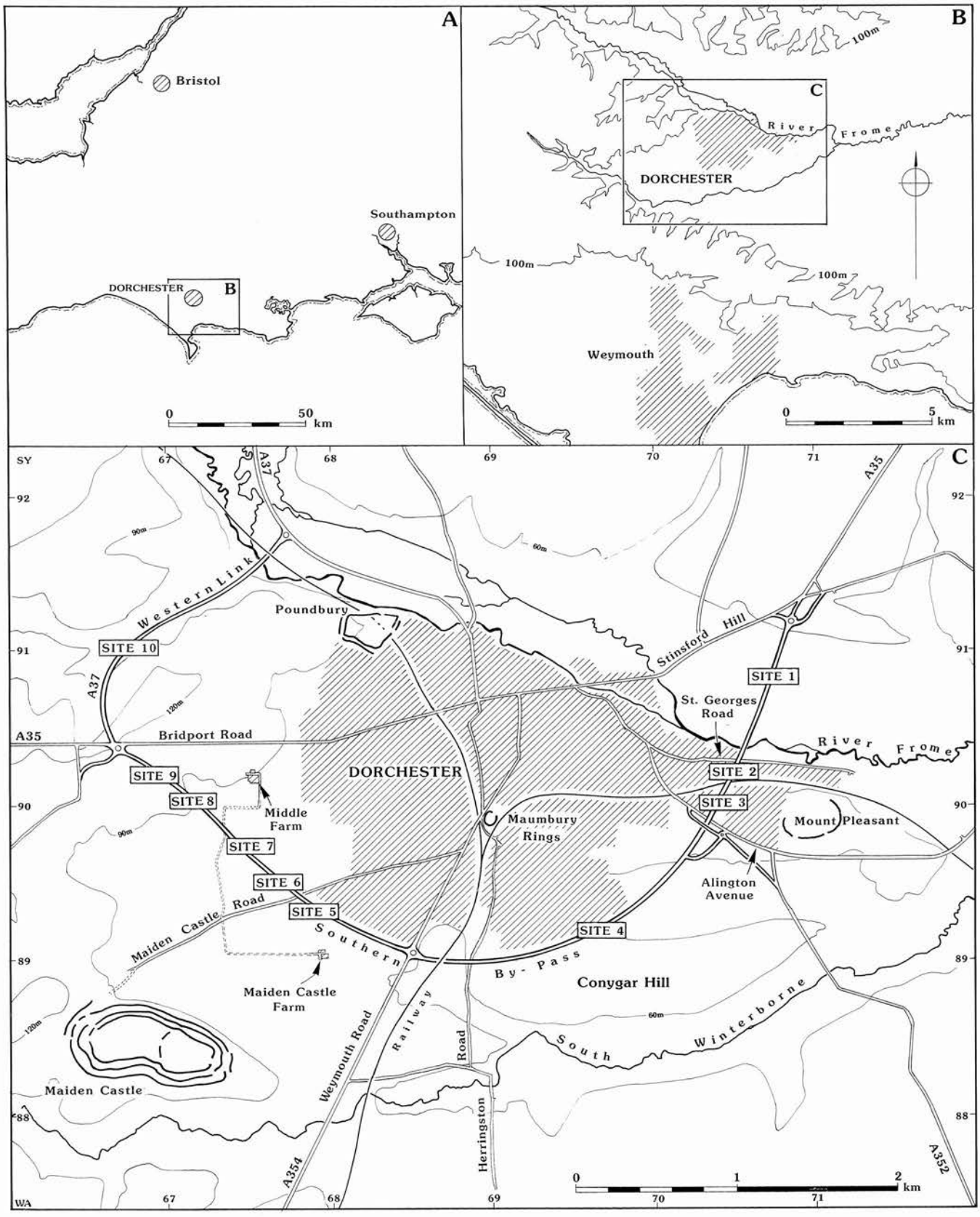


Figure 1 Location of the Dorchester By-pass and sites discussed in text

1. Introduction

by Roland J.C. Smith

1 Introduction

This report presents the results of archaeological survey and excavation works undertaken between 1986 and 1988 prior to and during construction of the A35 Southern By-pass and the A37 Western Link Road, which together by-pass the town of Dorchester, Dorset.

Dorchester and its environs are renowned both nationally and internationally, for their surviving archaeological monuments; the archaeological importance of the area is well established. The new by-pass road loops around Dorchester in the shadow of such notable monuments as Maiden Castle, Poundbury, Maumbury Rings, Mount Pleasant, and the Roman town of *Durnovaria* (Fig. 1). These monuments, however, represent only the most obvious features within an extensive range of other surviving monuments, archaeological features, and deposits which survive within the environs of Dorchester. These features and deposits have become increasingly well-documented and explored (outlined below *Archaeological Background*). From an early stage it was clear that road construction would cause considerable destruction to the archaeological record of the region.

The aims of the archaeological programme on the A35 and A37 road schemes were not only to rescue and record the archaeological features and deposits to be disturbed or destroyed by road construction but also to present the results as an overall study of the landscape development of Dorchester and its environs. The aim of this report has been not only to present the results from individual excavations and surveys along the route but also to integrate the conclusions and discussions into a comprehensive appreciation of the development of the prehistoric and historic landscape around Dorchester.

The distinction in this report between the archaeological works undertaken on the two road schemes reflects their separate development, project design, and funding. By necessity this is also reflected in the layout of this report. Part 1 describes the geomorphological, archaeological, and developmental background to both road schemes. This is followed, in Part 2, by the description of the site data and material evidence for the excavations along the A35 Southern By-pass; in Part 3 by the results of the excavations on the A37 Western Link Road; and concludes, in Part 4, with an overall discussion of the landscape development of the environs of Dorchester.

To present the results in a coherent and practical manner, the 8.1 km of the total route have been subdivided into a series of 'sites'. The A35 Southern By-pass was subdivided into nine 'sites', numbered consecutively from east to west and listed below, while the A37 Western Link represents the most western and tenth 'site' (Fig. 1). These site divisions provide the basis for presenting the results and are used throughout the report. The sites consist from east to west of:

Site 1	Stinsford Hill and the Frome Floodplain
Site 2	St Georges Road
Site 3	Flagstones
Site 4	Conygar Hill
Site 5	Maiden Castle Farm
Site 6	Maiden Castle Road
Site 7	Fordington Field
Site 8	Middle Farm
Site 9	Bridport Road Ridge
Site 10	A37 Western Link Road (Fordington Bottom)

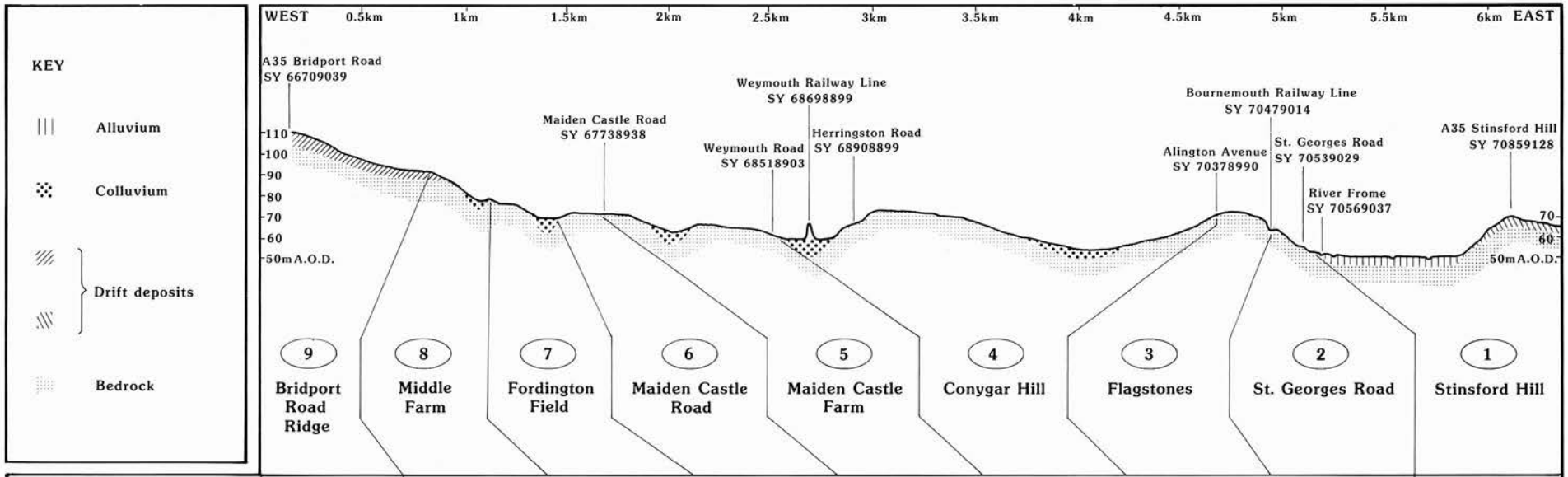
2 The Study Area

Geology, Topography, and Soils

Dorchester lies at the centre of the Chalk downlands of Dorset. To the north the dip slope of the Chalk outcrop ascends to steep scarp slopes. To the south the pronounced steep slopes of the South Dorset Ridgeway mark the southern limit of the Chalk and dramatically cut off Dorchester from the coast. Tertiary sands and gravels, originally thought to overlie much of the Chalk around Dorchester, survive on some of the higher ridges and hilltops, but nowhere on the By-pass route. Drift deposits, however, thought to derive partly from Tertiary deposits, occur. Clay-with-flints or plateau drift, occurring as reddish flinty clays, cap the Chalk on the higher ground on the west of the route. Valley and Tertiary gravels, both also highly flinty in content, occur as a series of broad terraces to the north of the River Frome.

Dorchester, therefore, lies in a shallow basin with higher ground to the north, west, and south. It also lies on the watershed between the Rivers Frome and South Winterborne, both of which drain eastwards to meet some 3 km east of the town. The confluence of these rivers defines an eastern edge to this basin and adds to the appearance of the special topographic setting for the town and its environs. The River Frome is the senior of the two and provides the natural routeway eastwards to the Isle of Purbeck and ultimately to Poole Harbour. The Frome has a broad floodplain and the river consists of a series of meandering braids, partly resulting from previous water meadow management.

Between the two rivers the topography consists of gentle, undulating chalkland made up of a series of low ridges in a dendritic pattern of dry valleys running into either the Frome or the South Winterborne. The By-pass cuts across two of the more pronounced ridges in the area: one to the east of Dorchester along which Alington Avenue now passes (referred to hereafter as the Alington Ridge) and Conygar Hill to the south of the town, although here the By-pass cuts into only the northern slopes of the ridge. The most pronounced and



PRESENT DAY SOILS	Deep, stony well-drained, brown, silty-clay loams	Very shallow (less than 30cm) well-drained, calcareous, grey-brown, silty-clay loam rendzinas with well-drained, deep, silty-clay loam brown earths in dry valleys and on the base of slopes							deep clay loams or calcareous gley soils
COLLUVIUM/ALLUVIUM		thin, chalky colluvium	thin, non-chalky colluvium		thin, non-chalky colluvium	thin, chalky colluvium			alluvium (Evans & Rouse 1991)
DRIFT DEPOSITS	silty drift over clay-with-flints or plateau drift								valley gravels and Tertiary or plateau gravel
BEDROCK	UPPER CHALK- very pure soft limestone with bands of flint								

Figure 2 The geology, drift deposits, and soils along the A35 Southern By-pass route

deeply incised dry valley occurs on the A37 Western Link Road. Here the By-pass was routed down the east edge and floor of a dry valley, known as Fordington Bottom, running into the floodplain of the River Frome at the end of the road construction corridor (Fig. 5). Colluvium invariably occurs on the floors of the dry valleys, alongside extensive alluvium on the Frome floodplain.

The soils of the area consist primarily of very shallow calcareous rendzina soils over most of the chalkland, with deeper, loamy calcareous soils in dry valleys or on lower slopes. The only acid soils are the deeper silty or clayey soils on the clay-with-flints and plateau drift deposits to the west of the By-pass or the stony soils on gravels to its east. Detailed soil studies were undertaken for the Maiden Castle Project (Staines 1991).

The route of the By-pass can be subdivided into four broad sections on geological and topographic evidence (Fig. 2):

The River Frome and Stinsford Hill (Site 1) is represented by river valley and floodplain, with gravel terraces to the north, and with permanent pasture on the seasonally waterlogged floodplain. The acidic soils of the gravel deposits are extensively ploughed.

Chalk downland from St Georges Road to Middle Farm (Sites 2–8) is represented by low ridges and dry valleys with shallow calcareous soils. These soils are extensively ploughed.

Bridport Road Ridge (Site 9) and southern parts of the A37 Western Link (Site 10) is represented by higher undulating ground, with Chalk capped by plateau drift deposits. These in turn are sealed by acidic flinty brown soils and are extensively ploughed.

Fordington Bottom (Site 10) is a steep-sided, colluviated dry valley, with deeper, calcareous, colluvial soils in the floor and very shallow, calcareous rendzinas on the sides. The valley sides and floor are maintained as permanent pasture.

Archaeological Background

Dorchester, the county town of Dorset, is the successor of the Roman town of *Durnovaria*, an important administrative centre for the tribal territory of the Durotriges. The foundation of the Roman town was carefully planned within a local landscape containing the Iron Age hillforts of Poundbury and Maiden Castle. The latter is of primary importance and represents a principal seat of power of the Durotrigian community at the time of the Roman Conquest.

These monuments emphasise the central role of Dorchester and its environs from the Iron Age to the present day. However, the importance of this area as an attraction for settlement pre-dates the Iron Age and the foundation of the hillforts at Maiden Castle and Poundbury (Fig. 3). The causewayed enclosure and bank barrow on the Maiden Castle hilltop and the distribution of long barrows point to a territorial focus in the 4th millennium BC (Wainwright 1979a, fig. 94). The sequence of monument construction in the area was extended by the construction of the henge monument at Maumbury Rings (Bradley 1976), the post-ring at Dorchester (Woodward *et al.* 1993), and the earthwork enclosure and palisade at Mount Pleasant (Wainwright 1979a) in the 3rd millennium BC. The extraordinary density of round barrows to the west and south of Dorchester, centred along the South Dorset Ridgeway, provides testimony to the continuing importance of the area in the earlier Bronze Age (Woodward 1991; Woodward and Woodward forthcoming).

All of these impressive monuments have made Dorchester an area of outstanding archaeological importance. Although the route of the By-pass carefully avoided these monuments, the roadworks threatened to disturb or destroy other features and deposits. These features include ring-ditches, enclosures, settlement sites, and field systems that, with the major monuments, illustrate the extensive character of prehistoric and later activity around the town.

Surveys, rescue excavations, and observations in and around Dorchester, especially in the 1980s, have begun to establish the patterns of settlement and land-use within the area. Especially important are the South Dorset Ridgeway Survey (Woodward 1991) and the Maiden Castle Project (Sharples 1991), which cover the route of the By-pass. The aims of these surveys were respectively 'to explore the relationship between the prehistoric burial monuments, settlements and land-use, and to develop a comparative settlement study for the prehistoric period' (Woodward 1991, 5) and 'to obtain a clearer understanding of the local archaeological landscape in terms of settlement and landuse' (Wainwright and Cunliffe 1985, 98). Both these surveys present a broad settlement and land-use history for the area, particularly for the prehistoric landscapes. Both are based on fieldwork, published data from excavations, and the preliminary results of recent excavations in and around Dorchester, including those of the By-pass itself (Woodward and Smith 1987). The reader must refer to these publications: it is not proposed to make exhaustive reference here to all evidence for the archaeology of the By-pass route.

Figure 3 summarises the principal features of the pre-Iron Age and the Iron Age and Roman landscapes and sets them against the By-pass route. This illustration does not plot possible settlement sites identified from lithic scatters identified in these two above-mentioned published surveys.

Mesolithic, Neolithic, and Bronze Age landscapes

Figure 3 illustrates that the proposed road was designed so that it did not threaten any known earlier prehistoric monuments. However, four areas of high potential for Neolithic and Bronze Age activity were identified.

Mesolithic and Neolithic occupation has been identified from lithic scatters on the gravel terraces to the north of Stinsford Hill (Woodward 1977, 122; 1991, fig. 67). Early Neolithic clearance was probably concentrated on the edges of the river valleys and adjacent spurs. The pronounced Chalk ridge to the south of the River Frome and to the east of Dorchester, along with the Maiden Castle hilltop, is one of the two concentrations of Neolithic monuments in the area. The construction of a long barrow at Alington Avenue, the

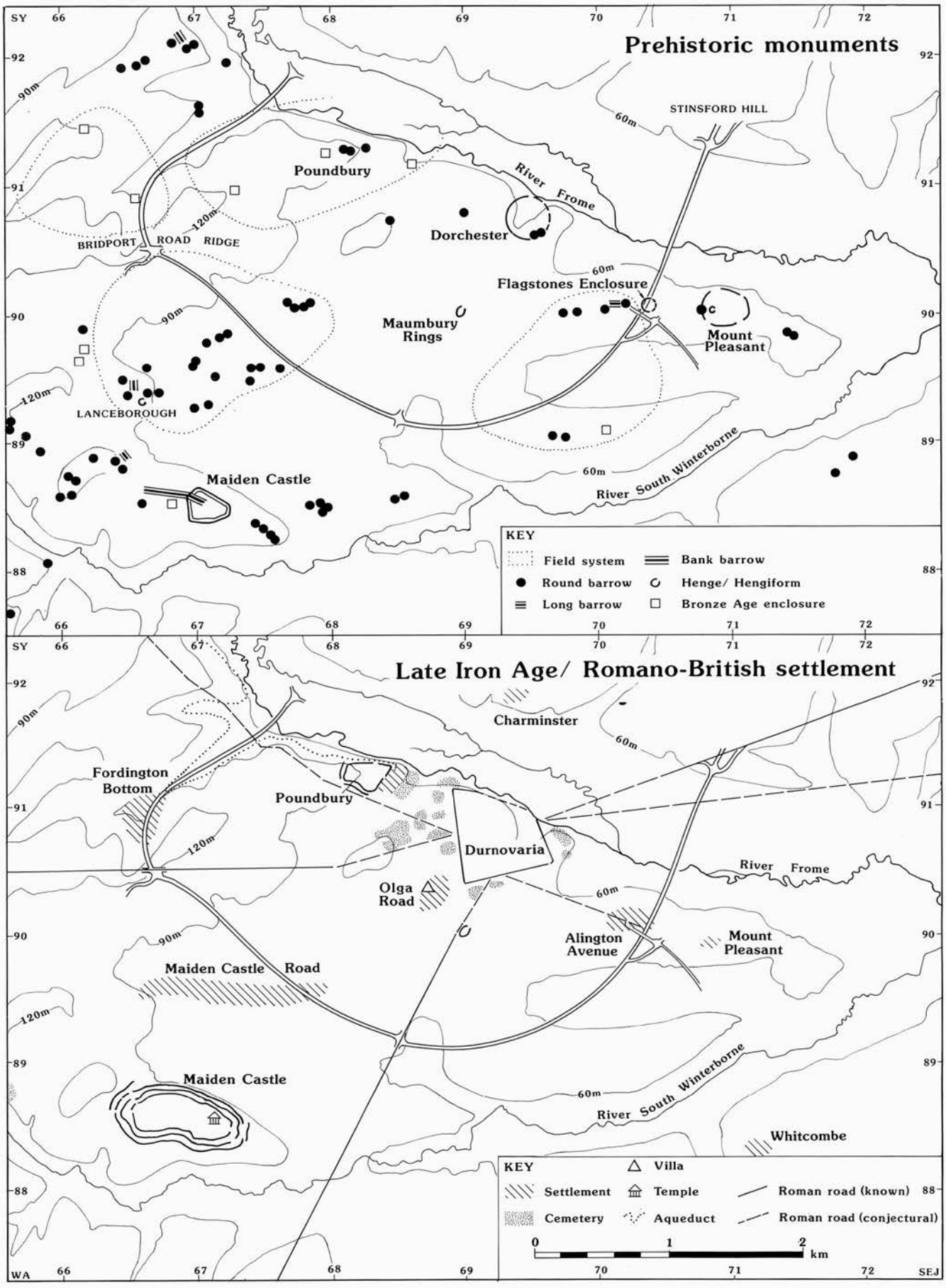


Figure 3 The By-pass route set against the prehistoric and Romano-British landscapes around Dorchester (after Woodward 1991, fig. 14, and Woodward 1993, fig. 173)

Maumbury Rings henge monument, and the henge and earthwork enclosure at Mount Pleasant along the crest, illustrate the importance of this ridge. By the Early Bronze Age an extensive linear round barrow cemetery had been set out along the ridge, aligned on the long barrow, and a timber palisade was constructed within the Mount Pleasant earthwork. The barrow cemetery probably lay on the fringes of a field system laid out across the dry valley to the south.

In 1982 a geophysical survey identified a substantial enclosure on the crest of the ridge at Flagstones on the proposed By-pass route (David 1983; Woodward 1986a, fig. 6). The possibility that this enclosure represented another feature among the Neolithic and Bronze Age monuments made survey and excavation prior to road construction a high priority.

A second later Bronze Age field system is suggested for the low ridges and dry valleys to the north of Maiden Castle. With the exception of some low earthworks to the south of the Bridport Road (RCHM(E) 1970, 624), the field system can be recognised now only as soilmarks. A series of round barrows, including the Lanceborough Barrow Group, on the crests of the low Chalk ridges is known. Few survive as earthworks and many are identifiable now only as soilmark ring-ditches. At least one soilmark ring-ditch was threatened by road construction (*see* Fig. 40). Possible Bronze Age enclosures and settlement sites occur within the field system along the edges of dry valleys. At least two possible enclosures have been identified from soilmarks on the margins of this field group, in addition to a Late Bronze Age settlement, identified by excavation to the east of the By-pass (Smith *et al.* 1992).

A third field group occurs to the north of the Bridport Road. This field system (Group (2), RCHM(E) 1970, 624) is the best preserved of the three field groups to be affected by road construction, the other two having been severely eroded by ploughing. This field system is recorded in aerial photographs (Wheeler 1943, pls lxxa and b) showing the upper parts of Fordington Bottom. Some of the earthworks were destroyed in the 1950s (Farrar 1956), and were crossed by the A37 Western Link Road. The fields are set out around the head of a dry valley. The possibility of Bronze Age settlements within the field system was high. At least one possible enclosure, close to the roadline, had been recognised as a soilmark.

The Iron Age and Roman landscape

The Early Iron Age hillforts of Maiden Castle and Poundbury dominated the Iron Age landscape (Fig. 3). This landscape was devoid of contemporaneous Early and Middle Iron Age settlement between the two hillforts, with the exception of settlement east of Poundbury (Green 1987).

A number of Late Iron Age and Roman settlements has been identified around what was to become the site for the Roman town of *Durnovaria*. The By-pass route cuts through or affects the edges of three of these settlements: the first to the east of Dorchester at Alington Avenue, associated with burials scattered extensively along the Chalk ridge; the second to the north of Maiden Castle (Bowen and Farrar 1970); and the third to the north of the Bridport Road (RCHM(E) 1970, 624). Only the settlement to the east of Dorchester had been extensively sampled by excavation prior to road construction (Davies *et al.* forthcoming). The settlement to the north of Maiden Castle is known from an intense, extended soilmark complex along the east–west ridge.

The By-pass crosses the Roman road network leading to and from *Durnovaria*, although too far from the town to disturb suburban cemeteries. There are scattered burials on the ridge to the east of the town which may reflect the line of a road to the Isle of Purbeck (Davies *et al.* 1985, 109). The lines of three approach roads to Badbury Rings to the north-east (Chowne 1988), to the south-west to Radipole (RCHM(E) 1970, 540), and to the west to Exeter (ibid., 541) are known. But the route of three others is conjectural, to the east to Lake Farm (Field 1988), to the south-east to the Isle of Purbeck, and to the north-west to Ilchester (RCHM(E) 1970, 541). The By-pass also crosses, to the west of the town, the aqueduct to the Roman town (ibid., 585), although this important and Scheduled monument was carefully taken into account and the road was designed to leave it undisturbed and sealed below the A37 Western Link Road.

Post-Roman and medieval features

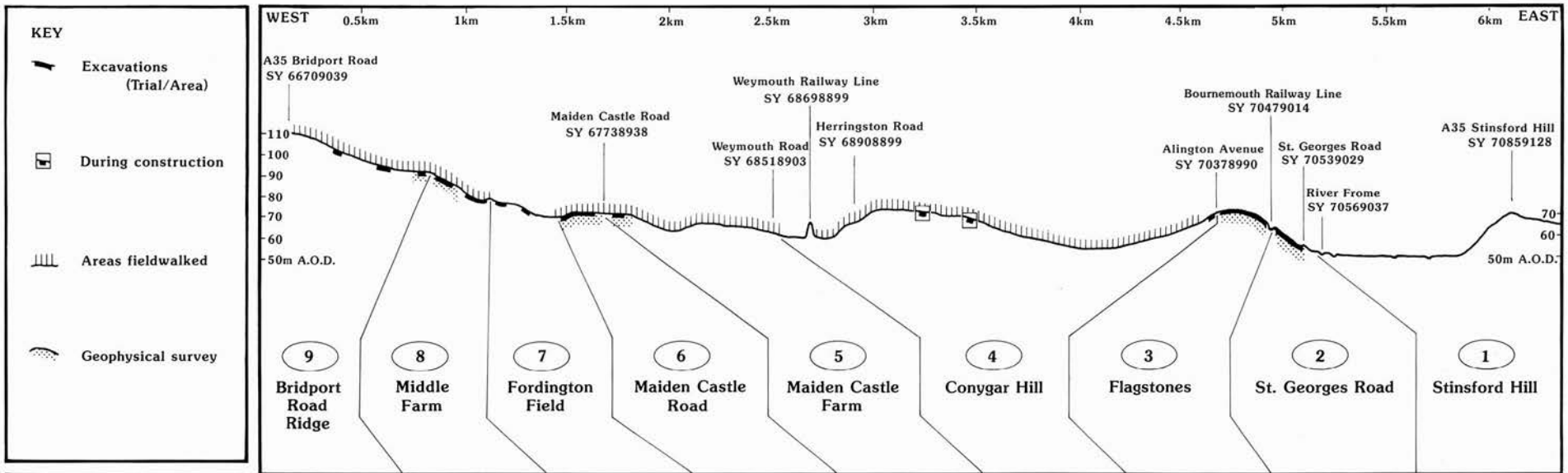
The By-pass route is mainly within the parish of Fordington, which surrounds the town of Dorchester. A short stretch to the east is in the parish of Stinsford and the A37 Western Link Road is in the parish of Bradford Peverell. Woodward (1991, 18) describes Fordington parish in the medieval period as being 'primarily composed of arable fields together with an area of meadow along the River Frome'. The fields were a system of strips, headlands, and furlong divisions. Keen suggests that this open-field system may date to the middle Saxon period and was an act of deliberate planning (1984, 238). The proposed route of the By-pass cuts across possible remnants of these field systems represented either as boundaries within the present day field arrangement, the result of 19th century Enclosure, or as low earthworks or soilmarks. In addition the remnants of water meadows, possibly dating from the late 17th century, occur across the Frome floodplain (Whitehead 1967, 264).

Post-Roman settlement remains and scattered burials have been identified in the Dorchester area and the evidence is summarised by Keen (1984, fig. 72). The possibility of other post-Roman evidence occurring on the ridge to the east of the town, and the particular importance of this ridge in the Neolithic, Bronze Age, Iron Age, and Roman periods, makes this area one of outstanding importance.

3 Excavation Strategy

Background

Plans for a road to by-pass Dorchester had been proposed since at least the early 1950s, although it was not until March 1986 that a by-pass road to the south of the town was finally approved, with construction works due to commence in spring 1987. In September 1986 a programme of evaluation and excavation was commenc-



Plotting of features from aerial photographs	Soil marks (Fig.63)	Soil marks (Fig.55)	Soil marks (Fig.54)	Soil marks (Fig.42)	Soil marks (Fig.40)	None recorded	None recorded	Earthworks (Fig.11)	Watermeadows (Whitehead 1967, fig.4)
Geophysical survey area = m2	390	5550	—	11700	7200	—	4200	3600	—
No. of observations of contractors test-pits	4	3	1	1	1	8	None	None	None
Fieldwalking	100%	c.50%	0% (in pasture)	100%	100%	85%	0% (in pasture)	0% (in pasture)	0% (in pasture)
Trial excavation No. trenches	3	2	2	2	—	3	3	2	—
Trial excavation Area = m2	933	732	450	416	—	828 (south of Alington Ave.)	1070	720	—
Assessment of alluvium and colluvium	None present	3-D recording of artefacts & soil/mollusc analyses	Colluvium in E-W combe not examined	None present	Colluvium in SW-NE combe not examined	Colluvium in E-W combe not examined	None present	Soil samples examined during excavations	Alluvium examined at Stinsford Channel (Fig.10A)
Area excavation (m2)	—	2094 (Fig.55)	—	2650 (Fig.42)	845 (Fig.40)	—	5520 (Fig.17)	2080 (Fig.11)	—
Observations during construction	No further features recorded	No further features recorded	Some further features recorded (Fig.54)	Some further features recorded (Fig.42)	Further features recorded (Fig.40)	Excavation of 2 pit-rings and recording of some other features (Fig.36)	Limited areas recorded and excavated during construction	Construction methods did not allow further recording	No features observed. Sketch plotting of alluvial sequence

Figure 4 The programme of archaeological works along the A35 Southern By-pass

ed on the route by the Trust for Wessex Archaeology (now Wessex Archaeology) and was concluded in March 1988. The long fieldwork programme was divided between that undertaken on the A35 Southern By-pass between 1986 and June 1987 and that on the A37 Western Link Road between July 1987 and 1988.

A35 Southern By-pass

The strategy for the archaeological programme on the A35 Southern By-pass was set out in a project design (copy in archive). The strategy was designed to identify those areas of greatest archaeological potential which should be excavated prior to road construction. The location and extent of the final programme of fieldwork undertaken on the A35 Southern By-pass is illustrated in Figure 4.

The fieldwalking and plotting of crop and soilmarks from aerial photographs were undertaken in autumn 1986 as part of the Maiden Castle Landscape Survey (Woodward 1991). In winter 1987 geophysical survey, trial excavation, and the assessment of colluvial deposits were undertaken but on a reduced scale to that originally envisaged. The full evaluation programme was only realised on the Chalk ridge to the north of Alington Avenue, at Flagstones, and St Georges Road, and in the area between Maiden Castle Road and the Bridport Road. Both areas had been seen as areas where the greatest concentration of archaeological features might occur.

Geophysical survey to the north of Maiden Castle was concentrated over the most intense soilmarks at Maiden Castle Road and Middle Farm although this was unhelpful in providing additional definition to archaeological features plotted from aerial photographs (Linford and Shiel 1990). Geophysical survey in 1982 determined the position of machine excavated trial trenches at Flagstones and St Georges Road: this survey had identified a possible enclosure on the crest of the ridge and possible circular anomalies on the north-facing slopes (David 1983). Machine excavated trial trenches to the north of Maiden Castle Road were located where soilmarks were most dense or over individual marks (Figs 37, 39, 51, 52, and 60).

The results of the fieldwalking were not used to determine the location of trial trenches. None of the sites subsequently examined was visible on the surface as lithic or pottery scatters. An exception was the collection of Late Iron Age and Romano-British pottery at Maiden Castle Road which showed a concentration over the extended soilmark complex along the ridge (Woodward and Bellamy 1991, fig. 17).

Colluvial deposits were examined only at Middle Farm. The strategy had proposed that deposits in each of the dry valleys along the route should be examined. The choice of dry valley was determined by the location of trial trenches on the adjacent slopes. The presence of Bronze Age deposits increased the probability of the identification of a datable sequence within the colluvium (Fig. 52).

The results of the trial excavations determined that four areas: St Georges Road, Flagstones, Maiden Castle Road, and Middle Farm, were selected for further excavation. The results of the trial excavations indicated a small post-ring and associated ditches at St Georges Road; a Neolithic interrupted enclosure, Romano-British burials, prehistoric cremation burials, and a field system at Flagstones; late Roman burials, hut features, and linear boundaries at Maiden Castle Road; a Bronze Age enclosure and a linear boundary, all above a colluvial deposit sealing a post-structure of Early Bronze Age date, at Middle Farm. A fifth area, a ring-ditch soilmark at Maiden Castle Farm was also selected for excavation.

These sites were excavated between April and June 1987. The remaining parts of the route, including Stinsford Hill and the extended stretch from Alington Avenue to Maiden Castle Road, where no trial excavation or geophysical survey had been undertaken, were observed during construction works. The exceptional discoveries during the observation work were two pit-rings on Conygar Hill (Fig. 34) and additional ring-ditches at Maiden Castle Farm (Fig. 37).

Archaeological deposits were excavated on a sampling basis. Full excavation of features was not undertaken with the exception of part of the Neolithic enclosure at Flagstones (Fig. 15) and the Romano-British cemetery at Maiden Castle Road (Fig. 46).

A37 Western Link Road

The strategy for evaluation on the A37 Western Link Road was prepared in June 1987 (copy in archive). This followed the aims and proposed a similar programme of fieldwork as was prepared for the A35 Southern By-pass. Emphasis was placed on:

- assessing the alluvial deposits of the Frome floodplain and identifying features and deposits associated with the suggested Roman road from Dorchester to Ilchester
- assessing the colluvial deposits in Fordington Bottom and examining the nature of medieval strip fields on the coombe side
- examining the recorded Roman settlement and prehistoric to medieval field systems in the upper parts of Fordington Bottom and on Fordington Down.

No provision was made for excavation of the Roman aqueduct feeding the Roman town of *Durnovaria*, as the road was carefully designed to leave this important monument undisturbed and sealed below a new road embankment.

The programme of fieldwork commenced in July 1987. Five contractors test-pits were observed in July 1987 (details in archive). Geophysical survey was undertaken in September 1987 (Bartlett and Gater 1987). A recorded magnetic survey was undertaken for an area of 1.4 ha from the Bridport Road to *c.* 100 m south of the Roman aqueduct. The remaining portions of the route were investigated by magnetic scanning. The results of the survey were poor, with few indications of settlement activity on Fordington Down or around the head of Fordington Bottom. It was clear, however, from the subsequent excavation results that this was partly caused by the masking of archaeological features by

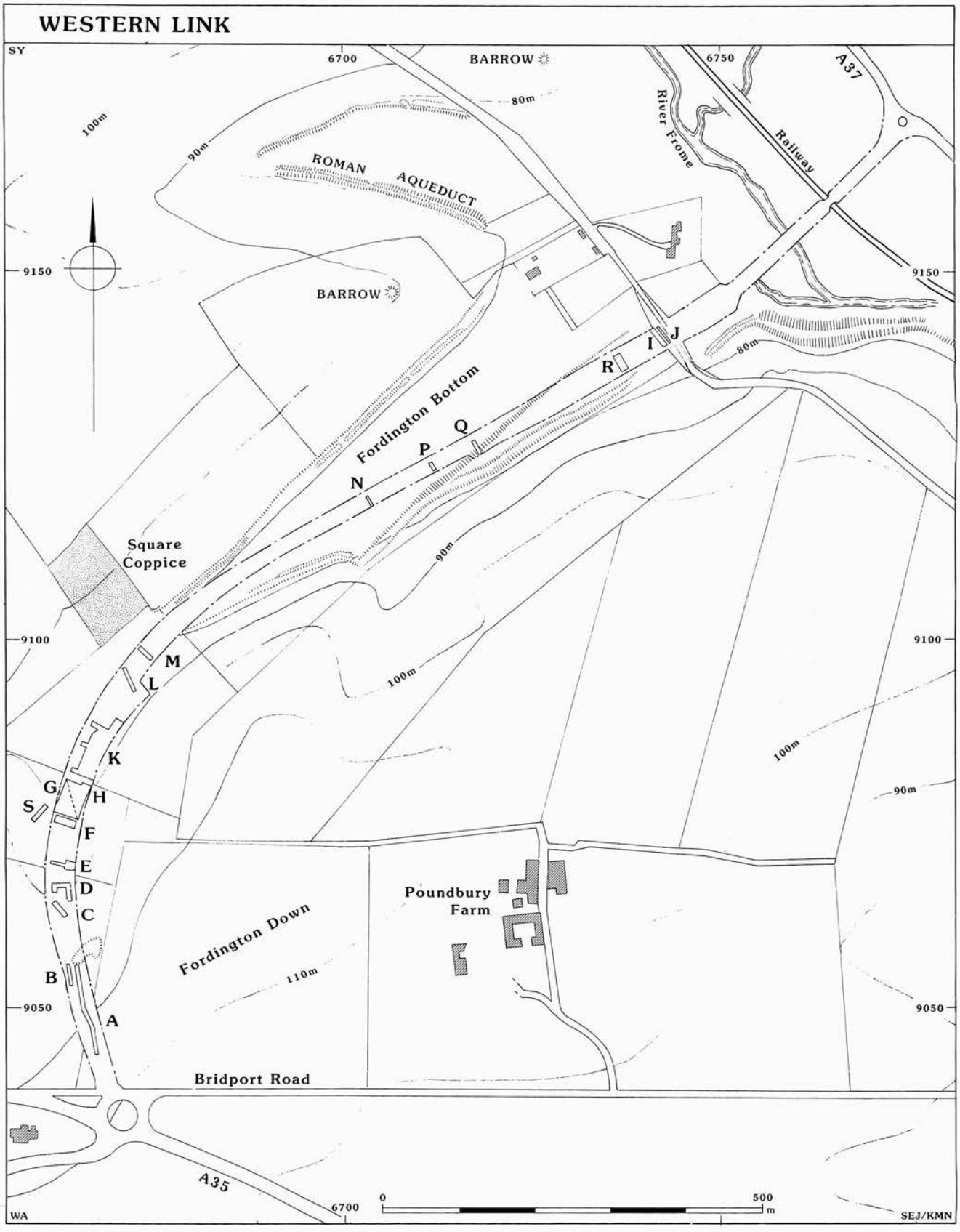


Figure 5 A37 Western Link Road: trench location

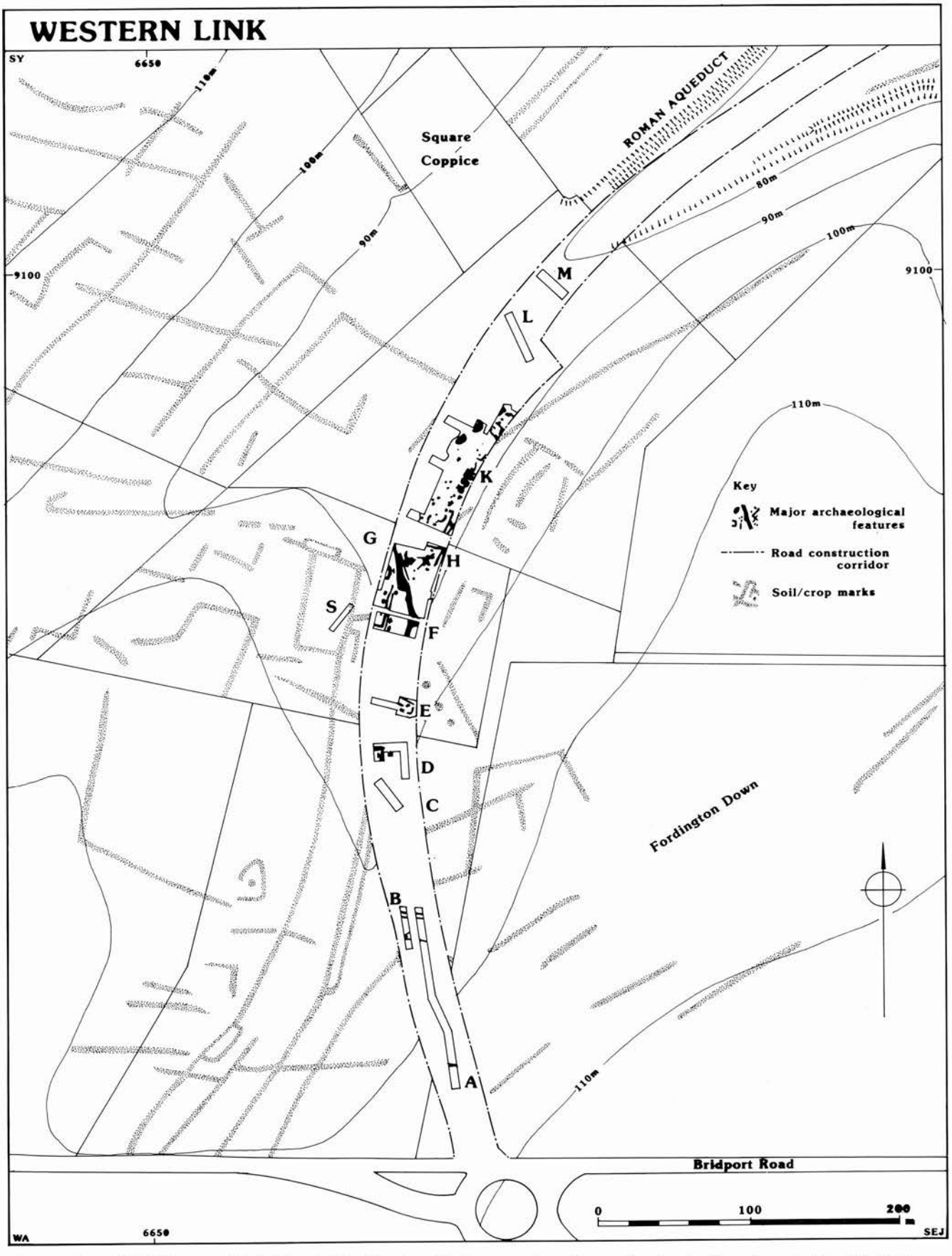


Figure 6 A37 Western Link Road: Fordington Bottom soilmarks and principal archaeological features

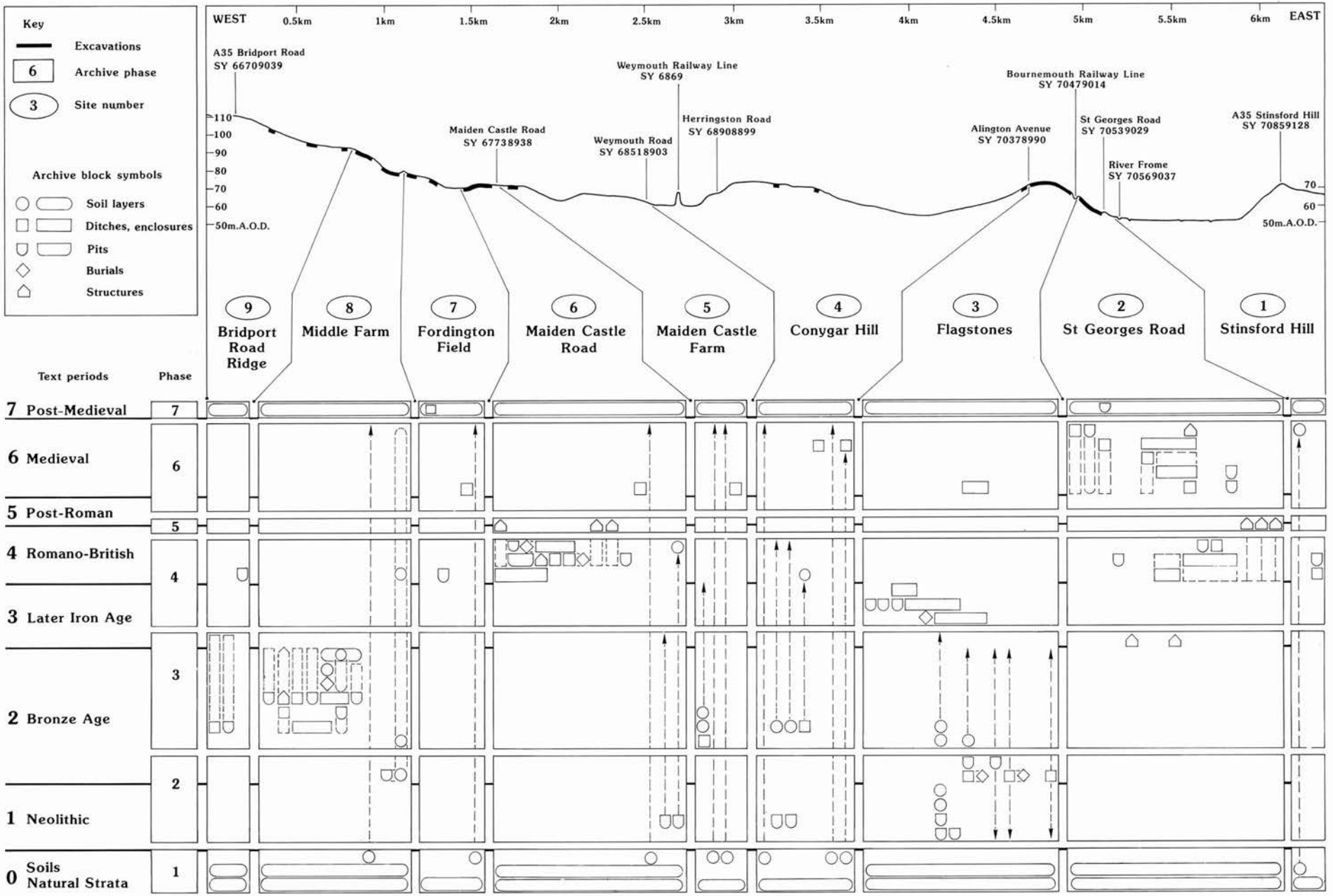


Figure 7 A summary of the location of archaeological deposits along the A35 Southern By-pass

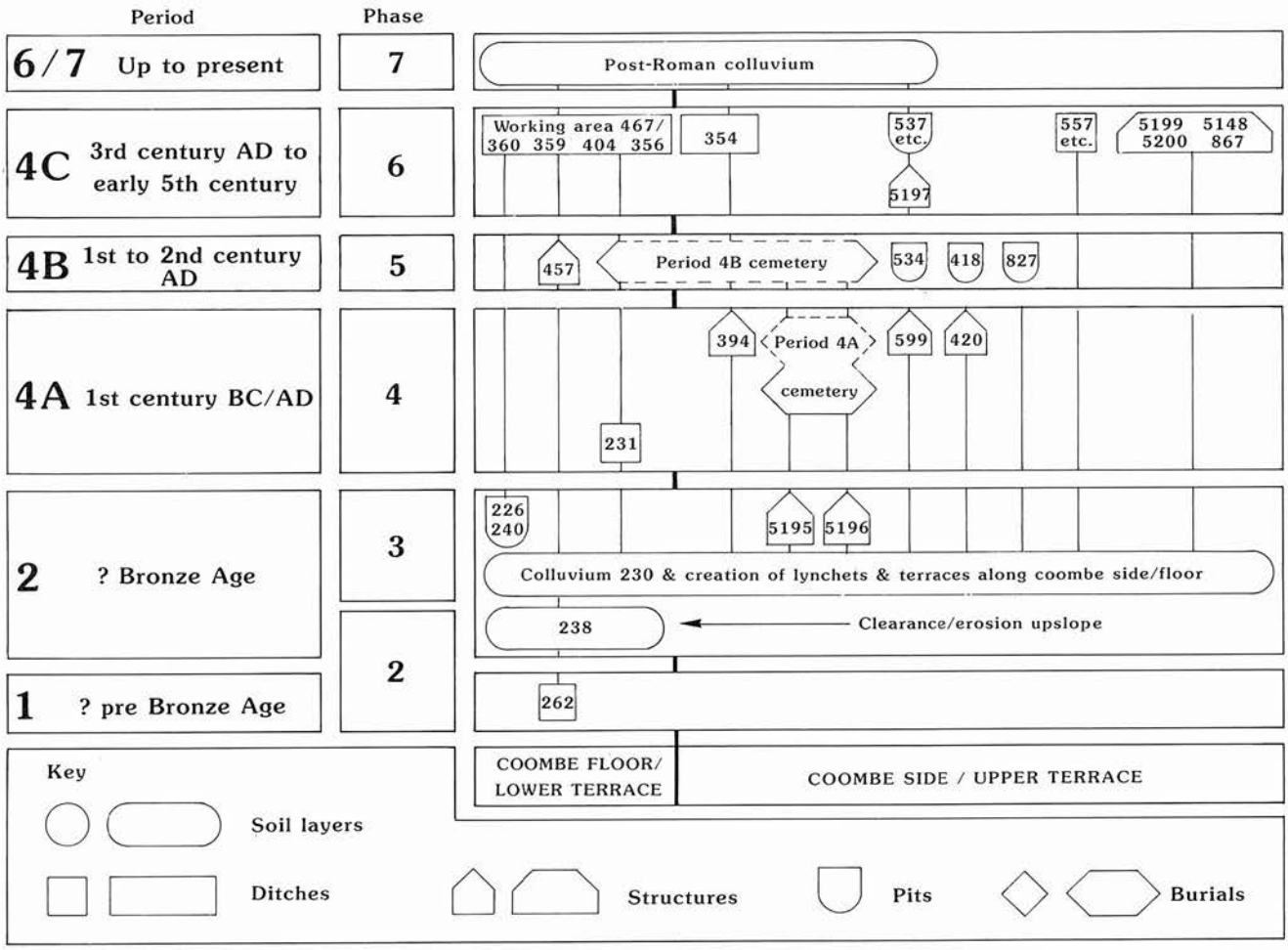


Figure 8 A37 Western Link Road: stratigraphy of the main structures in Fordington Bottom

colluvium and was not a genuine reflection of the density of archaeological features. The scanning to the north of the Roman aqueduct produced virtually no response.

In autumn 1987 nine machine excavated trial trenches, totalling 1848 m^2, were examined. These trenches were located to examine the line of the proposed Roman road from Dorchester to Ilchester (Fig. 5, I–J) and to examine soilmarks, lynchets, and colluvium (Fig. 5, A–H). The trial trenches on the coombe side and floor (Fig. 6, E–H) revealed an impressive and well-preserved sequence of Roman settlement features and colluvium.

A strategy for excavation was subsequently prepared (copy in archive). The priorities of further excavation were:

- to excavate the sealed Roman settlement remains on the coombe side and floor; and
- to investigate the lynchet arrangement across the coombe side and floor to provide data on the formation of colluvial deposits and the rate of hill slope erosion

An area of 0.3 ha was machine stripped, extending trial trenches E, F, G, and H (Fig. 6). In the negative lynchet on the coombe side, where well preserved settlement remains were suspected to be sealed below colluvium, topsoil and recently displaced lynchet material were removed by machine. The remaining colluvium was excavated by hand. In the coombe floor the identification of Roman structures and surfaces within the colluvium in trench G only allowed upper portion of the colluvial deposits to be examined. The full colluvial sequence was exposed only in trench F (Fig. 92). Excavation was undertaken between October 1987 and January 1988.

No further excavation work was proposed adjacent to the trial trenches on Fordington Down (Fig. 5, A–D) or adjacent to the Bradford Peverell road (Fig. 5, I–J) where a low density of archaeological features was recorded.

In February 1988, access for archaeological works was granted for areas of the route between trenches H and I (Fig. 5). Priority was given to determining the northern extent of the Roman settlement (Fig. 6, K), not here sealed by colluvium, and an assessment of the nature of the colluvium in the remaining portions of Fordington Bottom (Fig. 5, L–R). An assessment of the colluvium in trench M is presented in this report. Descriptions of trenches L, N–R are contained in the archive. All excavations were completed by the end of March 1988. One additional opportunity to examine the extent of the Roman settlement in Fordington Bottom was provided by the Offices of the Duchy of Cornwall,

who undertook improvements to an existing farm track adjacent to the Western Link Road in spring 1990 (Fig. 6, S). Observations have been incorporated into the following report.

4 The Excavation Report

Stratigraphic Analysis

The aims of the post-excavation work were to produce a fully integrated account of the archaeology of a landscape, providing results of the individual excavations, descriptions, and discussions of the finds and environmental material, and an overall synthesis. The framework of this account was provided in stratigraphic analyses for the A35 Southern By-pass and the A37 Western Link Road and these provided the foundation for the site, finds, and environmental descriptions presented in this report. Details of the stratigraphic analyses are provided in the site archives.

Figures 7 and 8 summarise the date, location, nature, and relationships of blocks of stratification on the A35 Southern By-pass and the A37 Western Link Road. These figures act as simplified sequence diagrams. Within each site, overlying blocks within any vertical column indicate a stratigraphic relationship, while blocks within any one line are assumed to be broadly contemporaneous.

Each stratigraphic block has been allocated to one of seven chronological periods. The periods reflect the range and diversity of features and deposits encountered throughout the route rather than at any one site. Precise dating of most features and deposits was difficult or impossible and relied largely on the date of their infilling rather than of construction or usage. Radiocarbon determinations provided the primary dating evidence for the Neolithic enclosure and the central burial of the ring-ditch at Flagstones and a framework for the Bronze Age sequence at Middle Farm.

The seven chronological periods form the basis of the descriptive sections throughout this report. The period divisions are indicated in Figures 7 and 8, which also show the overlap between the periods and the original archive phase references.

In this report the results of the survey, excavation, and observation work are described for the ten sites from east to west. The chronological periods provide the framework for these site descriptions; the evidence for each period, if present, being described in turn from the earliest to latest. Archive phase references have, therefore, not been included in text. Feature plans with feature numbers are provided in microfiche (Mf 1–5, 8, and 14) for St Georges Road, Flagstones, Maiden Castle Road, Middle Farm, and the Western Link Road.

Descriptions by site consist of summaries of the principal archaeological features and deposits by period, with reference to their location, principal stratigraphic relationships, dating evidence, and the finds and environmental evidence on which their interpretation is based. Each description is followed by a summary interpretation of the excavated sequence. The finds and environmental reports follow a broadly similar pattern, with each category described by site and discussed by period or object type. The finds and environmental material from the A35 Southern By-pass and A37 Western Link Road are described separately.

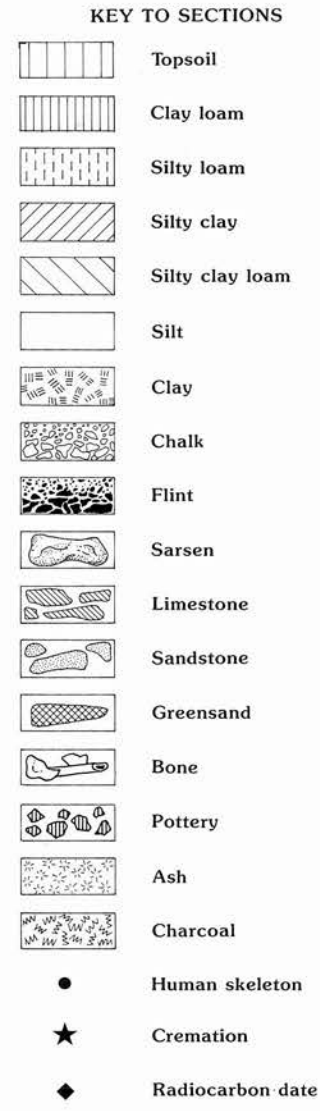


Figure 9 Key to section drawings

Note on the Use of Radiocarbon Dates

In this report uncalibrated radiocarbon dates use the form BP and calibrated dates are referred to in the form cal BC. The ten dates available are presented in Tables 1 and 3 and have been calibrated using University of Washington Quaternary Isotope Laboratory, Radiocarbon Calibration Program 1987, (Revision 2.0), with reference to Pearson *et al.* (1986) and Pearson and Stuiver (1986).

The Site Archives

	W137	*W183*	*W184*	*W185*	*W186*	*W221*
Archive introduction/contents	X					X
Background data and project initiation	X					X
The project design	X					X
Context and burial record	X	X	X	X	X	X
Photographic record	X	X	X	X	X	X
Graphics record	X	X	X	X	X	X
Finds record	X	X	X	X	X	X
Environmental record	X	X	X	X	X	X
Matrices/phase plans	X	X	X	X	X	X
Stratigraphic report	X					X
Interim reports/statements	X					X
Finds analyses in publication order	X					X
Environmental analyses in publication order	X					X
Technical reports (geophysics etc)	X					X
Draft report	X					X

The site archives for the By-pass have been prepared under Wessex Archaeology's site code system. The archaeological programme embraces the following site codes:

W137 A35 Southern By-pass: evaluation and observations

W156 A35 Southern By-pass: fieldwalking. This fieldwork was undertaken for the Maiden Castle Project (Sharples 1991) and the archive has been integrated with that project's archive.

W183 A35 Southern By-pass: Flagstones excavations

W184 A35 Southern By-pass: St Georges Road excavations

W185 A35 Southern By-pass: Maiden Castle Road excavations

W186 A35 Southern By-pass: Middle Farm excavations

W221 A37 Western Link Road

All site records for fieldwork, evaluation, excavation, and observation, are held under the appropriate site code. The post-excavation analyses for the A35 Southern By-pass were integrated under site code W137 and for the Western Link under W221. The project archive and that of each site code number consists of the elements listed above.

The archive, along with the finds, has been deposited in the Dorset County Museum, Dorchester. Microfiche copies of the project archive are held by the National Monuments Record and by Wessex Archaeology, Salisbury.

Part 2: The Southern By-pass

2. Site Reports
by Roland J.C. Smith

1 Site 1. Stinsford Hill and the Frome Floodplain

This site, from the A35 at Stinsford Hill across the Frome floodplain to St Georges Road (Fig. 10), was examined during topsoil stripping for construction in summer 1987. No pre-construction survey works were carried out, although Stinsford Hill had originally been targeted for geophysical survey and trial excavation. The principal features and deposits recorded may be summarised as:

Period 7 Water meadow channels
Period 4 Roman roads and 'milestone'
Period 0 Valley sediments

Period 0. Natural Features and Deposits

The valley sediments of the River Frome floodplain were examined in a trench on the line of the By-pass (Fig. 10, A) for the Maiden Castle landscape survey (Evans and Rouse 1991a, 15). A second trench for this survey was examined further to the east at Kingston Maurward. The results suggest a shifting river course during the Iron Age, with lightly grazed pasture or meadow. Peat formed in the late Roman period followed by alluviation, probably in the early medieval period.

During construction works, a series of alluvial and peat deposits on the Frome floodplain was observed in the sections of temporary drainage ditches. These inter-leaving deposits of clays, gravels, and peat were sketch recorded but otherwise not examined or sampled in detail.

Period 4. Romano-British

On Stinsford Hill the By-pass crosses the projected line of two Roman roads; from Dorchester to Badbury Rings (RCHM(E) 1970, 539) and Lake Farm to Dorchester (Field 1988, 116). In both instances more recent work (Chowne 1988, 150; Field 1988, 145) to the east of the By-pass has confirmed the alignment of these roads, although in the former case (Fig. 10, B) on a slightly more southern line than had previously been assumed. Neither feature was observed during earthmoving for construction; the nature of the features and the method of topsoil stripping made identification impossible.

Prior to By-pass construction, the 'Roman Milestone' at Stinsford Cross (Farrar 1957, 110) was removed for safe-keeping until the road had been completed. The original date and function of the stone remain unclear but the 'Roman Milestone' was subsequently returned to Stinsford Hill on completion of the By-pass. It has now been repositioned to the west of the Stinsford Hill roundabout on the projected centre line of the Roman road from Dorchester to Badbury Rings (Fig. 10, C). This is the third recorded time the stone has been moved as a result of roadworks and perhaps now it will enjoy a long and undisturbed resting place.

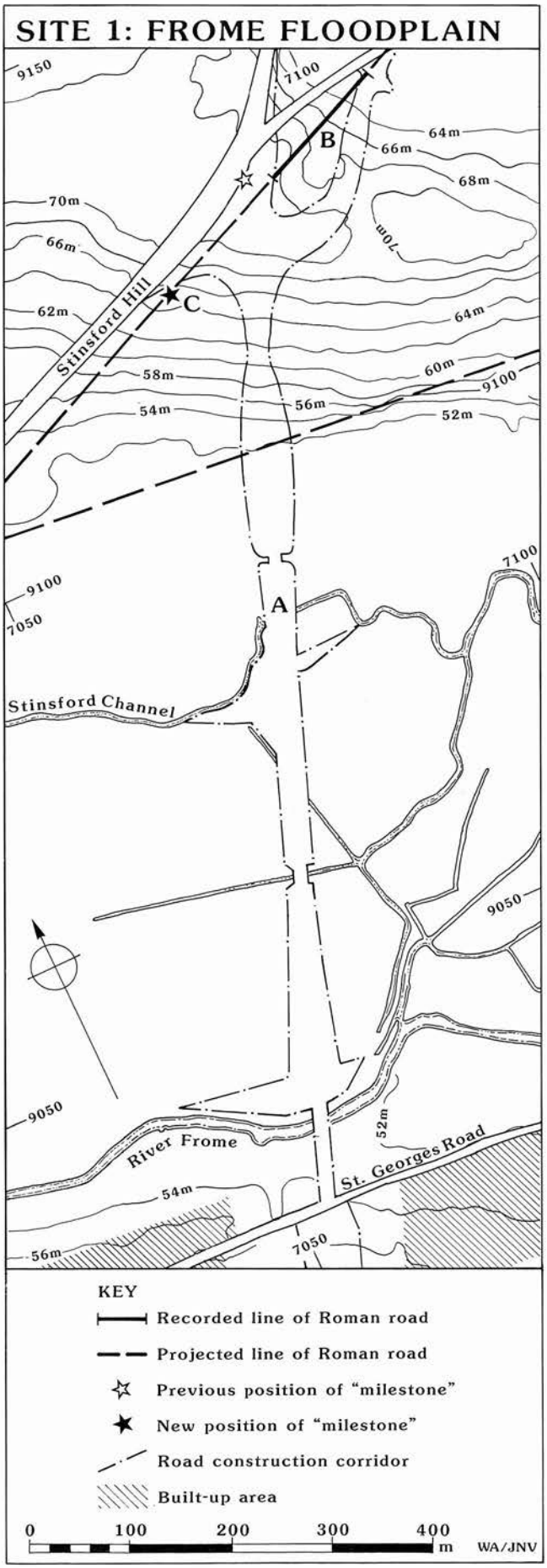


Figure 10 (opposite) Frome floodplain: location of observations

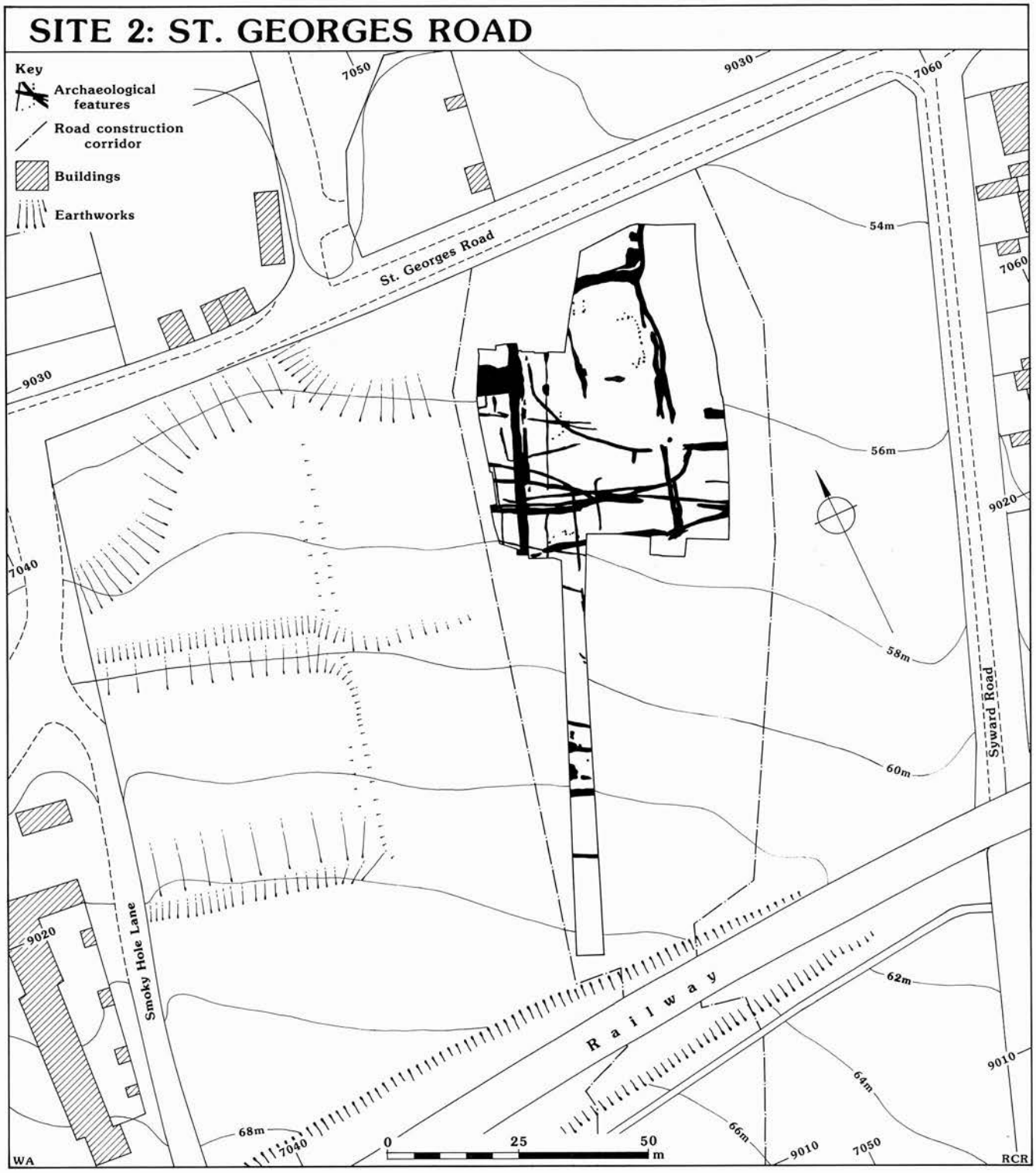


Figure 11 St Georges Road: trench location and all archaeological features

Period 7. Post-Medieval

On the Frome floodplain the By-pass crosses a series of water meadow drainage channels and ditches. These features consist of the major elements of an established water meadow system of regular channel layout between the river Frome and the Stinsford Channel recorded by aerial photographs in January 1947 (CPE UK 1934 frame 5081; Whitehead 1967, fig. 4). It has been suggested that the establishment of these water-meadow systems with weirs and hatches on the Frome floodplain dates from at least the second half of the 17th century (ibid., 264).

2 Site 2: St Georges Road

This site lies between St Georges Road and the Dorchester to Bournemouth railway line (Fig. 11). Geophysical survey in 1982 indicated possible archaeological features close to the railway line (David 1983). These were examined by trial excavation in spring 1987. This suggested the existence of enclosures, field boundaries, and post-structures of Romano-British or later date, although primarily to the north of the site. In summer 1987, 0.2 ha was machine-stripped and excavated prior to road construction. No additional features were recorded during road construction and the site was buried below the embankment for St Georges Viaduct. The principal features and deposits recorded may be summarised as:

Period 6 Medieval field systems and an agricultural building
Period 4 Late Roman enclosures, farm buildings, and associated features
Period 3 Prehistoric/?Late Iron Age post-holes
Period 0 Periglacial features

Period 0. Periglacial Features

Forty-two probable periglacial 'solution' features were recorded. Most were circular, V-profiled, and smooth-sided, generally 0.2 m in diameter and depth. An exception was an irregular rectangular feature, 3 m long, in the central area of the excavation (Mf 1, *01085*). This consisted of a series of conjoining 'solution' features, each similar to the individual examples identified elsewhere on the excavation. All the solution features were filled with a dark brown silty clay and none contained artefacts. All occurred along irregular lines running south-west to north-east, diagonally across the north-facing slope, and incompatible with the alignments of the later enclosure and field boundary systems. The density of these features increased towards the north of the excavation, towards the base of slope.

Period 3. Prehistoric / ?Late Iron Age Features

Nine sherds of prehistoric pottery (61 g) were recovered; all were residual in later contexts. A simple upright rim (Fig. 64, P1) may possibly be of Late Bronze Age or Early Iron Age date. The remaining sherds were undiagnostic. A small assemblage (761 pieces) of very worn and broken worked flint was also recovered containing no diagnostic elements.

Structure 01467

This consisted of an arc, 7 m in diameter (Fig. 12; Mf 2), of 11 post-holes. No post-holes of this arc were identified to the south, upslope. Six post-holes were regularly set at 1.5 m intervals with five further post-holes clustering adjacent to the two northernmost of the arc. They were generally 0.25 m in diameter and 0.15 m deep and filled with a light grey chalky silt loam. No finds were recovered from them, although the location of the structure suggests that the Period 4B enclosure cuts across it and has destroyed other elements of the structure. On this evidence a pre-Romano-British date is suggested.

Structure 01468

This consisted of an arc, 6.5 m in diameter (Fig. 12; Mf 2) of eight post-holes. The post-holes were positioned 1–1.5 m apart and were square in profile, generally 0.2 m in diameter and depth. No dating evidence was recovered from the silty loam fills. Post-hole *01408* was cut by the Period 4A curvilinear enclosure ditch *01010*.

Period 4. Romano-British Features

Period 4A. Curvilinear enclosure ditch 01010

Curvilinear enclosure ditch *01010* occurred across the central area of the excavation and defined an indeterminate area to the north-east (Fig. 12). The enclosure ditch was 0.2 m deep, and U-profiled for most of its length; a terminal to the ditch occurred at its east end but to the north the feature was more heavily eroded and its continuation to the north is obscure. Two sherds (10 g) of Black Burnished ware were recovered from this feature. The ditch cut across the Period 3 post-structure *01468* and was cut by the Period 6B and 6C medieval field boundaries and Period 6B horse burial *01083*. Otherwise it is only the alignment of the enclosure that suggests it is not contemporary with, but not necessarily earlier than, the Period 4B rectangular enclosure system. Since there was no stratigraphic relationship between the two enclosure systems, the chronological sequence remains undetermined, although a Romano-British date is suggested.

Period 4B

The rectangular enclosure system

Period 4B was represented by the establishment of a rectangular ditched enclosure across the west of the site (Fig. 12). The north, east, and south limits of the enclosure were identified. It was 48 m long and at least 34 m wide with an entrance to the east, 4 m wide, and to the north, also 4 m wide, but subsequently blocked by a shallow section of ditch. The enclosure ditch had been recut at least once and in places, for example to the south-east, was represented by a series of abutting ditch sections rather than a continuous feature. Linear ditches extending from the north-east and south-east corners suggest that other comparable and adjoining rectangular enclosures occurred to the north and east.

The enclosure ditches varied in depth between 0.15 m and 0.65 m, being deepest on the northern limb of the enclosure. They were invariably shallow and rounded and filled with an homogeneous grey chalky silty loam. This made recognition of the stratigraphic relationships between the enclosure ditches and their recuts difficult, although in places slightly more chalky fills allowed some relationships to be identified.

At least two phases of the rectangular enclosure of Period 4B can be discerned, represented by the recutting of the north

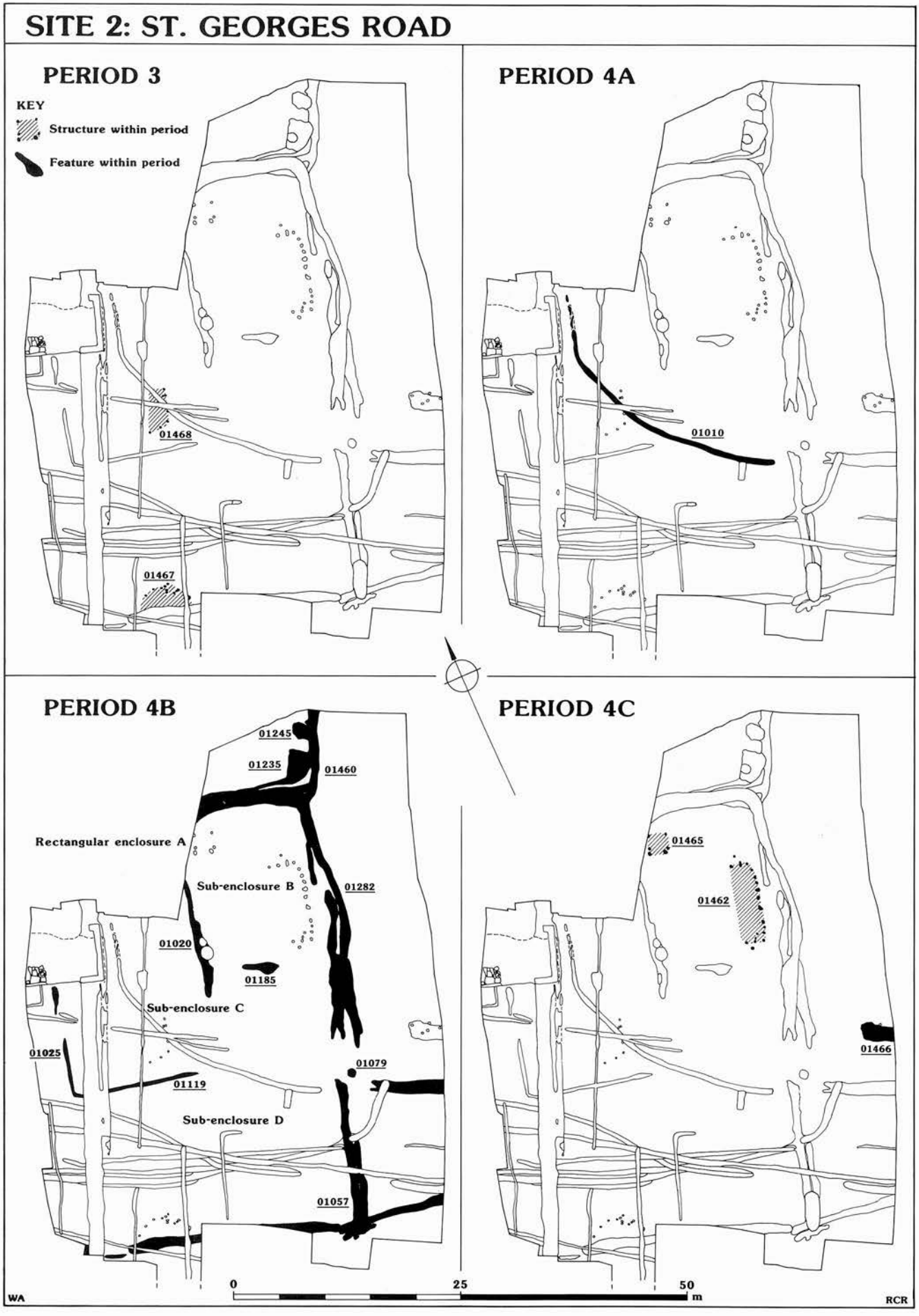


Figure 12 St Georges Road: Period 3 (?Late Iron Age) and Periods 4A–4C (Romano-British)

and east limbs of the enclosure ditch at least once and the apparent blocking of the southern enclosure entrance with a short ditch segment. Material recovered from both phases of enclosure ditch was sparse and the pottery consisted invariably of small and highly abraded sherds. The stratigraphically earliest enclosure ditches contained 17 sherds of pottery including two prehistoric sherds (including Fig. 64, P1); a sherd of briquetage; two sherds of samian of 1st century AD date; nine sherds (38 g) of Romano-British date including one of Oxfordshire ware dated to *c.* AD 240– 400; and two sherds of medieval date. A pin-beater (Fig. 75, 10) was also recovered.

The ditches at the north-east and south-east corners of the rectangular enclosure that are assumed to represent components of contemporaneous and adjoining enclosures contained four sherds of pottery including one of 1st century AD samian and one of Oxfordshire colour-coated mortarium dated to *c.* AD 240–400. Even less material was recovered from the recut ditches of the enclosure and included two sherds (20 g) of Black Burnished ware.

Stratigraphically, the earliest of the ditches of the rectangular enclosure system were also cut by a series of five pits (Fig. 12, *01057*, *01282*, *01460*, *01235*, *01245*). All these features consisted of slightly irregular U-profiled pits. Pit *01057* was the largest, 6 m long, 2 m wide, and up to 0.74 m in depth, with a shallow extension to its western edge. There was no indication from the pit fills of the original function for these features and all were gradually infilled with chalky loams. Material recovered from the fills was sparse and only pit *01057* contained datable material: one sherd of 2nd century AD samian and six sherds (22 g) of Black Burnished ware. The rectangular enclosure was also cut by the Period 6A, 6B, and 6C field system ditches.

Internal ditches within the rectangular enclosure

Internal subdivision of the enclosure was suggested by the alignment of three shallow ditches, *01020*, *01025*, and *01119*, in the north-west. These ditches were aligned parallel to the rectangular enclosure ditches and consisted of similar shallow, slightly irregular features infilled with light grey brown silty loams. Material recovered from ditch *01020* consisted of one sherd (5 g) of Black Burnished ware. This feature was cut by two Period 6B pits. Ditch *01119* was cut by the Period 6C field system ditches.

These internal ditches subdivide the enclosure into at least three smaller rectangular sub-enclosures. Sub-enclosure B (Fig. 12) was 29 m long and 14 m wide; sub-enclosure C was at least 22 m long and 17 m wide; and sub-enclosure D was 18 m wide and at least 34 m long.

Other internal features within the rectangular enclosure

Two features are suggested as being contemporary with the rectangular enclosure. Graindrier *01185* was located within sub-enclosure B. The feature, aligned east–west, was bulbous in plan, 4.04 m long and 1.30 m wide. The eastern end of the feature was deepest and consisted of a steep-sided 'bowl' with the western portions of the feature consisting of a more shallow gully. The feature was filled with dark brown, charcoal-flecked, silty loams and contained one scrap (1 g) of Black Burnished ware and five pieces of slag.

Pit *01079* lay on the southern side of the east entrance into rectangular enclosure A. The pit was circular, 1.10 m in diameter, and 0.85 m deep. Seven 'stake-holes' were cut horizontally into the pit sides at regular intervals around the circumference of the pit at a depth of *c.* 0.4 m below the top of the subsoil surface. There was no evidence to suggest the original function of these features. The fill of the pit, an homogeneous brown silty clay loam from top to bottom, suggested, like all the other Period 4 features, that it had gradually rather than been deliberately infilled. One scrap (1 g) of Black Burnished ware and one sherd of 15th or 16th century date was recovered alongside a quantity of domestic fowl bones.

A series of isolated and undated post-holes occurred within the rectangular enclosure. They occur only within this area and may suggest their contemporaneity, although they are undated.

Period 4C

Three structures, *01462*, *01465,* and *01466* (Fig. 13), were identified within or adjacent to the rectangular enclosure. The location and alignment of these features suggest they are probably contemporary with the Period 4B enclosure systems, but to re-emphasise the lack of good dating evidence for these structures and for the rectangular enclosure system, they are described independently of the enclosure ditches.

Structure 01462

This post-built rectangular structure was within sub-enclosure B, aligned parallel to the ditches of the east enclosure side (Fig. 13). The structure consisted of 16 post-holes comprising the north, south, and east walls. The long east wall of the building was slightly bowed. Overall the structure was 8.4 m long and at least 3.2 m wide internally; there was no evidence for post-holes defining a west wall to the building. The post-holes were all shallow, 0.04–0.16 m deep, and 0.24–0.63 m in diameter or length. There was no evidence for post-packing or post-pipes and the post-holes were generally irregular in plan and profile. Four additional features (Fig. 12, *01247*, *01253*, *01255*, and *01257*) occurred adjacent to the north and south walls of the structure. Their more irregular nature and deeper profiles suggest they may represent 'solution' features rather than post-holes associated with this building.

No internal or external surfaces were associated with the building. A possible entrance in the east wall of the structure might be suggested by the two elongated post-holes, *01191* and *01193*. Although this entrance would open onto the ditches of the possibly contemporaneous Period 4B enclosure. It is possible that the absence of post-holes for the west wall suggests an open-sided building.

No material was recovered from the post-holes with the exception of two pieces of struck flint and one animal bone from post-hole *01193*. The position of the structure within the rectangular enclosure system and the alignment of the bowed east wall, parallel to the recut enclosure ditch to the east, suggest the building was contemporary with this phase of enclosure.

Structure 01465

A second post-built structure, *01465* (Fig. 13), occurred to the north-west of sub-enclosure B. This consisted of six post-holes defining an area of $2m^2$, implying a four-post structure, although other elements to the structure may lie to the west of the excavation. The post-holes ranged from 0.5 m to 0.27 m in diameter and 0.05–0.20 m in depth with squarish profiles. Vertical post-pipes were evident within the fills of post-holes *01203*, *01205*, and *01209* suggesting that posts had rotted *in situ*. The pairs of post-holes on the south of the structure suggest a repair or replacement of the posts of this wall. One sherd of possibly intrusive post-medieval pottery was recovered from post-hole *01209*. The location of the building within the north-west corner of sub-enclosure B of Period 4B, suggests it was contemporary with the rectangular enclosure system and also therefore with structure *01462*.

Structure 01466

This sub-rectangular structure was to the east of the Period 4B rectangular enclosure A, 7 m from its eastern entrance (Fig. 13). It consisted of a shallow chalk-cut feature, 2.2 m wide, at

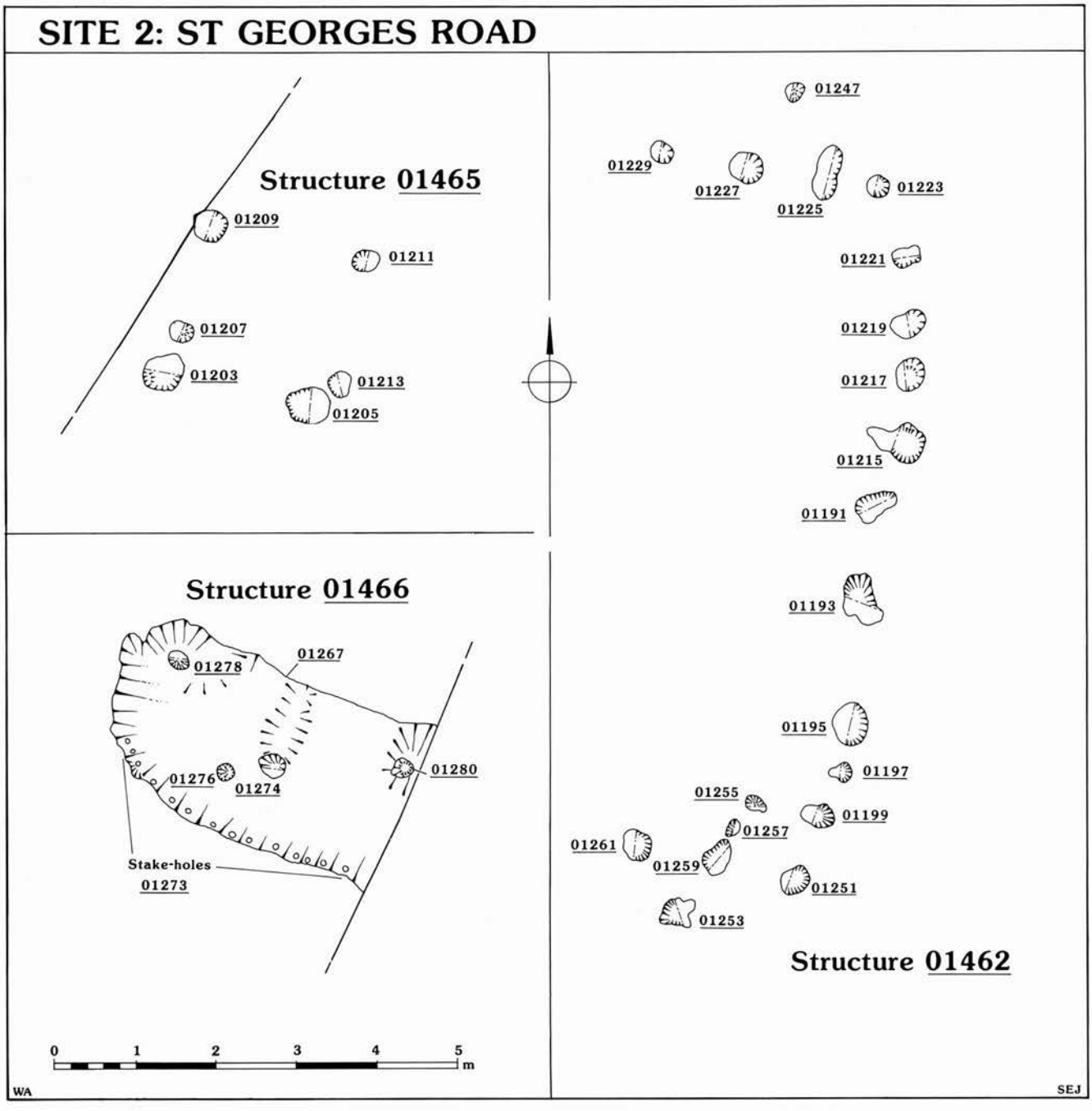


Figure 13 St Georges Road: late Roman structures 01462, 01465, and 01466

least 3.85 m long and 0.13 m deep. The base of the feature was slightly uneven but generally flat, suggesting the feature had been 'terraced' into the gentle south-facing slope. The south edge of the feature was 'bowed'; the nature of the west and north edges of the structure was unclear because of subsequent erosion. Around the inner edge of the south of the structure was a series of regularly spaced 'stake-holes', generally 0.1 m in diameter and depth, possibly to support a wattle wall. Four post-holes were identified within the structure; two approximately centrally placed and two towards each end of the excavated area of the structure. All four post-holes were well-constructed, 0.23-0.32 m in diameter and 0.14–0.3 m deep, and filled with flint-packing stones. The packing-stones were sealed by a deposit of light grey brown silty loam that also infilled the shallow scoop of the whole structure. These well-constructed features may have contained posts to support a roof.

Seven pieces of struck flint and a small quantity of Portland Limestone were recovered from this feature. In the absence of stratigraphic relationships, the date of the structure is unclear. Its spatial relationship to other features suggests it may be broadly contemporary with the Period 4B rectangular enclosure system, although the building is located outside the main enclosure A.

Period 6. Medieval Features

Period 6A. Curvilinear field boundaries

Six shallow curvilinear ditches represent this phase (Fig. 14). The ditches were generally aligned west to east, with the exception of the most eastern short segment which was aligned south-west to north-east. The eastern extent of each ditch was identified. Their comparable nature and alignment suggest that they represent the recutting of a single boundary. The stratigraphic sequence of the five intercutting ditches was identified and suggests they were recut slightly further north on each occasion. The short eastern ditch segment cut the edges of the Period 4B enclosure ditches and these may have survived as low earthworks at this time.

The ditches were steep-sided and flat-bottomed, no greater than 0.6 m wide and 0.32 m deep. Each was filled with homogeneous light grey–brown silty loam. A small quantity of material was recovered from the ditch fills and included four sherds (26 g) of prehistoric pottery, six sherds (18 g) of Black Burnished ware, one sherd of 2nd century AD samian, and three sherds of 15th or 16th century material. The ditches were cut by the ditches of Periods 6B and 6C.

Period 6B. East–west linear field system

Six ditches are assigned to this phase (Fig. 14). They were aligned north-west to south-east, parallel to each other and defining 'strips' of land 12 m wide. One further ditch with a comparable alignment was identified in the extended trench in the south of the excavation (Fig. 11) and may also belong to this field system. The intercutting of the two northernmost ditches suggests possible recutting of the ditch alignments.

The ditches consisted of shallow, U-profiled features at most 0.3 m wide and no greater than 0.2 m deep. They were filled with homogeneous light grey-brown silty loam, similar to all the other ditch fills from the excavation. One scrap of medieval pottery was recovered. The Period 6B ditches cut across the ditches of the Romano-British enclosure systems and the ditches of Period 6A, although the ditch system was cut by the Period 6C field system.

Also assigned to this phase, is pit, *01413*, cutting the internal ditch of the Period 4B rectangular enclosure (Fig. 14). The pit was 1.8 m in diameter and 0.72 m deep. It was filled with chalky silt loams and probably represents a gradual infill. A second pit, *01419*, to the north, is probably contemporaneous. The two features intercut but were filled at the same time. Eight sherds from one vessel of 12th or 13th century date, and possibly earlier, were recovered from pit *01413*. On this evidence, the pit pre-dates the Period 6C ditch system, while stratigraphically it post-dates the Period 4B enclosure system.

Horse burial *01083*, is also assigned to this phase, on the basis of its alignment at right-angles to the Period 6B ditch system (Fig. 14). Stratigraphically the feature post-dates the curvilinear ditch of Period 4A, but otherwise could be assigned to any of the following Romano-British or medieval phases. This rectangular feature, 2.1 m long, 0.8 m wide, and 0.4 m deep, contained the carcass of an adult male horse. The animal's left hindlimb had been removed and placed alongside the head in order to fit the body into the grave.

Period 6C. The north-east–south-west linear field system

This phase is represented by a series of shallow ditches, no deeper than 0.4 m, aligned south-west to north-east, directly downslope (Fig. 14). The predominant feature consisted of a wide feature in the west of the excavation, which represented three intercutting ditches. The ditch fills consisted of homogeneous light grey brown silty loams and no stratigraphic relationship between the ditches could be identified. These features probably represent repeated recutting of a single boundary. Land snails from these ditches indicate they were hedged.

Five lengths of ditch on a comparable alignment occurred to the west and east (Fig. 14). Each was no greater than 0.1 m deep and 0.4 m wide, and was more representative of a ploughscore or mark rather than an intentionally cut ditch. The features of this phase cut across all the preceding enclosure and field systems, but pre-date the construction of the Period 6D building. Material recovered from the ditches includes 40 sherds of 12th–14th century pottery, eight sherds of 15th or 16th century and three sherds of 18th century pottery. If the 18th century material is intrusive, the group as a whole could be no later than 14th century in date. A 4th century bronze coin, a copper alloy pin fragment, and an iron slide key of Romano-British type (Fig. 74, 4) were also recovered.

The alignment of the Period 6C ditch system is broadly comparable to a linear earthwork c. 40 m to the west recorded in the adjacent field between the By-pass and Smoky Hole Lane (Fig. 11). A series of lynchets was associated with this linear earthwork and was aligned at right-angles to it. These features were recorded in the trench sections of the excavation. No subsoil features within the excavation could be associated with the southern lynchet, although the series of shallow parallel features in the extended trench at the south of the excavation may be associated with these earthworks. The contemporaneity of these earthwork features with the Period 6C ditch system is suggested and it may be that the earthwork features represent a further phase of field division and activity subsequent to Period 6C.

Period 6D. Building *01009*

Building *01009* (Figs 14–16) was constructed over the ditches of the Period 6C field system. The building was 6.4 m wide and at least 8.4 m long externally, with the west wall of the structure lying outside the excavation. The building had been constructed in a shallow terrace cut into the gentle north-facing slope to create a level floor surface.

The east wall consisted of a square-cut foundation trench, 0.31 m deep. This foundation trench occurred only across and to the base of the infilled Period 6C ditches. Faced chalk blocks lined the foundation trench to the north, otherwise the feature had been robbed of material. The south wall line consisted partly of this robbed-out foundation trench and a narrow band of flint nodules in a soil matrix. There was no surviving evidence for a wall footing between these elements and any walling here must have rested on the surface of the chalk bedrock. A quantity of stone rubble lay above and along the line of the south wall suggesting that at least the lowest levels of the wall may have been constructed in stone. There was no evidence for a footing for the north wall. Here also any wall may have rested directly on the surface of the chalk bedrock or the building may have been open sided.

The building was floored with redeposited chalk and large limestone paving slabs set in a light grey mortar. The chalk may have acted as a sub-base for a slab floor, the majority of which has been robbed. There was no evidence for internal sub-divisions or partitioning. A shallow, right-angled 'trench' butted the south wall of the building and may have defined the foundation for a lean-to or porch.

No datable material was recovered from the constructional features of the building and two sherds of 12th–14th century material were recovered from the rubble overlying the south wall. The building is best dated by its relationship to the Period 6C ditches which are suggested as being infilled by the end of the 14th century, and therefore points to a post-14th century date for building *01009*.

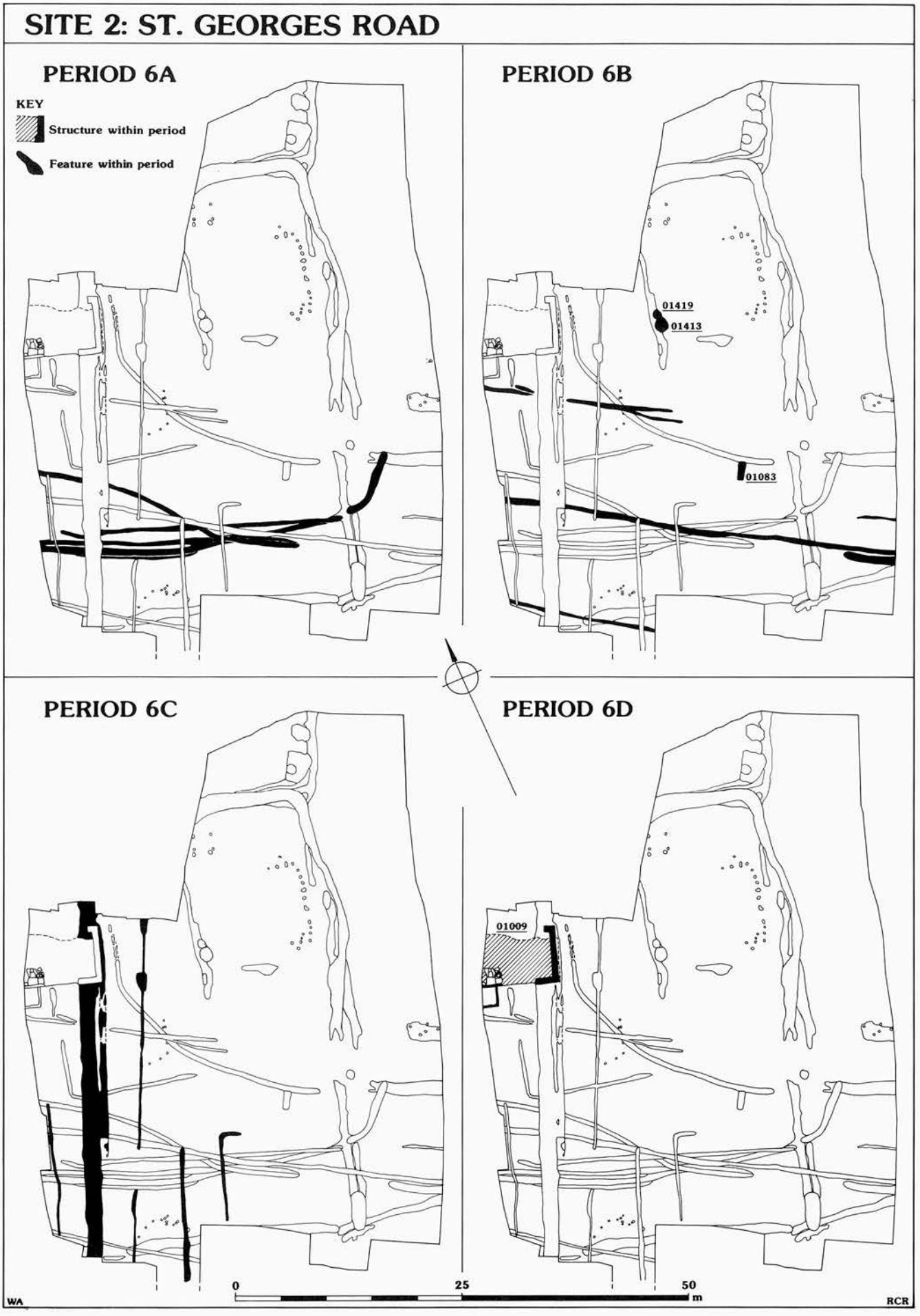


Figure 14 St Georges Road: Periods 6A–6D (medieval)

Figure 15 St Georges Road: western part of the excavation looking south; Period 6D medieval structure 01009 in foreground

Period 7. Post-Medieval Features

The features and deposits of the excavation were sealed by topsoil. The topsoil consisted of brown silty loams, becoming lighter in colour and more chalky towards chalk bedrock. The depth of topsoil varied between 0.3 m and 0.75 m and this can be related to the surviving lynchets extending into the excavation area from the west (Fig. 11).

Material recovered from the topsoil and during initial clearance included small quantities of residual Romano-British material, including an abraded samian stamp (Fig. 69, 3) and a fragment of glass jar or bottle of late 1st–early 3rd century date. Small quantities of post-Roman material was also recovered, including pottery dating from the 13th–19th centuries.

St Georges Road: Summary

Pre-Romano-British activity is represented by a small collection of residual prehistoric pottery, containing a Late Bronze Age or Early Iron Age element. The earliest excavated features are possibly Late Iron Age in date. The Late Iron Age date for structures *01467* and *01468* is suggested on the basis of their spatial and stratigraphic relationship to the Period 4A and 4B enclosure systems. There is no evidence for the function of the buildings. Soil and land snail analyses point to these and the Romano-British features being constructed in an open landscape already having suffered soil erosion and depletion.

Two ditched enclosure systems were established during the Romano-British period. The date of the construction of the rectangular enclosure system is unclear and that of the curvilinear enclosure ditch even less so. The curvilinear enclosure is assigned a Romano-British date on the basis that it pre-dates the medieval Period 6B and 6C field boundaries and its alignment is incompatible with the other identified field systems. No other features could be associated with this enclosure and its function and nature remain unclear.

A large rectangular enclosure (0.16 ha) was laid out across most of the west of the excavation and was sub-divided into at least three lesser enclosures B, C, and D (0.04 ha, 0.04 ha, and 0.06 ha respectively). The large rectangular enclosure was one element of a series of comparable enclosures to the east and north, running parallel and at right-angles to the contours of the south-facing slope and butting onto the floodplain of the River Frome. A continuation of this enclosure system to the south and upslope was not evident within the extended trench to the south of the excavation (Fig. 11).

The majority of the Roman material from the excavation was recovered from the enclosure ditches and associated features, although the material was invariably small and abraded. Assuming the medieval material is intrusive, the two sherds of Oxfordshire ware (dated *c.* AD 240–400) are the latest material recovered from the ditches. Pits cutting the eastern enclosure ditch contained only material datable to the Roman period. A late Roman date is assigned to this phase of enclosure,

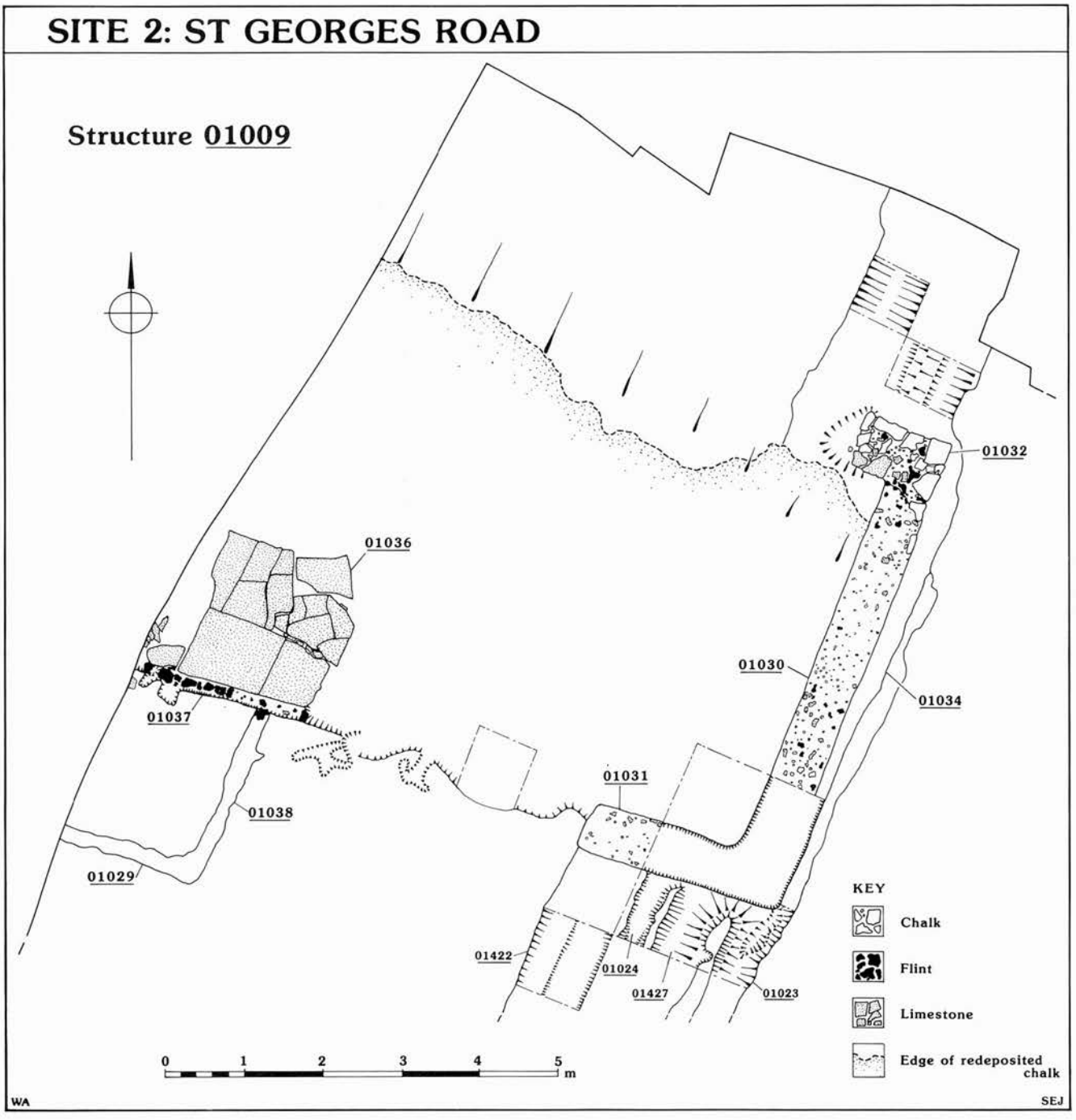


Figure 16 St Georges Road: medieval structure 01009

although, with recutting of the enclosure ditches at least once, activity may have extended into the early post-Roman period.

Few possible contemporaneous features occurred within the enclosures and these exclusively within sub-enclosure B, with the exception of pit *01079* in the eastern entrance to the main enclosure. If the other pits cutting the stratigraphically earliest enclosure ditches are contemporary with the recutting of the enclosures, this may suggest a deliberate attempt to maintain the open space within the enclosed areas. The function of these pits is unclear. There is little for which quarried chalk might have been used, while the pits were not used to dispose of quantities of rubbish, domestic or otherwise.

Three features occurred within sub-enclosure B; graindrier *01185* and structures *01462* and *01465*. The contemporaneity of these features with the rectangular enclosure cannot be proven on material evidence, but can be suggested by their position and alignment within sub-enclosure B. They may comprise a deliberate and planned group of structures within the sub-enclosure. An agricultural function for the two post-built structures is suggested in the absence of domestic or settlement debris from the adjacent ditch fills and as residual material in later phases. The rectangular struc-

ture may represent an open-sided barn building and, if structure *01465* is four-posted, a storage function may be suggested. With the graindrier, these structures provide a complementary set of agricultural structures within this sub-enclosure. The farmyard interpretation is supported by land snails from the enclosure ditch fills, which indicate a waste ground and garden-type habitat.

The absence of contemporaneous features within the other sub-enclosures suggests these were used as pens or enclosures possibly for stock. Although the ditches were insubstantial, shallow-set fences on low banks adjacent to the enclosure ditches may have provided suitable fencing for stock. Animal bone from the enclosure ditches and pits comprised predominantly sheep/goat and cattle. Horse, pig, dog, and domestic fowl were also represented. A small number of isolated undated post-holes also occurred within the enclosures and may indicate pens or fences within the ditched sub-enclosures.

The enclosure subdivisions may, therefore, have served separate agricultural functions within a farmyard represented by the main rectangular enclosure. This enclosure comprised only one of a system of rectangular plots laid out across the base of this south-facing slope and adjacent to the meadows of the River Frome. There is an absence of settlement debris from the enclosure ditches and the location of contemporary settlement associated with this farmyard and field system cannot be determined.

Building *01466* to the east of the main rectangular enclosure lies less comfortably with the rectangular enclosure system. The feature is devoid of any datable material and can only be loosely aligned with this field system on its position within the excavation. The nature of its construction differs from the post-built structures within sub-enclosure B and it may represent a second phase of building possibly of post-Roman date. There was no supportive evidence for this from material remains and the absence of settlement refuse may indicate a non-domestic function.

The abandonment of the enclosure and buildings was probably a gradual process, with the ditches filling slowly and the posts, at least of building *01465*, rotting *in situ*. There is insufficient evidence to suggest how long the enclosures and buildings were used and when they were finally abandoned. They were probably established in the late Roman period, with activity continuing into the early post-Roman period.

Three ditched field systems were established over the abandoned Romano-British enclosure system. They show no respect for the Romano-British enclosure ditches, except for a slight suggestion that they survived as low earthworks at the inception of the stratigraphically earliest sequence of field boundaries (Period 6A). None of these field systems can be accurately dated from finds. The latest field system (Period 6C) may date to the 14th century and the others pre-date this, but no precision can be attempted. The three field systems show no respect for each other. Each shows a marked change in alignment, field size, and nature of field division, with the latest field boundary, Period 6C, being associated with hedges.

Elements of this last-named field system may survive as low earthworks in the plot to the west of the By-pass, where a series of lynchets occur. The survival of these earthworks and evidence from the excavation show the area has remained as farmland, probably with reduced arable cultivation and increased pasture, up to the present day. Low quantities of post-medieval pottery were recovered from the topsoil.

Building *01009* (Fig. 16), cutting the Period 6C field system, is constructed on the same alignment and the field boundary probably still survived as a feature in the landscape. The structure may have been intentionally built in the corner of a plot, fronting St Georges Road. A post-14th century date is suggested on stratigraphic evidence. The structure probably consisted of low stone walls supporting a timber frame. An agricultural function for the building seems likely in the absence of domestic refuse. The building lies on the northern edge of a semi-circular hollow fronting onto St Georges Road (Fig. 11) and the two features may be associated. This hollow may represent erosion within a farmyard fronting St Georges Road and associated with building *01009*.

When abandoned, after an unknown length of time, the walls and floors of the building were robbed of stone and the building remains were sealed below topsoil.

3 Site 3. Flagstones, by Frances Healy

This site, from the Bournemouth to Dorchester railway to Alington Avenue, lies on the crest and upper north-facing slopes of the Chalk ridge to the east of Dorchester (Fig. 17). The importance of the ridge for settlement, ceremony, and burial from the Neolithic to post-Roman periods made it one of the areas of outstanding archaeological potential prior to road construction. Geophysical survey in 1982 identified a possible substantial enclosure on the crest of the ridge (David 1983). Trial excavation in winter 1987 confirmed the existence of a segmented enclosure ditch of probable Neolithic date, and also a field system and Late Iron Age pits and inhumations. In spring 1987 0.54 ha was machine-stripped around Flagstones House prior to its demolition and excavated prior to road construction. Between July 1987 and October 1988 further areas, totalling c. 120 m^2 and including land under the, by-then demolished, Flagstones House, its garage and driveway, and two hand-excavated trenches in the rear garden of Loud's Piece, the house to the north-west, were excavated during road construction. Geophysical survey in 1992 in the gardens of Max Gate House to the east sought to establish the complete plan of the Neolithic enclosure although the results were inconclusive (Payne 1992). The principal recorded features and deposits may be summarised as:

Period 7 Post-medieval finds
Period 6 Medieval field system
Period 4 Roman finds
Period 3 Late Iron Age field system, enclosure, settlement, and burials
Period 1/2 Other possible Neolithic and Bronze Age features, enclosure, and cremation burials
Period 2 Bronze Age central burial, ring-ditch, and pits
Period 1 Early Neolithic pits and Middle Neolithic enclosure
Period 0 Natural features and deposits

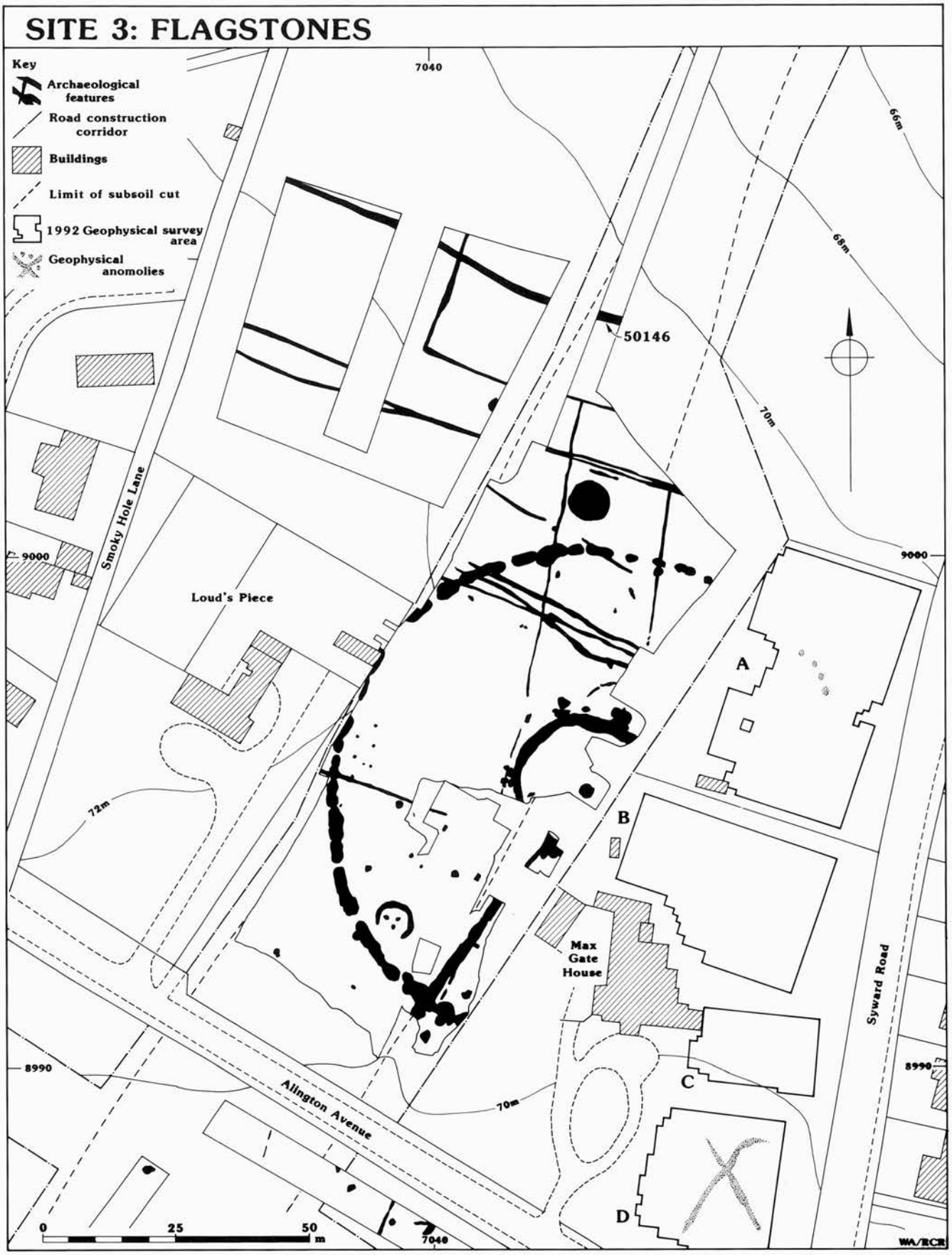


Figure 17 Flagstones: trench location and all archaeological features including those recorded during the initial evaluation and subsequent watching brief. The 1992 geophysical survey in Max Gate House was undertaken by the Ancient Monuments Laboratory (Payne 1992)

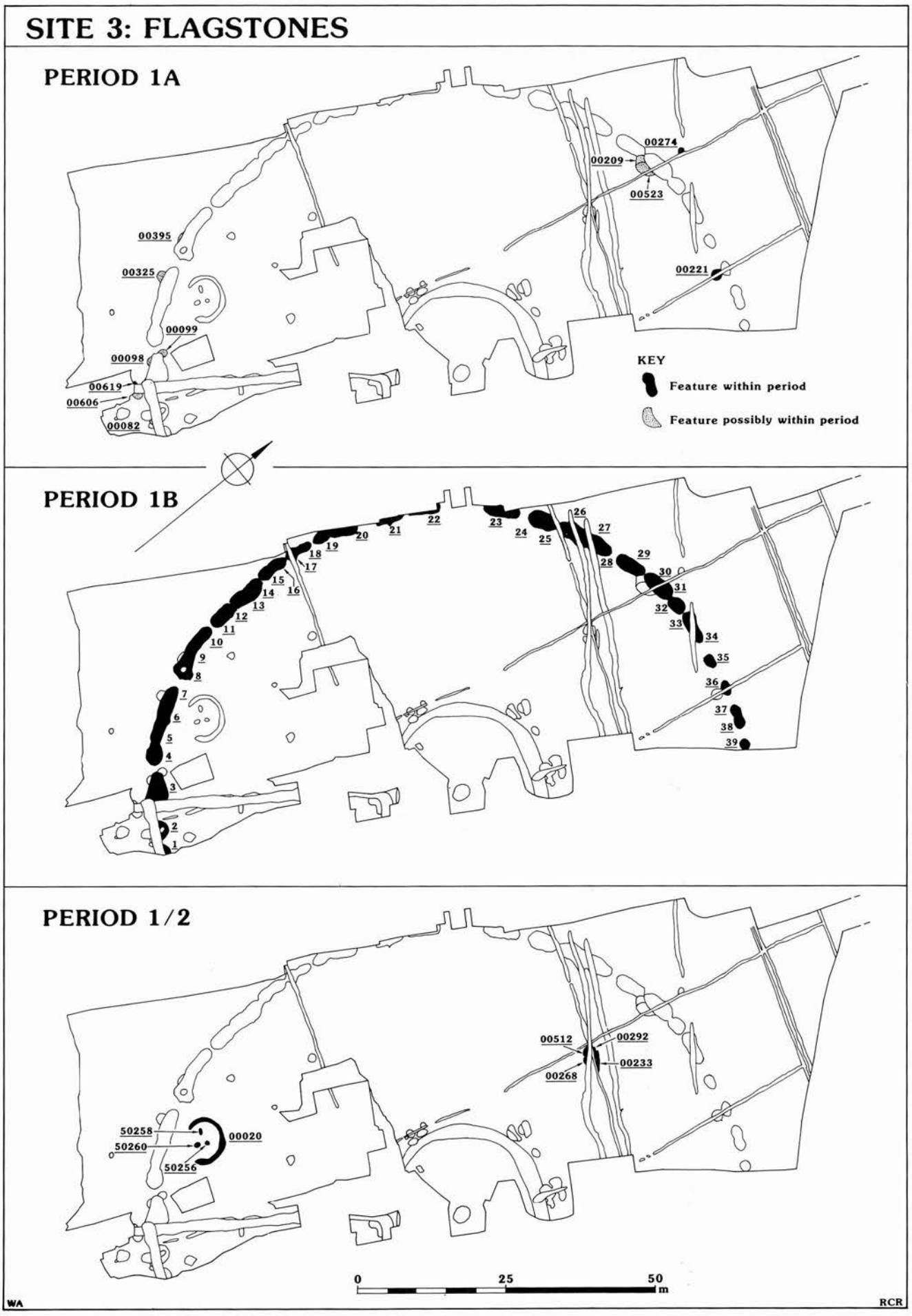


Figure 18 Flagstones: Periods 1A (earlier Neolithic), 1B (Middle Neolithic), and 1/2 (Neolithic/ Bronze Age)

Note: At Flagstones an exceptional amount of intrusive material, ranging from Late Iron Age pottery to grape pips — radiocarbon dated to the 18th–19th centuries AD — was found in what must have been prehistoric contexts on the evidence of other radiocarbon determinations, stratigraphy, and morphology. This material is noted in the descriptions in archive and documented more fully in the relevant artefact reports. Its frequency is largely attributable to the fact that the site was subject to considerable root and animal disturbance: the excavation revealed pits dug for tree planting, probably in the 19th century, and root and animal holes are noted frequently in the records. Later material could have been introduced through the topsoil and into the upper humic fills of prehistoric pits and ditch segments by these agencies, by earthworms, or by the cutting of subsequent features, as in Figure 20, section I. Thereafter, the vacuous chalk rubble primary fills of many of the Neolithic and Bronze Age features would have facilitated its further downward movement. The south-western part of the site, in the area of the central ring-ditch, also suffered disturbance from recent buildings and their foundations.

Period 0. Natural Features and Deposits

The natural Chalk was in places capped by a pale, clayey, weathered horizon up to 35 mm thick. The surface of the solid Chalk was fairly hard, with some erosion along bedding planes, and contained *in situ* flint nodules.

Numerous root-holes were visible in it, as were plough furrows and occasional tree hollows or solution features.

Period 1. Neolithic

1A. Pre-Enclosure

The earliest human activity was represented by a number of pits which pre-dated the enclosure (Fig. 18). The pits contained settlement debris dating to the mid 4th millennium cal. BC. A number of other pits lay close to the line of the enclosure and were apparently close to but earlier than it in date. They may represent the remnants of a stone setting preceding the enclosure.

Pits 00221 and 00274 were both of regular, near-circular plan with steeply sloping sides and flat bottoms. Pit *00221* lay immediately within the enclosure, cut by Late Iron Age gully *00257* and contiguous to segment *36* of the enclosure. The stratigraphic relation between the two was unclear, although the presence of a layer of chalk rubble more than half way up the fill of *00221* at its junction with segment *36* suggests that debris from the digging of the segment was deposited in the already largely silted pit (Fig. 20, section J). It may be relevant that the pit fills seemed disturbed from this level upwards. The pit measured 1.85 x 1.95 m and was 0.5 m deep, with a lower, near-circular area at its northern end, 0.14 m in diameter and 0.80 m deep. The bottom was stained black, perhaps by *in situ* burning, perhaps by contact with the basal fill layer (layer 00259), which was black with charcoal and ash and contained burnt chalk and burnt bone. Subsequent loam and clay fills contained smaller quantities of charcoal. A radiocarbon determination of 4960±80 BP (3850–3660 cal. BC; HAR–9161) was made on charcoal from layer 00259.

Pit *00274* lay 24 m to the north-east, outside the enclosure, cut by a Late Iron Age gully. The pit measured 1.05 x 1.1 m and was 0.35 m deep. There was no sign of primary silt, the entire fill being a uniform, almost stone-free dark brown silty clay loam.

Pottery from both was Neolithic bowl of the south-western style, 28 sherds from pit *00221* (Fig. 64, P14–P16), almost all of them from layer 0259, and 224 sherds from pit *00274* (Fig. 64, P2–P13). Although far fewer than those from pit *00274*, those from pit *00221* are better-preserved, with a mean weight of 14 g, double that of 7 g for the sherds from the larger assemblage. Both pits produced small quantities of Late Iron Age pottery, from layer 00259 in the case of pit *00221*. A total of 73 pieces of struck flint was evenly divided between the two. Both groups reflected more controlled flintworking techniques than the other assemblages from the site and were of more domestic character, distinguished by their relatively high frequency of implements and low frequency of cortical flakes. There was a small quantity of animal bone, the larger, less badly-preserved material coming from layer 00259 of pit *00221*. The few identifiable fragments are of cattle. The secondary clay fill of pit *00221* contained two sarsen fragments, one of them smooth and rounded, measuring 270 x 210 x 130 mm and set close to the south-east edge of the pit. Pit *00274* contained one fragment of calcareous sandstone or arenaceous limestone and two of Portland/Purbeck Limestone.

Features possibly cut by the enclosure were found on the margins of five enclosure segments. They comprised pits *00082* (segment *2*), *00098*, and *00099* (segment *3*), *00325* (segment *7*), *00395*(segment *8*), and *00209* with scoop *00523* (segment *30*). All six pits appeared to have been near-circular and flat-bottomed when complete. Approximate diameters ranged from 1 m to 1.9 m, with depths below the surface of the chalk of 0.25–0.7 m. One, *00209*, lay within a more extensive shallow scoop (Fig. 20, section G). Initial fills were of chalk rubble in four cases; that of pit *00099* appearing continuous with the topmost part of the primary chalk rubble fill of segment *3* (Fig. 21). Subsequent, in one case sole, fills were brown silty clays with varying amounts of chalk, similar to and in three cases, including pit *00099* and pit *00209*, apparently continuous with the secondary soil fills of the enclosure segments (Fig. 20, section G).

Stratigraphic relation to the enclosure was less than certain, partly because of disturbance by later activity, notably in segments *2* and *3*, more generally because the pits were much shallower than the enclosure segments. As a result, if the segments had been cut through the pits, the pit fills would have eroded back from the cut edges into the segments before the segment fills had accumulated to the same level, obscuring clear division between the two. There may have been some evidence for this in segment *7*, where, beneath the intersection with pit *00325*, the chalk rubble primary fill of the segment gave way to small, loose chalk fragments with powder. Alternatively, if the pits were cut into the edges of as yet only partly backfilled segments, the two would have silted-up together. The balance of probability is that, whatever the sequence, a relatively short interval separated the cutting of pits and segments. Pit *00082* on the edge of segment *2*, was cut by Late Iron Age features, as was the scoop within which lay pit *00209* (Fig. 18).

The few finds comprise antler fragments from the initial fill and a small Late Iron Age sherd, struck flint and a fragment of calcareous sandstone or arenaceous limestone from the upper fill of pit *00325* and struck flint and antler fragments from the upper fill of pit *00209*.

Two further pits, *00606* and *00619*, immediately to the south-west of the causeway between segments *2* and *3* (Fig. 18), were of similar size, shape and chalk rubble fill to those apparently cut by the enclosure. *00619* was cut by Late Iron Age features. They produced no finds.

1B. The Enclosure

A circular enclosure (Figs 18 and 22) consisting of a single circuit of unevenly spaced pits was constructed in

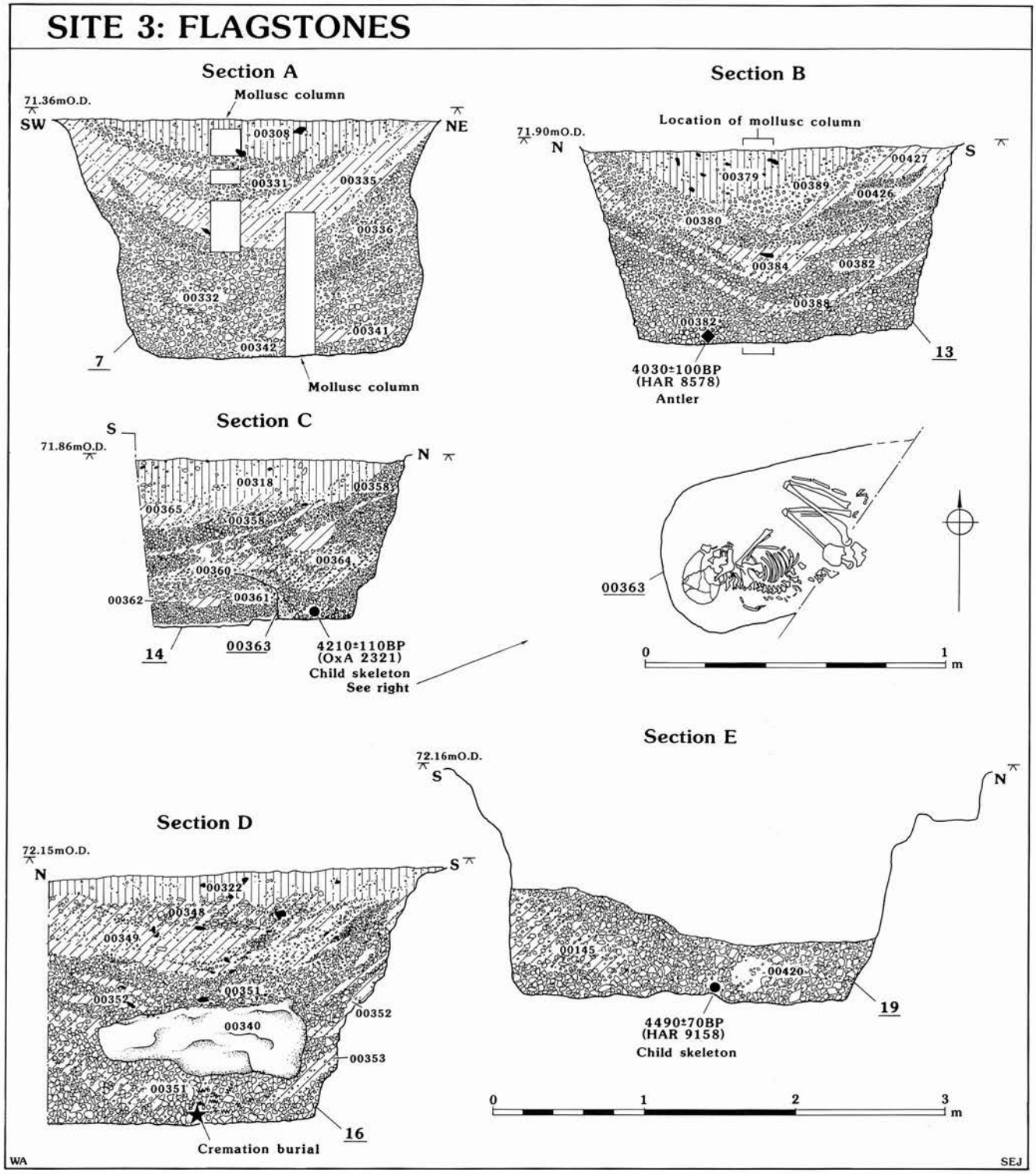


Figure 19 Flagstones: sections through enclosure ditch segments 7, 13, 14, 16, and 19, with detail of burial cut into the primary fill of segment 14. The section through segment 19 was drawn after the removal of the stone slab shown in Figure 27

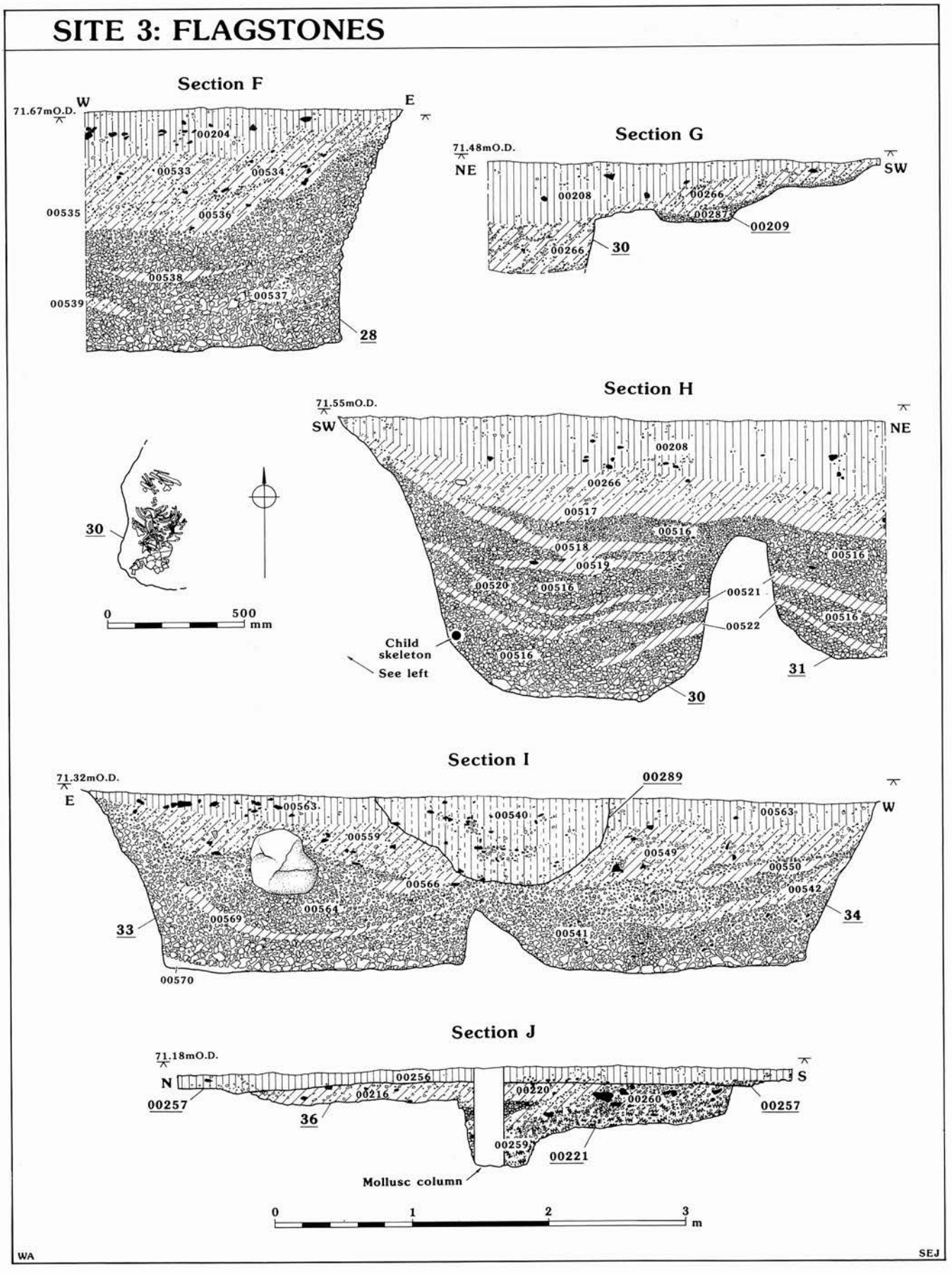


Figure 20 Flagstones: sections through enclosure ditch segments 28, 30 (with pit 00209), 31, 33 (with gully 00540), and 36 (with pit 00221 and gully 00257), with detail of burial in segment 30

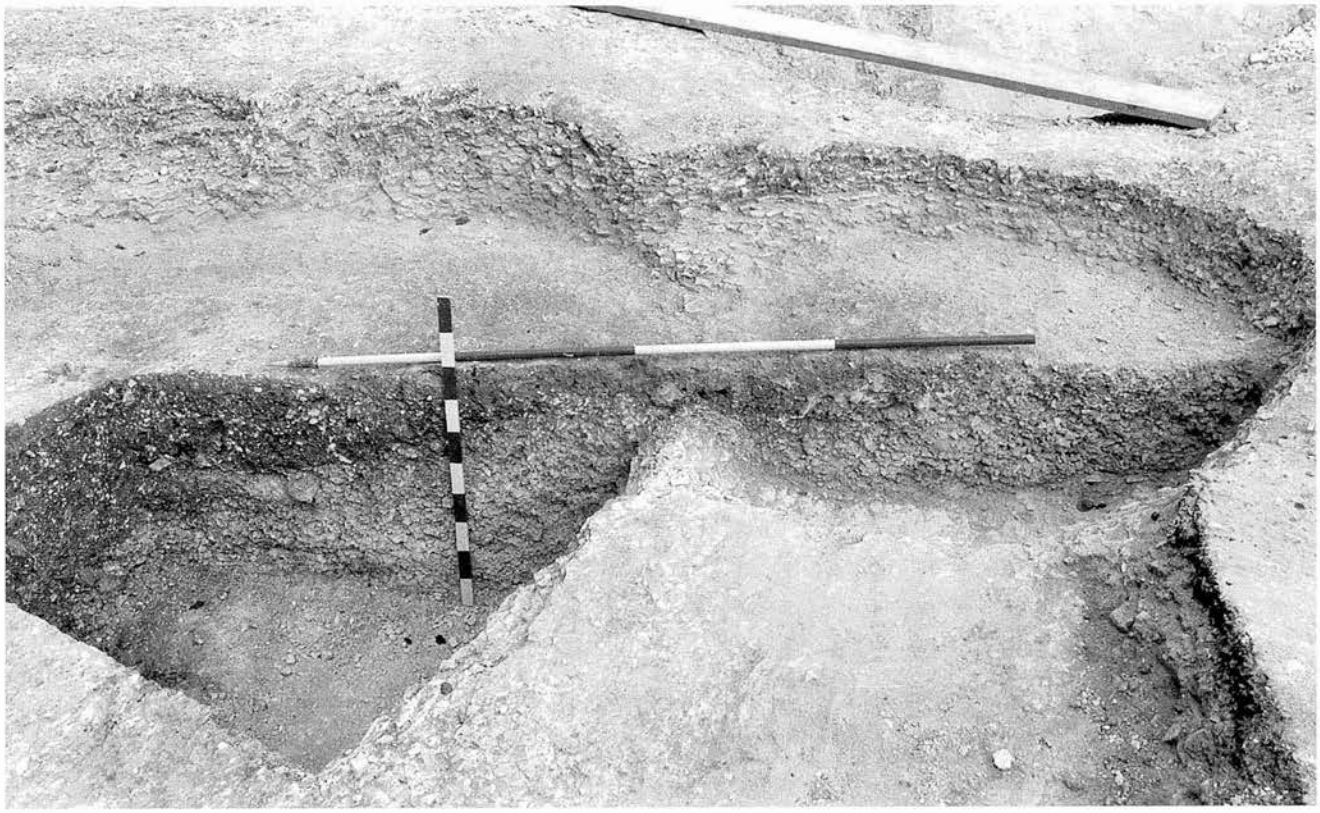


Figure 21 Flagstones: enclosure ditch segment 3 and pit 00099 under excavation, looking west

the late 4th millennium cal. BC. The monument was one in which child inhumations and an adult cremation burial were placed and on the walls of which designs were carved. The pits of the enclosure filled with chalk rubble soon after its construction. A soil formed over the rubble fills and the final infilling of the pits was gradual.

The excavated area included slightly more than half of an enclosure defined by a single, discontinuous circuit of ovoid pits, some of them intercutting. Individual segments, numbered clockwise from south-west to north-east, are described in detail, including burials, in archive (see Fig. 18).

Form

The enclosure was circular and *c.* 100 m in diameter. The segments were unevenly spaced, with intercutting prevalent in the north and west of the circuit and causeways generally 0.5–2.5 m wide elsewhere. There were two particularly wide gaps, one of 3 m between segments *35* and *36* and, apparently, another of 7.40 m between segments *22* and *23*. Neither of these was excavated, since they remained beneath a wall, and outside the road construction corridor, during the excavation and were planned during the subsequent watching brief. It is possible, although unlikely given the area eventually exposed (Fig. 22), that a further segment was present here but not observed. The excavated segments were 1.3–3 m wide, 2–5.75 m long, and generally 0.75–1.4 m deep below the stripped surface. Segments *35* and *36*, separated by an exceptionally wide causeway, were also exceptionally shallow, 0.58 m and 0.24 m respectively. These two segments were also distinguished by their profiles, both having gently sloping sides merging into their bases (Fig. 20, section J), while the other segments had steep, almost vertical sides and flat bottoms, except for slight stepping along the bedding planes of the chalk (Figs 19 and 20, sections A–F, I, H).

Engravings

The lower parts of the Chalk sides of the segments were fresh and unweathered, occasionally retaining the marks of the antler picks with which they had been excavated, some of which were found on the ditch bottom. In segments *4*, *13*, *28*, and *34*, shallow engravings had been carved on the ditch walls where cleavage between bedding planes had produced flat, near-vertical surfaces, (Figs 23–5). The engravings were on the external walls of segments *4*, *13*, and *34* and on a terminal of segment *28* (Fig. 22).

Towards the end of the excavation the engravings were cut from the Chalk in single blocks and removed from the site. Since then they have remained boxed awaiting long-term conservation and have not been available for further study. An account of them was written soon afterwards (Woodward 1988). The description which follows is based on this, as well as on photographs, written records, 1:1 drawings, and, in the case of engravings B–D, plaster casts.

All four engravings were on the lower parts of the ditch walls, extending to at most 500 mm above the ditch bottom. A, B, and C had been truncated by the weathering of the ditch sides, A slightly, the other two to an unknown extent (Fig. 23). A was the largest, surviving to 460 x 305 mm. D, apparently complete, was the smallest, measuring 112 x 212 mm and occupying only a little of the flat surface on which it would have been possible to engrave.

Antler pick marks were recorded in the faces occupied by D. The engravings themselves were probably cut with flint. The thin lines of B and D, up to 2 mm wide and 1 mm deep, can readily be reproduced on chalk with the edge of a thin, sharp flint flake. The wider, U-sectioned lines of A and C, up to 4 mm wide and 3 mm deep, may be reproduced equally easily by

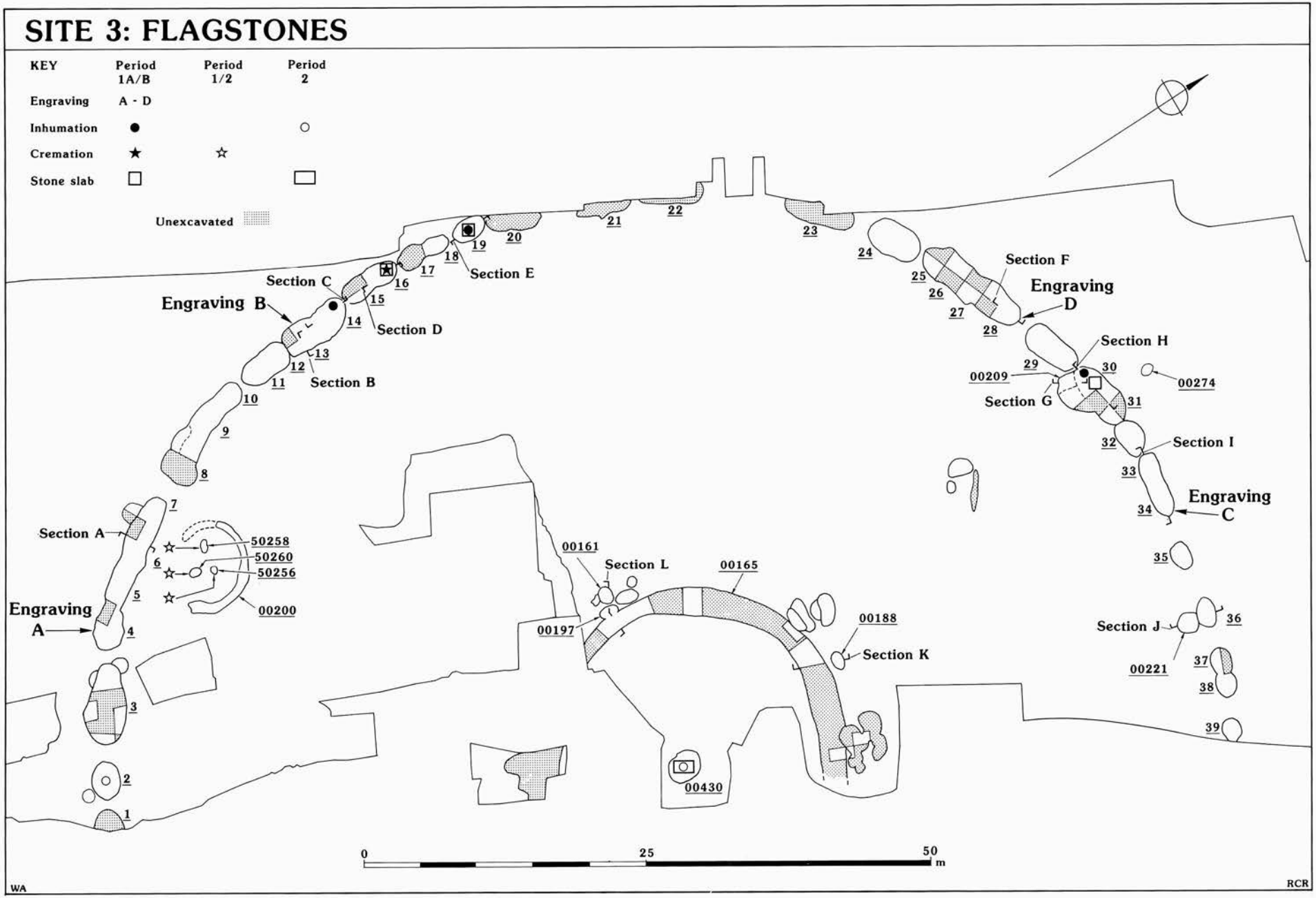


Figure 22 Flagstones: Neolithic and Bronze Age features, showing location of burials, stone slabs, and engravings, together with extent of excavation and location of published section drawings

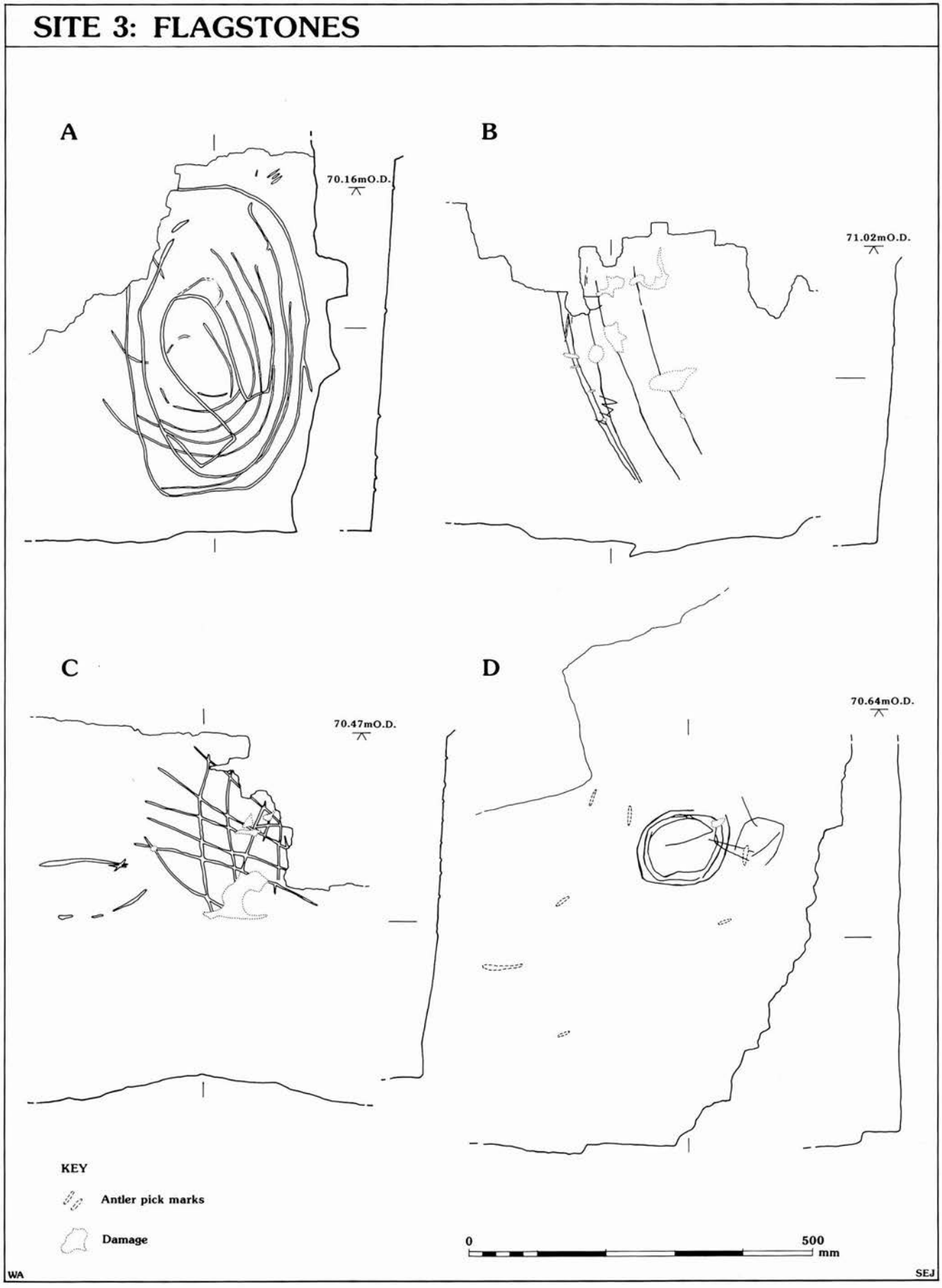


Figure 23 Flagstones: engravings on the walls of enclosure ditch segments 4, 13, 34, and 28. See Figure 22 for location

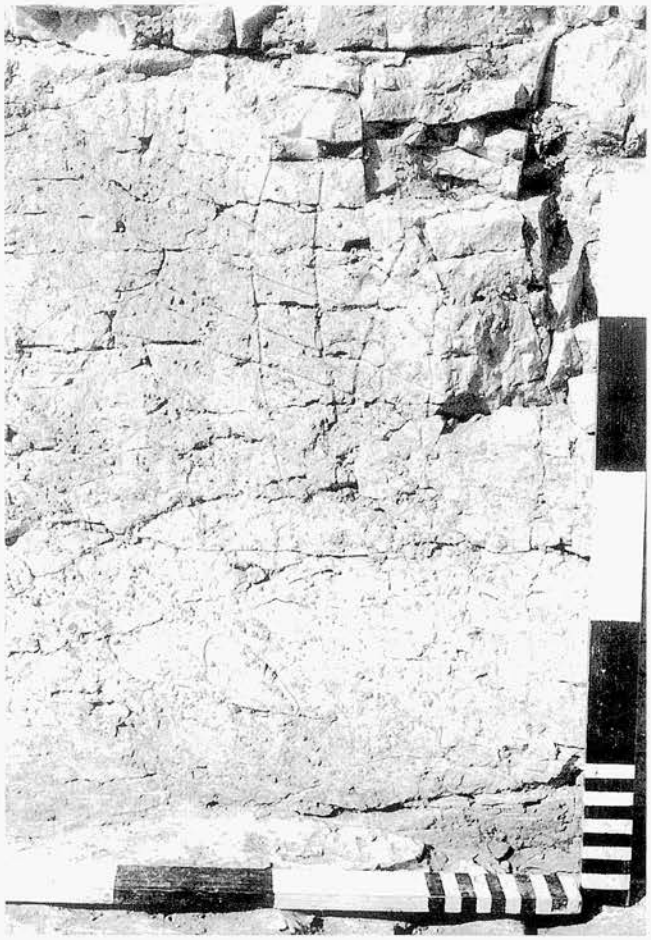


Figure 24 Flagstones: enclosure segment 34, engraving C, looking north-east

Figure 25 Flagstones: enclosure ditch segment 4, engraving A, looking south

Figure 26 Flagstones: enclosure ditch segment 16, sarsen in position 200 mm above the ditch bottom

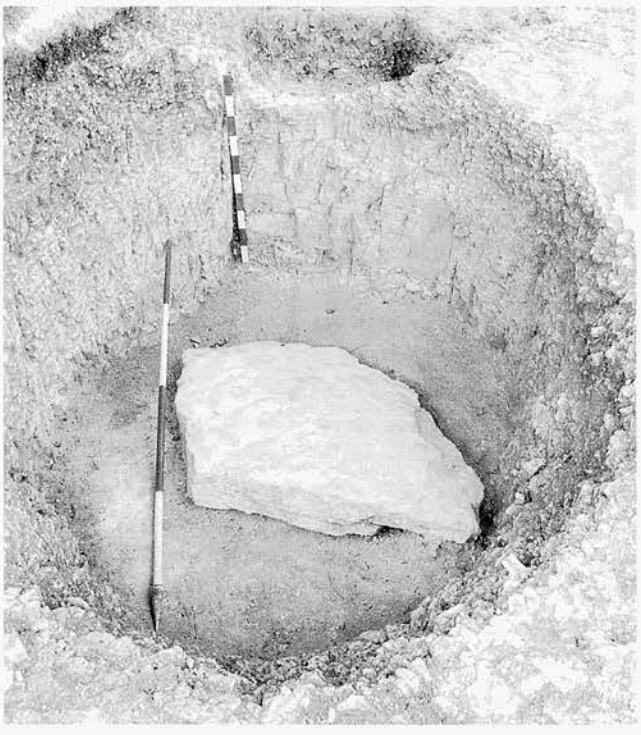


Figure 27 Flagstones: enclosure ditch segment 19, slab of calcareous sandstone in position 300 mm above ditch bottom

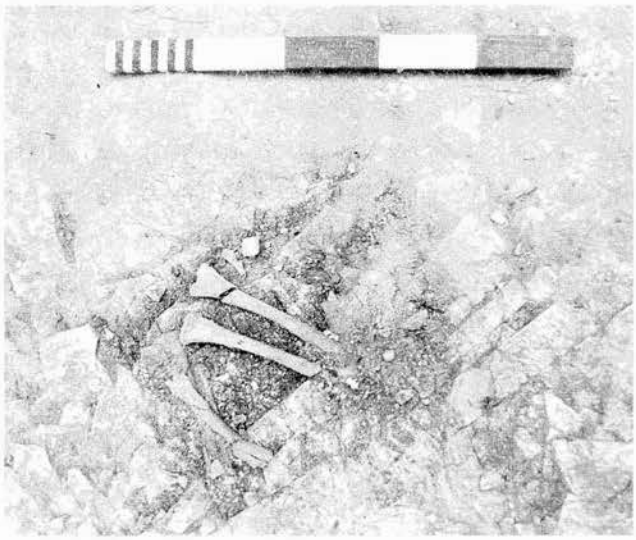


Figure 28 Flagstones: enclosure ditch segment 19, skeleton of a 2–3 year old child on base of ditch, after removal of calcareous sandstone slab and basal 300 mm of fill

using a thicker flake. The V-shaped section of the first cut becomes U-shaped as the flake is drawn through again. The difficulties of carving curves with a straight edge are seen in the fairly abrupt changes of direction which mark the curvilinear motifs of A and D. A was carved in two stages, the relatively thin concentric arcs of the underlying design being cut by the heavier lines of the more complex overlying one.

Primary burials

Primary burials were placed on the base of the ditch in segments *16*, *19*, and *30*, none coinciding with engravings (Fig. 22). All the inhumations were, like the animal bone from the enclosure, fragmented and abraded (Rogers). In segment *16*, the cremated remains of an adult were heaped on the base of the ditch, some 200 mm below a large sarsen slab (Fig. 26; Fig. 19, section D). On the bottom of segment *19* the skeleton of a 2–3 year old child was found as a 'jumble of bones' some 300 mm beneath a large slab of calcareous sandstone (Figs 27 and 28; Fig. 19, section E). In the west terminal of segment *30* the crushed, contracted skeleton of a 6–12 month-old child was found against the junction of pit base and pit side (Fig. 29; Fig. 20, section H). Part of the left femur of a 3–5 year-old forms part of the same collection of bones. Unlike the other burials, this was not directly under a slab. A sarsen fragment measuring 610 x 250 x 110 mm was, however, found 1 m away. All were without associated objects.

The sarsen slab from segment *16* now stands in the grounds of Loud's Piece, the house to the north-west. The calcareous sandstone slab from segment *19* was broken up to permit the continued excavation of the segment. A fragment of it remains in the collection of finds from the site.

Dating

Radiocarbon determinations relating to the excavation of the ditch are listed in Table 1.

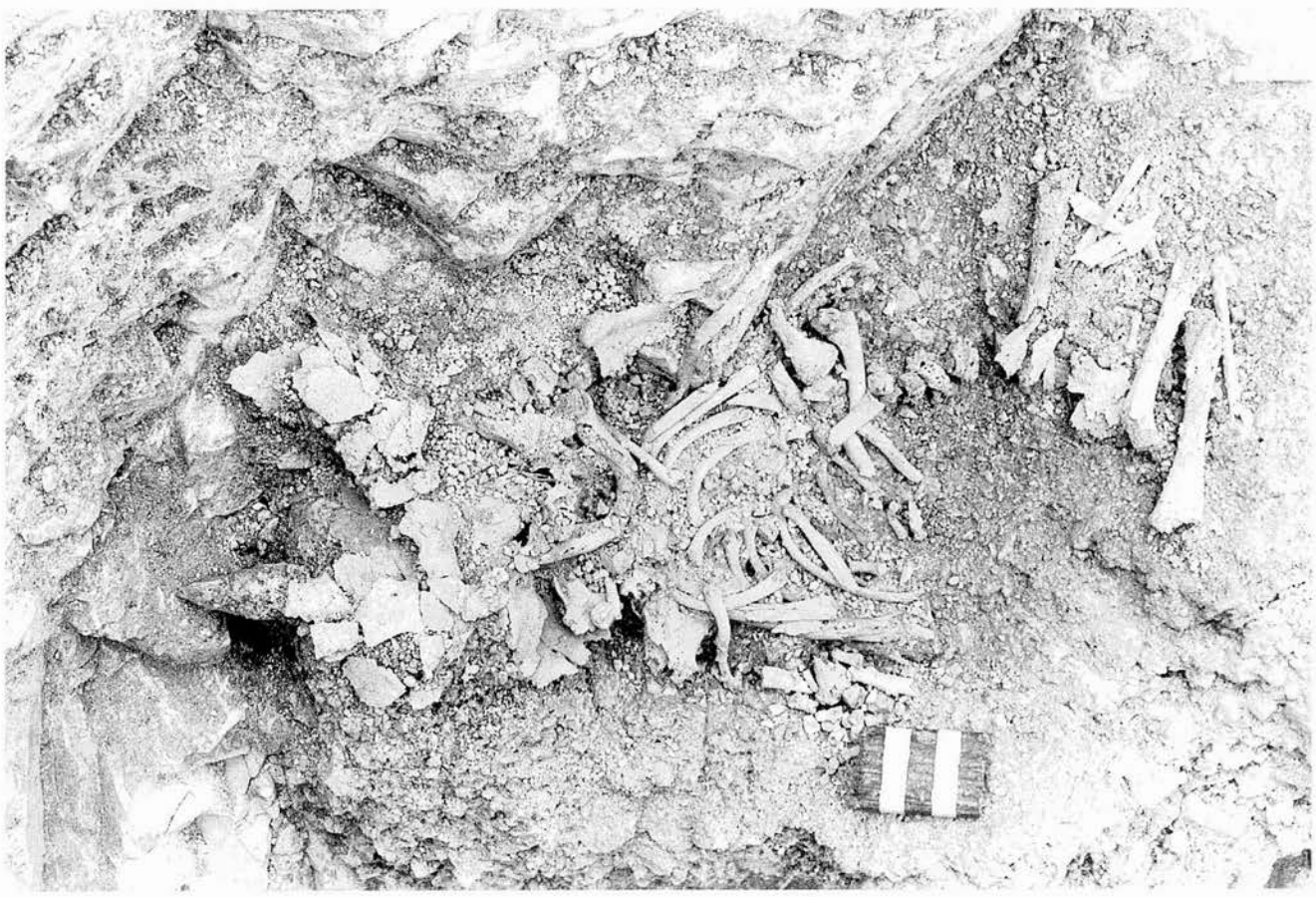


Figure 29 Flagstones: enclosure ditch segment 30, skeleton of an infant at the junction of the ditch base and side

Table 1 Flagstones: radiocarbon determinations

Lab. No.	*Sample*	*Context*	*Determination (BP)*	*Calibrated date at 2 sigma*
HAR–9161	oak charcoal	One of basal fills of pit *00221*, assoc. with SW style Neolithic bowl pottery	4960±80	3970–3540 cal. BC
HAR–9158	human bone	Child burial beneath stone slab at base of segment *19* of enclosure ditch *00399*	4490±70	3490–2930 cal. BC
OxA–2322	red deer antler	Base of segment *27* of enclosure ditch *00399*	4450±90	3380–2910 cal. BC
OxA–2321	human r. femur	Child burial on base of pit *00363*, cut into bottom *c.* 700 mm of fill of segment *14* of enclosure ditch *00399*	4210±110	3095–2500 cal. BC
HAR–8578	red deer antler	Base of segment *13* of enclosure ditch *00399*	4030±100	2890–2290 cal. BC
HAR–9159	human bone	Burial beneath stone slab in central pit *00430*	3560±70	2130–1710 cal. BC
OxA–2380	grape pip	Stabilisation horizon above initial chalk rubble fill in segment *32* of enclosure ditch *00399*	205±60	cal. AD 1520–1960
OxA–2381	grape pip	Soil fill of segment *38* of enclosure ditch *00399*	160±60	cal. AD 1640–1950

Infilling of the segments

Initial, perhaps rain-washed, silt was recorded only in segments *14* (Fig. 19, section C), *25*, *29*, and *33*, nowhere more than 10 mm thick. Otherwise, the first metre or so of the segment fills consisted mainly of chalk rubble, often vacuous and derived in approximately equal quantities from the interior and exterior. This material varied in size and consistency, with large, angular fragments often concentrated at the base, giving way higher up to smaller, more weathered material with zones of cementing and peagrit. Within it were thin, localised humic patches, almost certainly originally turves, and more extensive humic horizons up to 300 mm thick, both of clayey texture.

These deposits lay against the engravings, overlay the primary burials and incorporated the slabs which covered them (Figs 19 and 20, sections D, E, H), and were continuous over the lower of the ridges between intercutting segments (Fig. 20, section H). In segment *14*, after about 700 mm of these fills had accumulated, pit *00363* was cut through them down to the base of the segment, and the body of a 10–12 year old child placed in it (Fig. 19, section C). A radiocarbon determination of 4210±110 BP (2910–2610 cal. BC; OxA–2321) was made on the skeleton. A thick humic layer developed over the pit and the fill into which it had been cut and further chalk and humic fills accumulated above it.

Segments *35* and *36* had no chalk rubble fill, their fills instead corresponding to the secondary silts of the others, which are described below (Fig. 20, section J).

Finds from the chalk rubble fill of the enclosure were relatively few. Prehistoric pottery was confined to ten sherds of Neolithic bowl (including Figure 64, 17). The largest sherds were concentrated in segments *28* and *30*, close to pits *00221* and *00274* and perhaps derived from the earlier phase of activity which they represent. The 147 pieces of struck flint, are, unlike the pottery, of later Neolithic character and were concentrated on the other side of the enclosure, in segments *4*, *10*, *11*, and *16*, with a second, slighter concentration in segments *24*, *29*, *38*, and *39* (Table 78, *below*). The assemblage has a more industrial aspect than that from pits *00221* and *00274*.

A chalk ball (Fig. 77, 9) was found on the base of segment *29*. In addition to the sarsen and sandstone slabs found over or near burials, an irregular sarsen fragment with a maximum dimension of over 500 mm was found towards the top of the chalk rubble fill of segment *33* (Fig. 20, section I), and smaller fragments of sarsen, limestone, and sandstone were widespread in the primary fills, most with fresh breaks and a few with signs of burning.

The right femur of an adult of undetermined sex, in addition to the burials mentioned above, was recovered from the chalk rubble fills of segment 7. The small quantity of animal bone is dominated by red deer antler, some probably from further picks, and includes cattle and dog or wolf.

Relatively recent objects found in the chalk rubble fills include over 20 sherds, most of them small and abraded, of Late Iron Age, medieval, and post-medieval pottery, six fragments of brick or tile, and four iron nails.

Stabilisation

The sequence of primary fills ended with the formation of a humic horizon up to 280 mm thick, visible in most segments, which seemed to represent the formation of a stable soil over the earlier deposits. This was of dark brown silty clay with varying amounts of small, weathered chalk (Figs 19 and 20, sections A–D, F, H). The few finds from this horizon include six sherds of Neolithic bowl pottery, one sherd of Late Iron Age/Romano-British pottery, 19 pieces of struck flint, a small quantity of animal bone, and a grape pip from segment *38* on which a radiocarbon determination of 205±60 BP (cal AD 1640–1950; OxA–2380) was made.

Soil fills

Once a stable horizon had formed over the chalk rubble fills of the enclosure segments, the still-exposed upper parts of their sides weathered back to a smooth slope and up to 0.55 m of silty clay with abundant weathered chalk fragments accumulated within the segments (Figs 19 and 20, sections A–D, F–I). These fills contained a flint industry more abundant than that of the primary fills, concentrated unlike it in segments *29–33*, and technologically distinct from it, relating more closely to the Bronze Age industry from the central ring-ditch. The most frequent pottery in these deposits remained Neolithic bowl, in the form of seventeen small, abraded body sherds concentrated, as in the primary fills, in the north-eastern

segments. A larger sherd of gabbroic ware came from segment *14* in the south-west.

There are also seven sherds of Late Iron Age pottery and four of medieval. Other finds include four small fragments of ceramic building material, fired clay, slag, small amounts of stone, and a beach pebble probably used as a rubber (*below*, Cat no. 18). Twenty-three fragments of animal bone include four cattle bones, a horse vertebra, a red deer tooth, and three red deer antler fragments. Fragments of human bone were found in segment *28*. In segment *32* there was another grape pip on which a radiocarbon determination of 160±60 BP (cal. AD 1660–1950; OxA–2381) was made. A further example from segment *33* is likely to be equally recent.

The crouched inhumation of an adult male, the upper part of the body subsequently cut off by a Late Iron Age feature, was placed on top of these deposits in segment *2*.

Covering this burial and forming the uppermost fill of the almost all the segments, was up to 0.6 m of brown silty clay loam, with occasional small, abraded fragments of chalk and a little flint, both less frequent than in the underlying fills (Figs 19 and 20, sections A–D, F–I). These deposits were cut by Late Iron Age features. They were more prolific of finds than any of the earlier ditch fills, producing 1547 pieces of struck flint, predominantly of Bronze Age character. Pottery from them includes 42 sherds of Neolithic bowl (Fig. 64, P18–22) concentrated in the north-west of the circuit, one Bronze Age sherd, 167 Late Iron Age sherds including Figure 70, 1, concentrated in the segments close to and cut by contemporaneous features in the south of the excavated area and 27 medieval and post-medieval sherds.

Other finds include fragments of brick or tile, fired clay, a fragment of unworked shale waste (Table 20), a fragment of copper alloy sheet (Cat. no. 4), and a coin of Constantine II (Cat. no. 4). Fragments of human bone were found in segments *2*, *3*, and *25*. Those from segments *2* and *3* probably belong to the individual buried at the interface of the secondary and tertiary deposits in segment *2*. Those from segment *25* probably belong to the same individual as the disarticulated fragments found in the secondary fills in segment *28*. The identifiable fragments among the 127 pieces of animal bone are principally of cattle.

Period 2. Bronze Age

A grave was cut in the centre of the enclosure in the early 2nd millennium cal. BC. The grave was sealed below a mound constructed of chalk quarried from a surrounding ditch. The barrow was subsequently remodelled with the addition of material from groups of pits around its circumference (Fig. 30).

Central burial and ring-ditch

Grave *00430* lay at the centre of the enclosure. It was ovoid and measured 3 x 2.6 m with a ledge 0.6 m wide and 0.2 m deep on the south and a steep-sided, near-circular pit 0.9 m deep to the north. On the base of the pit was the badly-preserved skeleton of a young, adult male, perhaps originally crouched. Above the base of the pit, a maximum of 0.2 m of clayey primary silts with small chalk fragments at the sides of the pit gave way to chalk rubble and to a loose, root-disturbed chalky silt which actually covered the skeleton.

Some 0.25 m above the base of the pit a large, irregular, unworked sarsen measuring approximately 1.8 x 1.4 x 0.65 m had been placed over the skeleton (Fig. 31). The underlying fills were particularly compacted at the north side of the pit, suggesting that the sarsen had been rolled or levered in from this direction. Successive chalk rubble fills butted against the sarsen and partly overlay it, giving way to upper fills of loose brown silt loam with small chalk fragments. Root disturbance was apparent throughout and may have been responsible for the dispersal of human bone fragments through the grave.

A radiocarbon determination of 3560±70 BP (2010–1830 cal. BC; HAR–9159) was made on the skeleton. Further fragments of human bone, probably from the same individual, were found in the pit fill. A copper alloy rivet (Fig. 74, 1) was found during the sieving of a sample from the layer overlying the skeleton.

The upper, soil fills contained a medieval or post-medieval copper alloy lace tag, and an unidentified iron object, possibly of Romano-British date (Fig. 74, 7). Pottery consisted of three sherds of Neolithic bowl, one of Late Iron Age pottery and four post-medieval sherds. There were also four fragments of ceramic building material, and an oblique arrowhead of Portland chert (Fig. 78, 9). Sixty-six pieces of struck flint from the feature as a whole exhibit a technology comparable with that of Bronze Age industries and include a high proportion of cortical debitage. Animal bone from the pit consists of only 16 fragments, including cattle, pig, and ovicaprid.

Ring-ditch *00165* was continuous, surrounding the grave and concentric with it. It was *c.* 28 m in external diameter and up to 0.75 m deep below the surface of the Chalk, with unweathered, near-vertical sides joining the flat base at a sharp angle (Fig. 32, sections K–L). There were localised patches of fine silt some 20 mm thick on the base of the ditch (Fig. 32, section L). The initial fills were otherwise of chalk rubble with occasional flint nodules, sometimes vacuous near the bottom, becoming more compact and occasionally cemented towards the top. Material seemed to have entered the ditch in roughly equal quantities from exterior and interior, with darker, loamier lenses more often deriving from the exterior. The Chalk of the interior survived as a raised area, up to 160 mm higher than the Chalk outside the ditch, its surface weathered and disintegrating (Fig. 32, section K). The subsequent ditch fills consisted of silty loam with small chalk fragments.

There were 27 pieces of struck flint from the primary ditch silts, and canid skull fragments from the central excavated sector may be of wolf. The secondary silts produced ten sherds in grog-tempered Bronze Age fabrics (including Fig. 64, P24–P25), and one Late Iron Age sherd, three fragments of burnt flint, nine fragments of animal bone, and 1675 pieces of struck flint of Bronze Age technology, including a high proportion of cortical debitage and a large number and range of implements (eg. Fig. 78, 13–18).

Pits peripheral to the ring-ditch

Four clusters of intersecting pits were spaced around the outer edge of the central ring-ditch, to the south-west, west, north, and north-east. They ranged from sub-circular to ovoid in plan, were of bowl-shaped profile and up to 2 m in maximum dimension and 0.75 m deep. Two pits of the west cluster cut the chalk rubble fills of the ring-ditch, the upper silty loam fills of all three features being indistinguishable (Fig. 32, section L, *00197*). Elsewhere the relationship was unclear. Pits of the north and north-east clusters were cut by Late Iron Age gullies. The south-west cluster was observed following the demolition of Flagstones House, after the main excavation had ended, and could not be excavated; it appeared to be cut by a Late Iron Age ditch. A single pit, *00188*, lay close to the ring-ditch between the north and north-east clusters.

Primary silt was recorded only in one pit in the north cluster. The initial fills were otherwise of angular chalk rubble, sometimes cemented. The secondary fills were, like those of the ring-ditch, of silty loam with small chalk fragments, those of intersecting pits often indistinguishable from each other.

Struck flint was present in the initial fills of all three excavated clusters, but concentrated in the north one, which produced 384 pieces of Bronze Age technology and in fresh

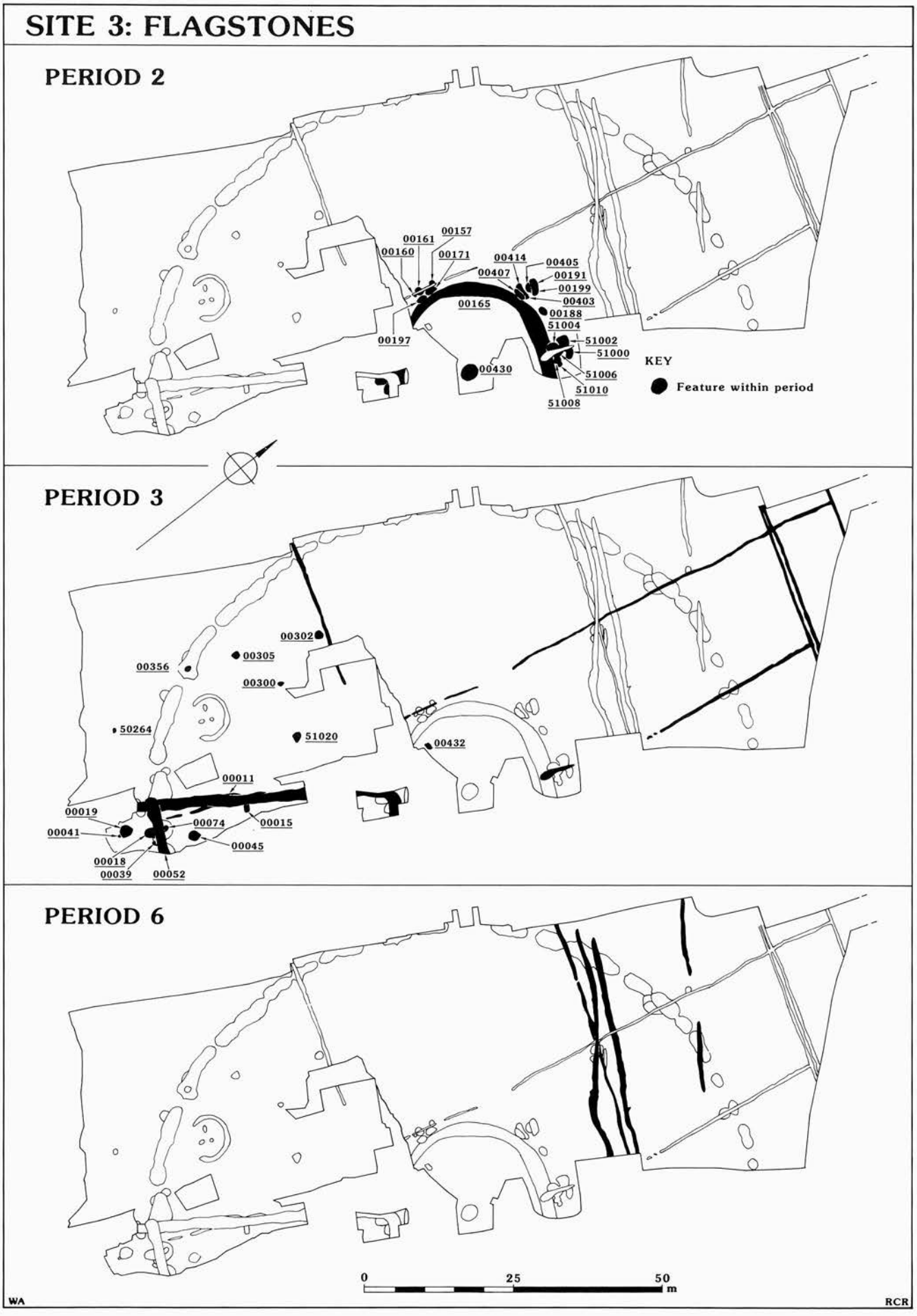


Figure 30 Flagstones: Periods 2 (Bronze Age), 3 (Late Iron Age), and 6 (medieval)

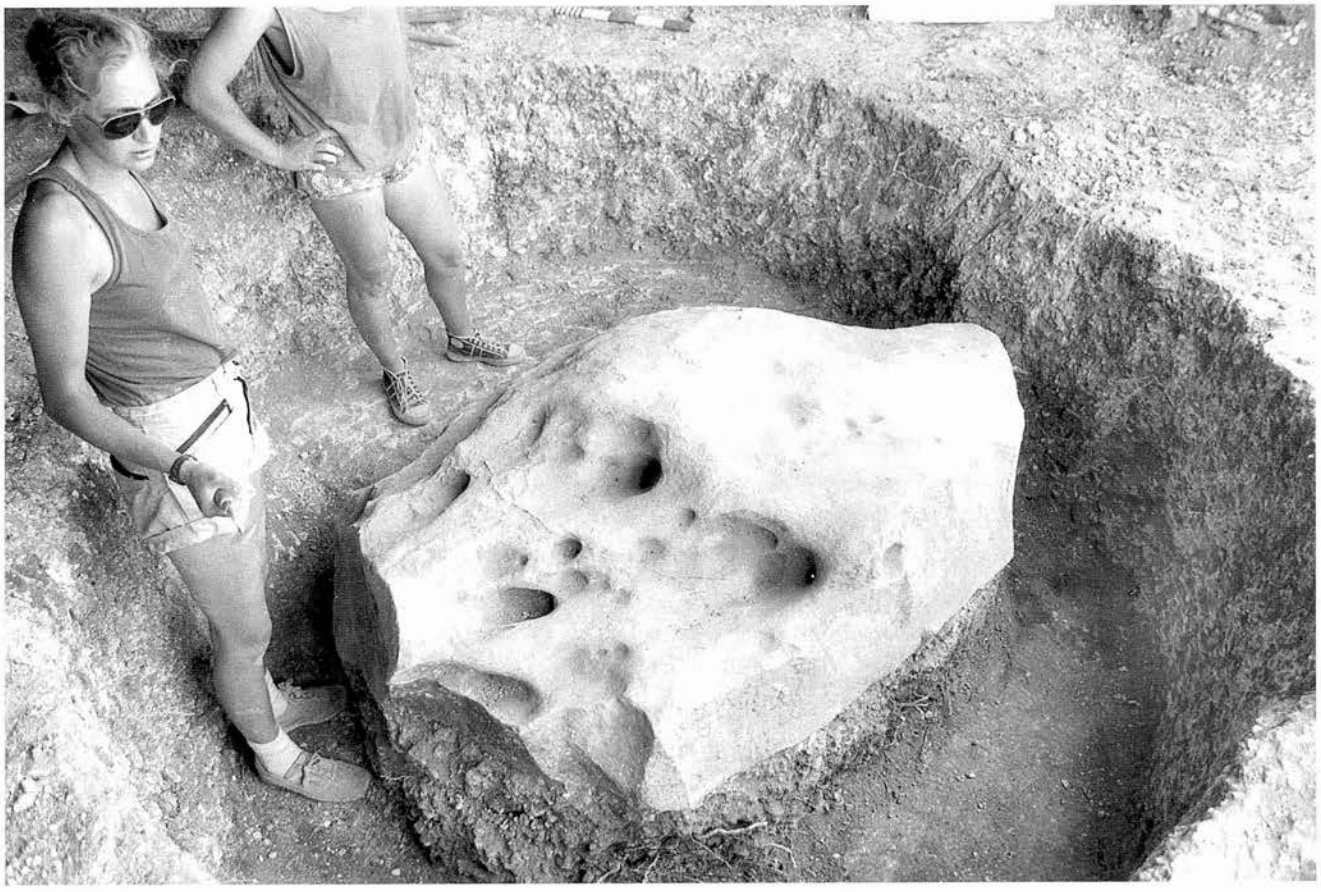


Figure 31 Flagstones: sarsen in position in central grave 00430

condition, probably the waste of a local knapping episode. Within the same cluster, three sherds of pottery in grogged Bronze Age fabrics were found among nodules and struck flint in pit *00191*, and two small Late Iron Age sherds and one medieval one were found in pit *00407*.

The upper fills of the pits again contained struck flint in all clusters, especially the north one, the material being comparable with that from the upper fills of the ring-ditch. Three further Bronze Age sherds (including Fig. 64, P23) were recovered from the north cluster, while the west cluster produced two sherds of Late Iron Age pottery and a fragment of glazed floor tile and the north-east cluster two small sherds of Late Iron Age pottery.

The ring-ditch, the outer edge of the interior, and the peripheral pits were capped by up to 0.45 m of brown silty loam with occasional chalk flecks and flints which immediately underlay the topsoil (Fig. 32, section K). Finds from it include one sherd of Neolithic bowl and seventeen of Late Iron Age pottery as well as 539 pieces of struck flint predominantly of Bronze Age character and a fragment of slag.

Period 1/2. Other Probably Neolithic or Bronze Age Features

Within the western part of the enclosure, three pits lay within the area defined by a shallow crescentic gully, which survived to a maximum of 1 m wide and 0.28 m deep (Fig. 18). Its deeper, central part was flat-bottomed and steep-sided, becoming more rounded towards its shallower ends, the south-western one of which seemed to continue as a soilmark on the surface of the Chalk. The fill was silty clay loam with small chalk fragments, becoming more frequent towards the base. It contained ten pieces of struck flint including a serrated blade, a sherd of Roman pottery, a folded fragment of copper alloy sheet (Cat. no. 3), and a fragment of animal bone. The pits were of 1.4–0.5 m maximum dimension and 0.2–0.1 m deep. All were filled with silty clay loam containing cremated bone and small, weathered fragments of chalk. One pit, *00260*, may have been recut. A single adult was represented in each (*below and archive*). The small quantity of bone from pit *00256*, which survived to only 0.1 m deep in the Chalk, may have resulted from subsequent truncation of the pit rather than from originally incomplete deposition. There were no other finds.

To the north, also within the enclosure, a group of three shallow, intersecting pits (*00233*, *00268*, *00292*, *00512*), comparable with those peripheral to the central ring-ditch was cut by medieval field boundaries. All had similar initial fills of small chalk fragments in a silty clay matrix, succeeded in the largest pit by a less chalky upper fill. Finds are confined to four flint flakes and a core with four fragments of animal bone, including two of horse.

Further isolated features without diagnostic finds within the enclosure may have been of Neolithic or Bronze Age date. During the initial trial excavations, ditch *50146* was found to run north-west–south-east, some 50 m north of the enclosure (Fig. 17). It was 1.75 m wide and 0.4 m deep, and appeared to have been recut two or possibly three times, the initial chalk rubble fills of each cut being succeeded by loamier silts. There were no finds in the 5 m length which was excavated. Observations made to the north-west during topsoil stripping while the By-pass was being built indicate that it was cut by the continuation of an excavated Late Iron Age gully and ran for at least a further 65 m (Fig. 17).

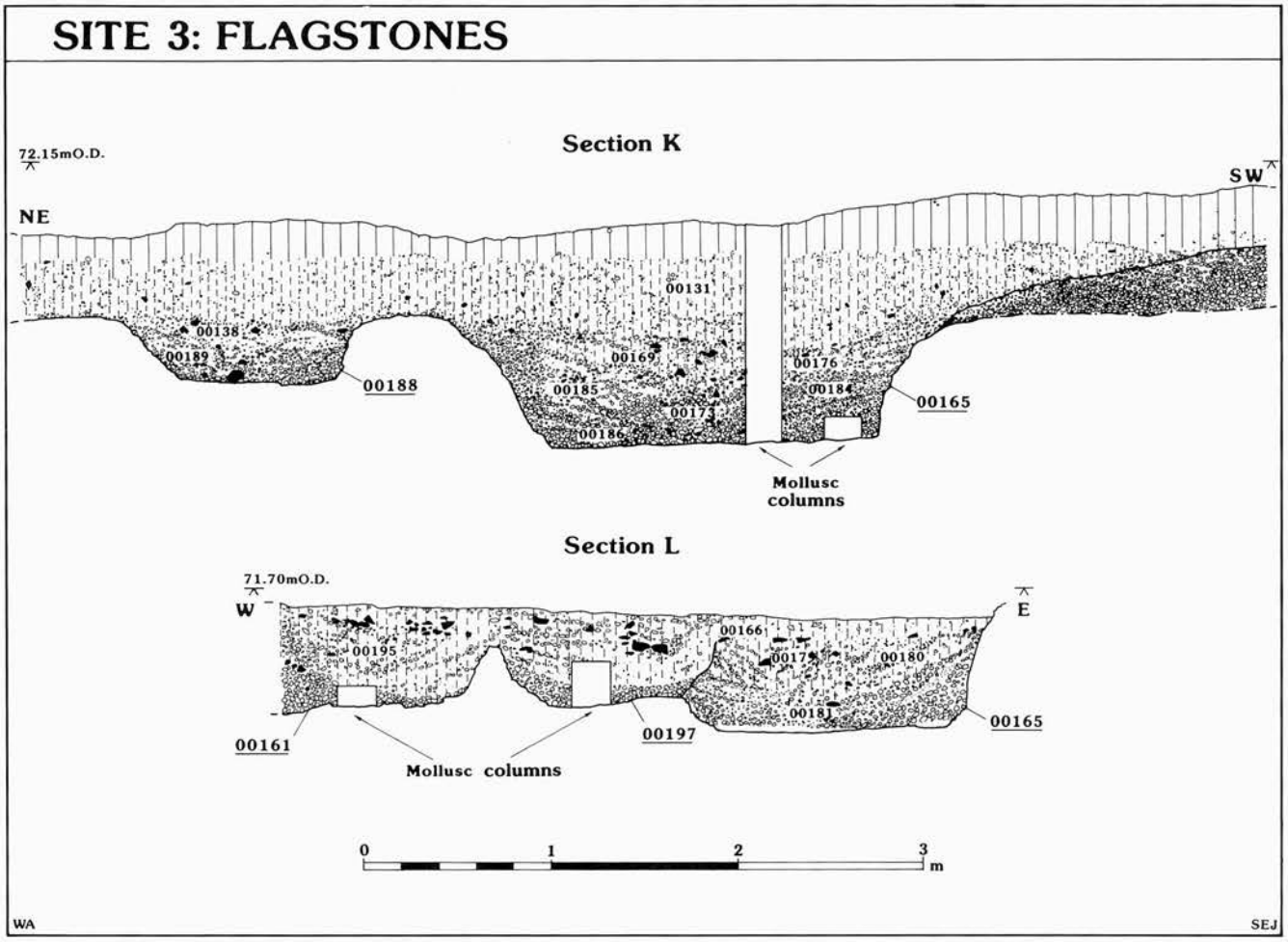


Figure 32 Flagstones: sections through central ring-ditch 00165 with pits 00018, 00161, and 00197

Period 3. Late Iron Age

In the 1st century BC a field system was laid out on the fringes of an area of contemporaneous settlement and burial represented by a number of storage pits and a ditched rectangular enclosure. Burials were found in the storage pits and in purpose-cut graves (Fig. 30).

Although at least three stratigraphic episodes are indicated for this phase by the intersection of linear features in the south of the excavated area, the pottery from all contexts is consistently attributable to the 1st centuries BC/AD, suggesting a fairly narrow span. In addition to the finds noted here, many of the features contained residual Neolithic and Bronze Age material which is documented in the artefact reports. Details of the burials are in archive.

A network of shallow gullies oriented north-east–south-west and north-west–south-east and defining rectilinear plots was identified over most of the excavated area. Topsoil stripping during the construction of the By-pass showed that the system extended at least 60.0 m to the north-west (Fig. 17). It ran over the Period 1 enclosure, the gullies cutting the uppermost silts of the segments (Fig. 20, section J), but appeared to respect the area within the central ring-ditch, one gully stopping short over the northern part of the ditch (Fig. 30). The gullies were generally 0.2–0.5 m wide and 0.03–0.25 m deep in the Chalk. Apparent breaks probably reflect the fact that parts of their length were cut entirely in topsoil. All seemed to have silted naturally. A silty clay loam fill with a little weathered chalk was continuous across the junction of three gullies in the north of the excavated area. One hundred and thirty-one sherds from the gullies (including Fig. 70, 2), range in date from the 1st century BC to the 3rd or 4th centuries AD, most falling in the early part of this period. They were concentrated in the south of the excavated area, close to contemporaneous settlement features. There were also five medieval and post-medieval sherds, five fragments of fired clay, and nine fragments of animal bone.

In the south of the excavated area a sub-rectangular, steep-sided, flat-based grave, *00015*, was cut by a substantial ditch, *00011*, which also cut one of the gullies. The skeleton of an adult female lay on the base of the grave, supine, with the knees drawn up to the chest and with the left arm more tightly flexed than the right. The grave was filled with 0.45 m of undifferentiated angular chalk rubble (Fig. 33, section M). There were no grave goods.

Ditch *00011* was up to 2 m wide and 0.85 m, its sides sloping gently to a flat base 0.15–0.3 m wide. Sporadic ledges on both sides were suggestive of recutting, although this was not apparent in the fills. Its excavated part ran south-west–north-east. Following the demolition of Flagstones House it was observed to turn south-eastwards through a right-angle over the southern part of the central ring-ditch (Fig. 30). Most of the ditch was filled with primary silt of weathered chalk fragments in a clayey matrix, perhaps derived more from the south-east than from the north-west, suggesting an internal bank. Finds from it included 134 sherds of predominantly 1st century BC/AD pottery, two fragments of fired clay, a per-

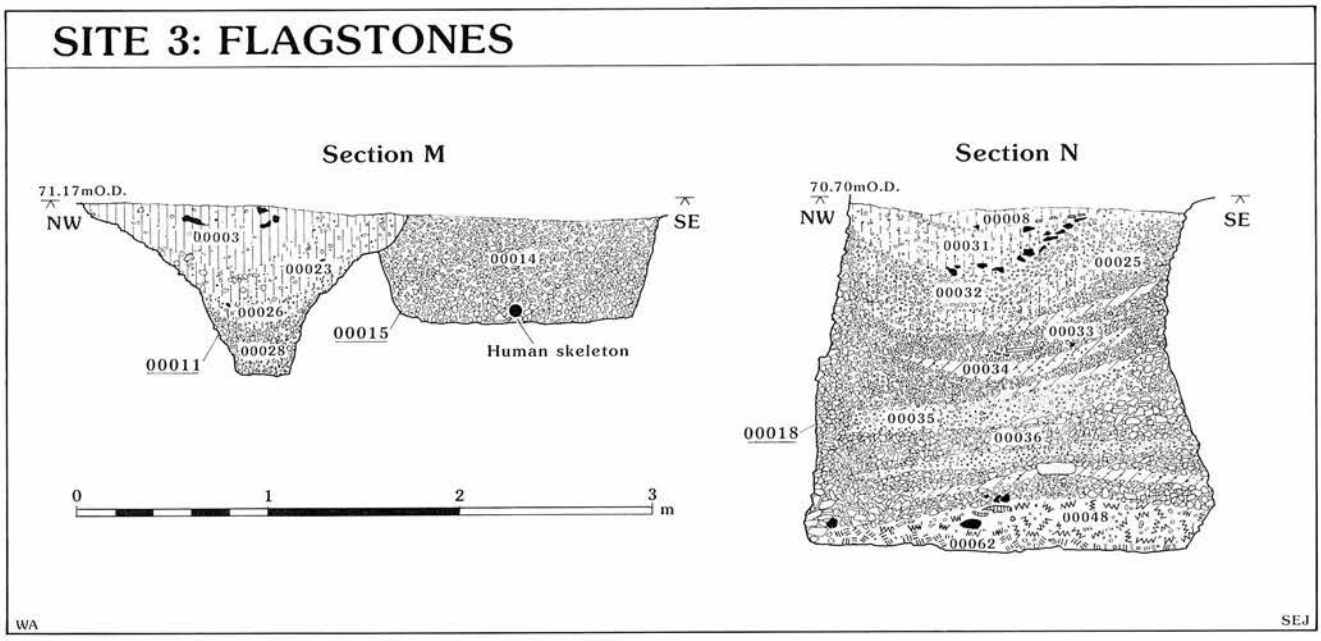


Figure 33 Flagstones: sections through ditch 00011, grave 00015, and pit 00018

forated chalk lump (Fig. 77, 4), and a fragment of unworked shale. Animal bone was concentrated towards the northern end of the exposed length, where most identifiable fragments were of sheep or goat; the articulated remains of the left hind limb of a horse were recovered at the eastern end. The upper fills of silty clay with less chalk were prolific of finds. These included 598 sherds of predominantly 1st century BC/ AD pottery (including Fig. 70, 3–7), 18 fragments of fired clay, nine fragments of indeterminate brick or tile, and a bone gouge (Fig. 75, 5). Animal bone was concentrated in the south-west, the identifiable fragments being dominated by sheep/goat and including fragments of a further horse.

Ditch *00011* was itself cut by the butt end of north-west–south-east ditch *00052*, which also cut four pits, with perhaps a fifth in a confused area of intersecting features. One of these, *00018*, was a large, flat-based, bell-shaped storage pit 1.8 m in diameter and 1.85 m deep. After some 0.05–0.1 m of initial clay silt had accumulated on the base, a deposit of ash and charcoal was tipped into the pit, followed by successive layers of chalk rubble, often containing charcoal, separated by thin lenses of silt (Fig. 33, section N). The pit contained an abundant assemblage of 1st century BC/AD pottery (including Fig. 70, 7–20; Fig. 71, 21–9, 31), and of animal bone. The lowest chalk rubble layer, 00036, contained particularly large quantities of pottery (362 sherds) and bone (418 fragments).

The 1117 sherds from the pit as a whole far outnumber the totals from any of the other storage pits, the greatest of these being 149 from pit *0019*. They include substantial parts of several vessels, the sherds of which were sometimes spread through more than one layer, some of them with evidence of use such as sooting, limescale, or basal perforations made after firing. The assemblage is dominated by jar and jar/bowl forms, without open bowl or other fineware forms.

The 1296 fragments of animal bone from the pit similarly outnumber the collections from other pits, the next greatest being 985 fragments from pit *00302*. They represent, in order of frequency, ovicaprids (36.5%), dog (36.1%), cattle (12.9%), horse (3.6%), and pig (1.6%). The assemblage from layer 00036 included a neonatal sheep or goat and the remains of three adult dogs, one of them almost complete. Other finds included an iron gouge (Fig. 74, 1) and a perforated sheep metatarsal (Cat. no. 13) both from the ash and charcoal layer (00062), and a perforated chalk slab (Fig. 77, 5), from layer 00036. Upper layers produced 17 fragments of fired clay and five of indeterminate brick or tile, three fragments of unworked shale, and five of worked shale waste.

The remaining pits cut by ditch *00052* were relatively shallow and bowl-shaped, one of them (*00074*) cutting segment *2* of the Period 1 enclosure. Two (*00039* and *00054*) produced small, abraded sherds of pottery similar to that from *00018*.

Ditch *00052* was 1.5 m wide and up to 0.45 m deep, with gently sloping sides and a rounded base. An initial fill of small chalk rubble in a clayey matrix gave way to loamier silts with a lower proportion of chalk. Finds consist primarily of 172 sherds of 1st century BC/AD pottery, with seven fragments of fired clay and a further seven of indeterminate brick and tile. Animal bone comprises 146 fragments, among which dog was the most numerous species.

Other Late Iron Age features consisted of pits and graves scattered over the southern part of the excavated area. Six pits (*00019*, *00045*, *00300*, *00302*, *00305*, and *51020*) were bell-shaped storage pits like pit *00018*, although none matched its charcoal and ash deposit or was as prolific of finds. They ranged from 1.3 m to 2.15 m in maximum (basal) diameter and from 0.64 m to 2.06 m deep. All seemed to have infilled naturally with successive layers formed by varying combinations of collapsed chalk from the sides and silted topsoil from the surface.

Pits *00019*, *00302* and *00305* contained substantial assemblages of 1st century BC/AD pottery (including Fig. 71, 30 and 72, 32–7). Other finds include fired clay, with two slingshots and a clay weight (Cat. nos 1, 2, 5) among numerous amorphous fragments. Worked bone comprises a perforated ovicaprid metatarsal and three bone gouges (Cat. nos 6–8, 11). A beach pebble hammerstone (Fig. 77, 8) came from one of the lower layers of *00305*. Small quantities of shale waste and of indeterminate brick or tile were also recovered.

The animal bone assemblages from these pits are described by Bullock and Allen (*below*). They often include the remains of small mammals and amphibians as well as the butchered, and sometimes gnawed, bones of domestic animals, including articulated sections of skeleton, especially limbs. The presence of the butchered and gnawed remains of a cow in a pit (*00356*) cut into segment *8* of the Period 1 enclosure, probably relates

it to this phase. Pit *00302* was the most prolific of bone after pit *00018* (Fig. 34). On the base of the pit three cattle skulls, two with their cervical vertebrae, lay with other bones beneath a cone of primary silt composed of abraded chalk fragments and brown silty clay (Fig. 34). Higher up in the fill was a bone deposit including articulated horse and cattle limbs as well as a complete horse mandible. Among the animal bone were a few cranial and mandibular fragments of human bone from an infant less than 6 months old. The layer immediately above this contained more animal bone, including further cattle limbs, a further horse jaw, and a dog skull with both halves of its mandible, as well as almost half of a large Black Burnished ware jar (Fig. 72, 37). Above these the body of an adult had been placed, perhaps in a deliberately cut grave, in a supine position with the legs drawn up to the chest and the left arm more tightly flexed than the right.

Human burials were also found in storage pits *00019* and *00300*. In pit *00019* the body of a 3–4 year-old child had been placed in one of the upper fills, supine and with the legs flexed. An adult male had been placed on the base of pit *00300* against the side of the pit (Fig. 35).

Three shallow graves, *00041*, *00432*, and *50264* contained single, unfurnished inhumations, like grave *00015*. These were respectively of a 16–17 year-old lying on the right side with legs drawn up to the chest, an unsexed adult supine with the legs flexed, and a mature adult, possibly male, lying on the left side with the legs tightly flexed. Grave *00041* was cut into storage pit *00019* after it had silted up. The remaining two are grouped with the Late Iron Age inhumations here because of their proximity to them, the burial postures, and the relatively good preservation of the skeletons, which accords better with the Iron Age than with the Neolithic and Bronze Age inhumations from the site.

Period 4. Romano-British

No structures or sub-soil features of this period were found at Flagstones. Small quantities of pottery of the 2nd–4th centuries were found in medieval and superficial contexts.

Period 6. Medieval

The excavated area was crossed by three sub-parallel north-west–south-east gullies, 0.65–1.5 m wide and 0.18–0.35 m deep, their profiles varying from rounded to steep-sided and flat-based, which cut the earlier field system and other prehistoric features. They appeared to have silted naturally. They were interpreted as part of a more extensive medieval field system known to the north (Woodward and Smith 1987, 84). A small quantity of medieval pottery was recovered from prehistoric and superficial contexts.

Period 7. Post-Medieval

Post-medieval features were confined to square-cut tree-planting pits of recent date, a bomb crater, and a few miscellaneous pits or post-holes. Roots still remained in some of the tree-pits, one of which contained a post-medieval sherd and a fragment of glass. Some of the miscellaneous features may also have been tree-pits.

Flagstones: Summary

Radiocarbon determinations (Table 1), artefacts, and stratigraphic considerations indicate that pits *00221* and *00274* pre-dated the enclosure, perhaps by centuries. Molluscan evidence correspondingly indicates different, perhaps successive, surroundings for each, the pits being dug in an area of recently cleared secondary woodland, the Period 1 enclosure constructed in one of grazed grassland. The pits and their contents are most readily seen as the remains of settlement of the mid 4th millennium cal. BC, most of the evidence for which would have been removed in topsoil stripping and/or lain beyond the excavated area.

The construction of the Period 1 enclosure is placed in the late 4th millennium cal. BC by two radiocarbon determinations (HAR–9158 and OxA–2322), and in the first half of the 3rd millennium by another (HAR–8578). It is difficult to see the discrepancy as the result of recutting, since the section of segment *13*, from the base of which the sample for HAR–8578 was recovered, shows no trace of this (Fig. 19, section B).

The monument was one in which child inhumations and an adult cremation burial were placed and on the walls of which designs were carved. There is virtually no evidence for contemporaneous settlement. A flint industry of later Neolithic character from the primary fills represents the use of the ditches as an *ad hoc* quarry rather than the execution of domestic tasks. The Neolithic bowl sherds from the same deposits may derive from the preceding occupation represented by pits *00221* and *00274*, close to which they were concentrated, although the probable late 4th millennium cal. BC date of the enclosure does not preclude contemporaneity. Animal bone was scant, and much of it consisted of shed red deer antler, some of it recognisably adapted for use as picks.

It is impossible to tell how far the engravings represent the fortuitous exploitation of flat areas of ditch side, how far the deliberate preparation and use of selected surfaces. Pick-marks within the areas of engraving D (Fig. 25) may suggest the latter, as may the fact that three of the five antler picks found on the ditch bottom came from segments *4*, *13*, and *34*, all with engravings, and a fourth pick came from segment *27* which intercut with segment *28*, the site of the fourth engraving (Cat. nos 1, 2, 4, 5).

Even the more pronounced engravings, A and C, were fragile and potentially ephemeral, surviving because the faces on which they were carved were buried in chalk rubble before they could weather. Other engraving may have been made on faces which subsequently weathered and collapsed, especially higher up the ditch sides. It is therefore impossible to judge the significance of the apparent complementary distribution of engravings and burials (Fig. 20).

The original form of the monument is uncertain. Primary chalk rubble fills seem to have entered the segments in equal quantities from interior and exterior, suggesting that there may have been banks or dumps on each side, or that spoil was far enough back from the ditch edges for infill to derive solely or mainly from the ditch sides. There were two particularly wide gaps between segments, either or both of which may have been entrances. An apparent gap of 7.4 m between segments *22* and *23* in the north-west was unfortunately in an area where the segments themselves could not be excavated (Fig. 22). To the north, segments *35* and *36*, which flanked a 3.0 m gap, were exceptionally shallow and hence lacked the chalk rubble primary fills of all the other excavated segments (Fig. 20, section J).

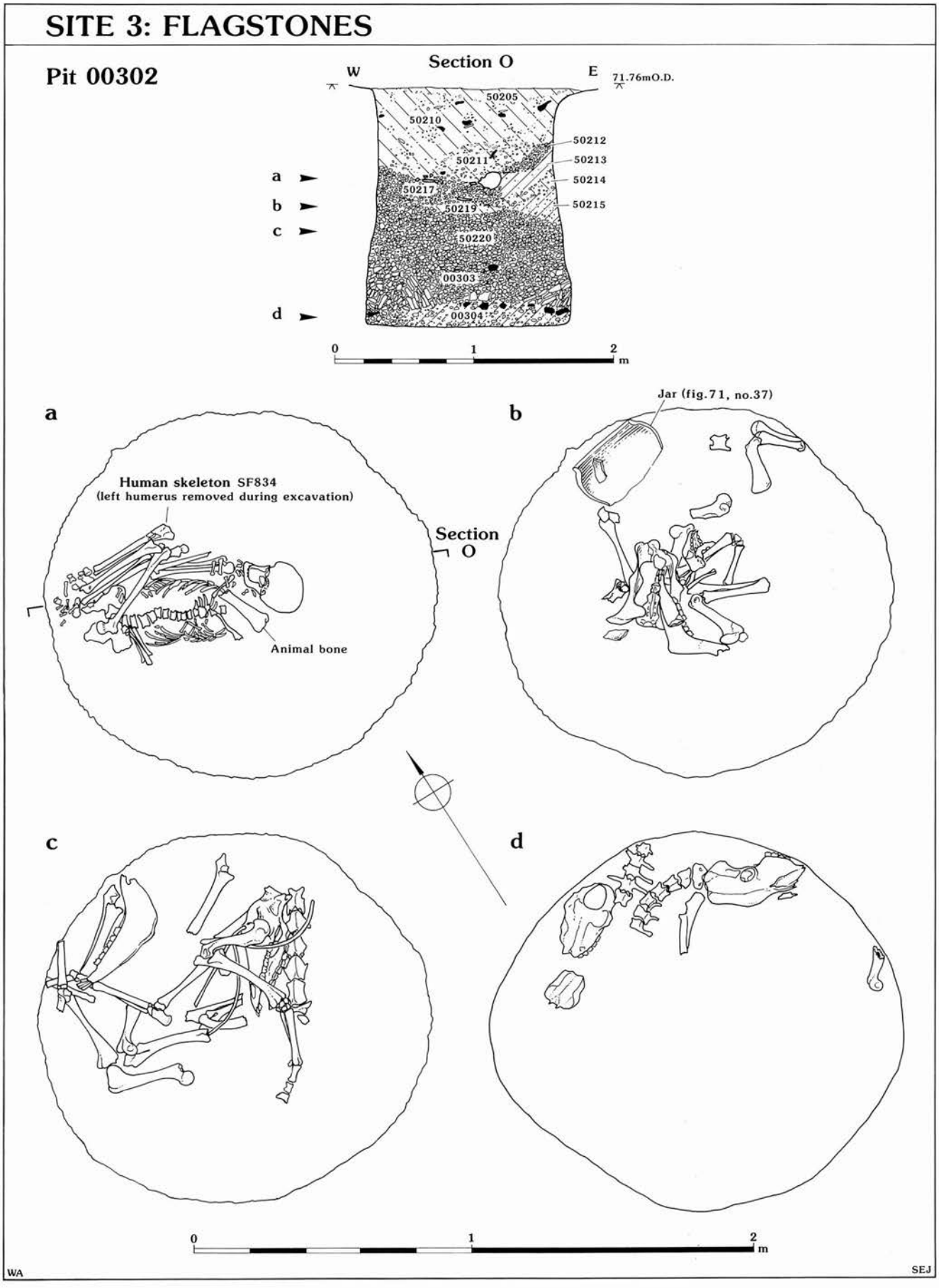


Figure 34 Flagstones: pit 00302, section through pit fills and plans of successive deposits; a) skeleton SF83); b) animal bone and fragment of Black Burnished ware jar in layer 50219; c) animal bone in top of layer 50220; d) animal bone on base of pit

A number of pits lay close to the line of the circuit and were apparently close to it in date (Fig. 22). They may be linked to the presence in the enclosure segments from the primary fills upwards of large slabs and many smaller fragments of sarsen, limestone, and sandstone from a variety of local sources, some of the slabs being used to cover burials (Figs 26–9). The concentration of this material distinguishes the monument from other sites excavated along the line of the By-pass and is unlikely to have resulted from natural processes. The enclosure may have been preceded by a stone setting, which was demolished prior to its construction with some stone sockets remaining at the ditch edge and others removed by its excavation, while some monoliths were used to cover burials and others broken up. To the south-east, a further sarsen slab was found in 1891, during the construction of Max Gate, at a depth of around a metre, overlying ashes and half-charred bones (Hardy 1928, 306). This is likely to have covered a burial in another enclosure segment. It remains at Max Gate, together with the sarsen from the central burial at Flagstones.

The fresh, near-vertical, unweathered state of the segment sides must reflect infilling soon after construction, as must the survival on the lower sides of some segments of shallow engravings which would not have survived exposure to weathering. Roughly a metre of chalk rubble mixed with turves and incorporating lenses of topsoil accumulated in the segments. The whole deposit closely matches the sequence of fills recorded in the ditch of the Overton Down experimental earthwork after it had stood open for four years (Jewell and Dimble-by 1966, pls xxiii, 3, xxiv, 4; figs 1–2) and eight years (Bell *et al.* 1996, fig. 4.4).

That ditch was cut in Chalk, with almost vertical sides, 3.0 m wide at the top, 2.5 m wide at the base and 1.2 m deep. After one winter up to 300 mm of chalk rubble had built up against the lower sides of the ditch, all derived from the upper sides, which had begun to weather back. After four years up to 1.2 m of fill had accumulated against the ditch sides, made up of chalk rubble, rather smaller at the top, most of it detached by winter frosts, interspersed with turves which had collapsed from the ditch edge as the weathering chalk sides undercut the topsoil, and with finer layers, incorporating both chalk and soil, deposited in summer. All of this was derived from the ditch sides and edges, none of it from the bank, which was separated from the ditch by a berm.

The chief difference between the Overton Down and Flagstones accumulations, the relatively slight depth of fill in the centre of the Overton Down ditch, may be attributed to its greater width. Overton Down shows that the initial fills of the Flagstones segments accumulated rapidly and naturally. If there were banks or dumps of chalk rubble close to the ditch edge the process might have been even faster. Observations made during the excavation of the Wyke Down henge in Cranborne Chase indicated that the *c.* 0.5 m of primary chalk rubble fill in the pits, again with occasional humic lenses, could have accumulated in one winter (Barrett *et al.* 1991a, 92). The survival in the Flagstones segments of very clear banding between chalk rubble and finer sediments may reflect low earth-worm activity in the relatively acidic soils of the period, since comparable sharp banding in the Overton Down ditch fill was blurred by worm action after only 32 years (Bell *et al.* 1996, 72, 237).

After some 0.7 m of deposit had accumulated in segment *14* at Flagstones, a pit was cut to the base and a burial placed in it. The accumulation of chalk rubble resumed only after a humic horizon had developed over the pit and the layers through which it was cut (Fig. 19, section C). OxA–2321, which dates the inserted burial, and HAR–9158 and OxA–2322, which may date the construction of the enclosure (Table 1), would accommodate an interval of anything from years to centuries. The considerations outlined above point to the former.

After this, a soil formed over the rubble fills and the segments silted up more slowly. The first deposit to form in them derived from the further weathering back of the upper sides of the segments, and had a correspondingly high chalk content. Once the sides had reached a stable angle, subsequent silts consisted entirely of contemporaneous topsoil. Both deposits were far richer in artefacts than the initial chalk rubble fills, containing in particular an abundant Bronze Age flint industry.

While the enclosure segments were silting up a grave was cut in the centre of the monument, a burial interred in the grave and a sarsen placed over it (Fig. 31). The replication of a rare rite, previously employed in the enclosure segments back-filled up to 1000 years before, is a coincidence not easily explained. It may be that at least one sarsen had remained unburied in the immediate area and was now employed. A local Early Bronze Age parallel is provided by a barrow on Conygar Hill in which 'a large block of Portland stone 7 ft x 4 ft x 1 ft 6 in [2.1 x 1.2 x 0.5 m]' and 'weighing over 3 tons [2.8 tonnes]' was placed over a burial comprising an inhumation, a cremation in a Food Vessel, and six barbed and tanged arrowheads (Acland 1908, 140; 1916, 41). A mound was then built over the burial, with material quarried from a surrounding ditch.

The former presence of the mound was evidenced by a preponderance of chalk rubble in the inner side of the ditch fill and by the raised, formerly protected surface of the Chalk within the ditch (Fig. 32, sections K and L). Once constructed, the barrow was a focus for flintworking, the debris of an abundant industry becoming deposited in the upper silts of the ring-ditch, with a small quantity of Bronze Age pottery. The assemblage itself was of industrial character, like the later Neolithic one of the primary fills of the en- closure, but included more frequent and more varied finished implement forms, suggesting a more extended human presence and the conduct of other activities in addition to flint collection and working.

Once the ditch had silted-up, four evenly-spaced groups of pits were cut around its outer edge (Fig. 30; Fig. 32, section L). These too served as a raw material source, some containing fresh knapping debris, as well as further small quantities of Bronze Age pottery. Their location suggests that they were quarries dug for the addition of material to the barrow: even spacing around and proximity to the periphery minimising the distance over which the material from them would have to be carried. Their relatively slight depth may suggest the application of a fresh covering of white chalk rather than substantial enlargement.

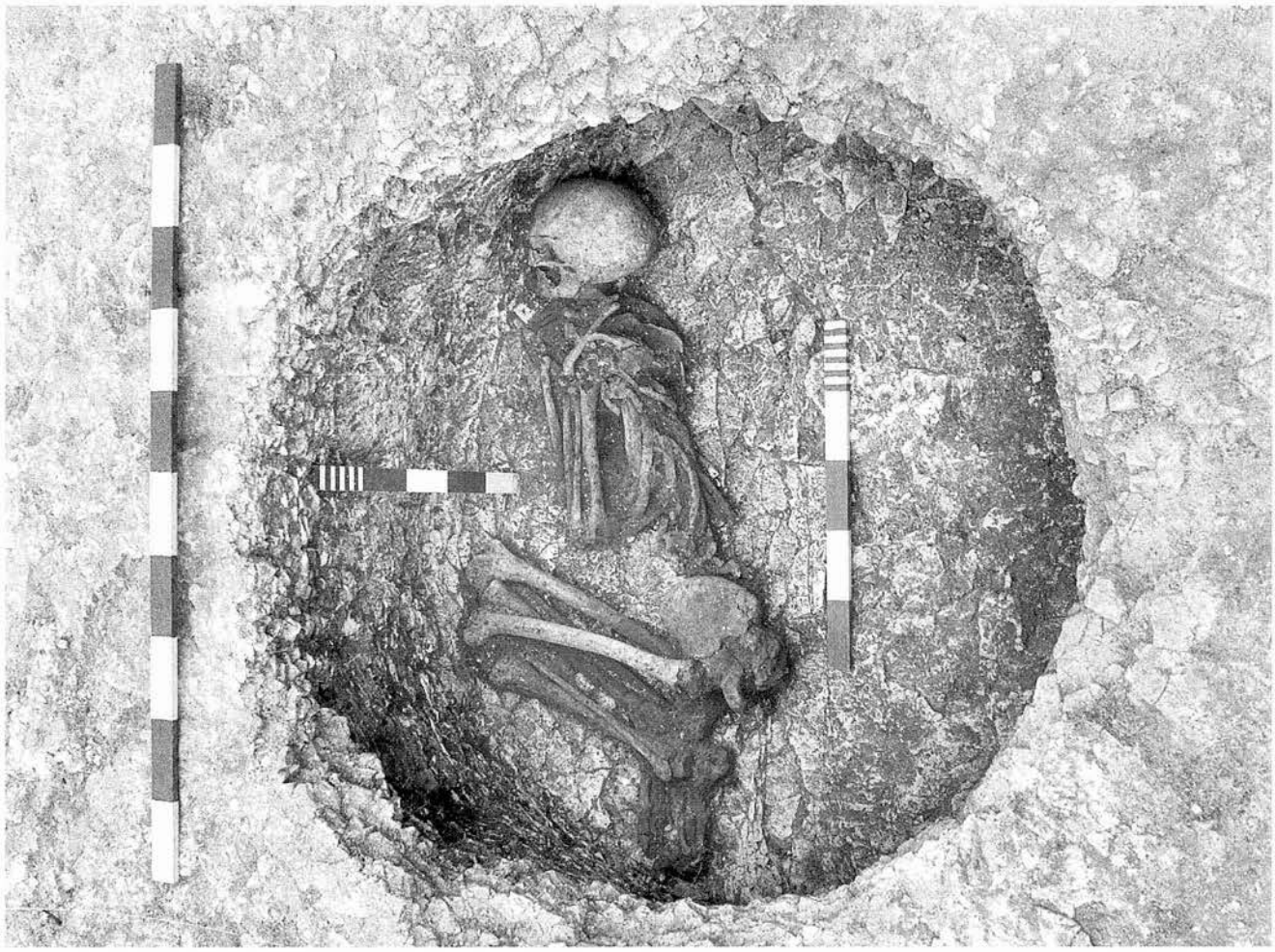


Figure 35 Flagstones: skeleton of an adult male on the base of pit 300

Artefactual indications of heightened human activity in this period correspond to molluscan and pedological evidence from the ring-ditch and the upper fills of the enclosure segments. Mollusca from the soil fills of the enclosure show a transition from the grazed grassland which obtained at its construction to a combination of tillage and pasture, within an increasingly open landscape. In the perhaps brief period when the ring-ditch was silting-up the immediate area was probably arable, within an extremely open landscape. The effects of intensive cultivation were seen in the soils accumulated in the ring-ditch, which became less clayey and more calcareous from bottom to top, the same process being apparent, although less sharply, in the soil fills of the enclosure.

This modification of soil type is reflected in bone preservation. Both human and animal bone from Neolithic and Bronze Age contexts is eroded, sometimes severely. This is likely to reflect its exposure to more acidic conditions than obtained by the time the better preserved human and animal bone of the Late Iron Age was deposited.

There is as little animal bone from Bronze Age contexts as from Neolithic ones. The whole suggests not so much occupation, as the carrying out of flint knapping and other outdoor tasks within farmland, where the barrow would have provided a reserved area out of the way of cultivation. Nodules excavated from the ring-ditch and incorporated in the mound would, as they weathered out, have provided a concentrated supply of raw material, possibly augmented by further nodules cleared from surrounding fields onto the mound.

There was no archaeologically visible human activity between the Middle Bronze Age and the Late Iron Age. Mollusca from the topmost fills of the enclosure show a reduction of grazing pressure indicated by the establishment of longer grassland.

By the time a field system was laid out over the site, probably in the 1st century BC, both enclosure and ring-ditch were completely silted and were disregarded in the laying-out of the plots and cut by slightly later ditches. The barrow mound was apparently extant, respected by the field system and by ditch *00011*, which turned a corner over the fill of the ring-ditch (Fig. 30).

Within the area of the ring-ditch, grave *00432* was cut only 0.17 m into the chalk, which suggests that most of its depth was within the body of the surviving mound. Most of the excavated area seems to have been in cultivation, with the fringe of an area of occupation and burial in the southern corner.

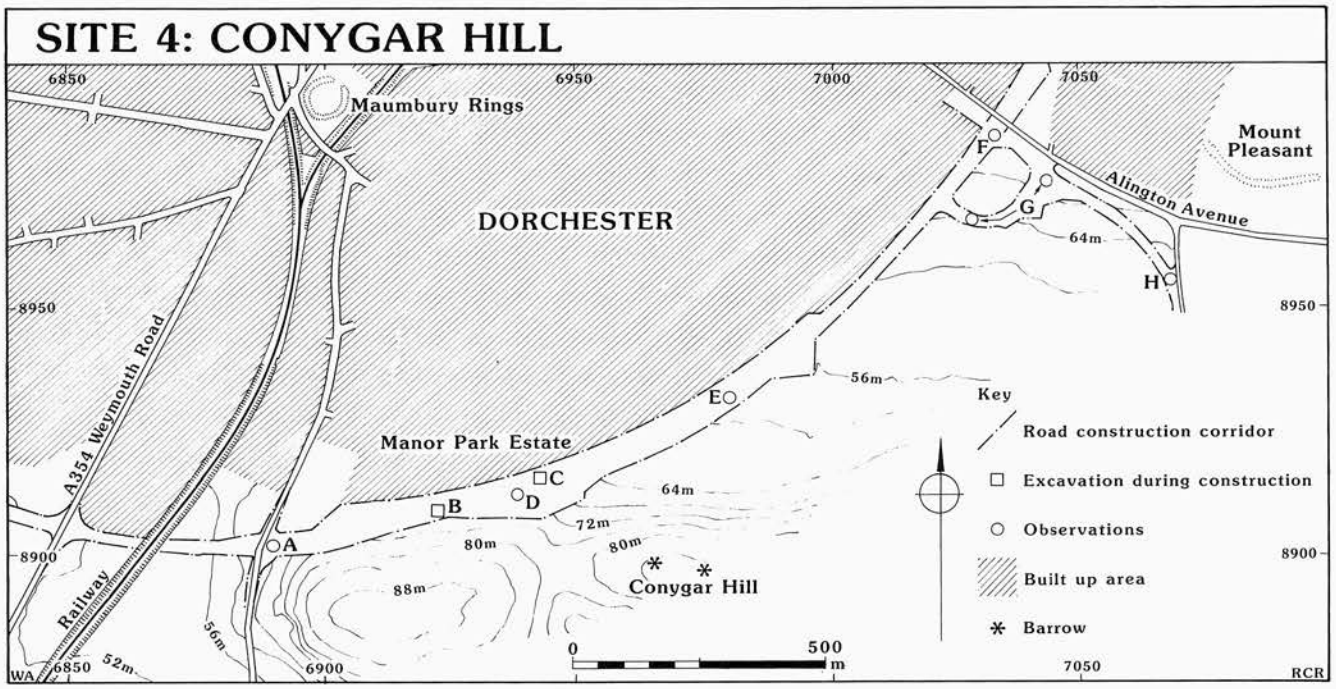


Figure 36 Conygar Hill: location of observations

The storage pits seem to have stood open once abandoned: all were filled with a combination of chalk rubble weathered from the sides and topsoil silted from the surface, and many contained the remains of small mammals and amphibians, such as voles and frogs, which would have fallen into the open pits. Natural infilling was punctuated by the deposition of apparently domestic debris, of human bodies, and of articulated animals, complete and fragmentary. The deposition of some of the animal bone in the pits seems to have been non-casual. The material on the base of pit *00302* (Fig. 34) must have been placed there immediately after the pit had been dug or cleaned out, like the human burial on the base of pit *00300* (Fig. 35). A concentration of articulated horse and cattle limbs in the middle fills of pit *00302* seems as purposeful as the human burial found above them (Fig. 34). The overwhelming concentration of pottery in pit *00018* may also have resulted from design rather than accident. The possibly specialised character of the assemblage may be relevant here.

Some Late Iron Age burials were placed in purpose-cut graves. This is most obvious in the case of grave *00015*, where the undifferentiated clean, angular chalk rubble fill shows that the grave was filled-in almost as soon as it was dug (Fig. 33, section M). In the case of grave *00041*, cut into the edge of pit *00019*, burial in a grave post-dated burial in a storage pit.

Burials continued to the south-east, where several were found during the construction of Max Gate House in the 1880s. In contrast to the unfurnished Flagstones graves these contained both pottery and metalwork. There may also have been a further storage pit: 'a circular pit 2 ft [0.6 m] by 5 ft [1.5 m] deep, packed with flints, had a flagstone at the bottom and above it an ox horn, with ox bones and teeth and pieces of bituminous matter' (RCHM(E) 1970, 577–8).

The site remained farmland from the Romano-British perid until the construction of Flagstones House in the 20th century. The barrow would have become flattened during this extended period, resulting in the deposition of additional soil over the ring-ditch and its periphery (Fig. 32, section K, layer 00131).

4 Site 4. Conygar Hill

This site extends from the A352 at Alington Avenue to the A354 Weymouth Road (Fig. 36). Fieldwalking, observation of contractors test-pits, and trial excavation immediately south of Alington Avenue were undertaken in 1986 and 1987 prior to construction. No areas were subsequently targeted for area excavation. Observations during topsoil stripping for construction identified a series of features. These included two pit-rings below Conygar Hill. Excavation of these features was undertaken in summer 1987 within the road construction programme. The principal recorded features and deposits may be summarised as:

Period 6 Medieval field ditches
Period 4 Roman finds
Period 2? Bronze Age linear ditches
Period 1 Later Neolithic pit-rings
Period 0 'Sink-hole' and tree hollows

Period 0. Natural Features and Deposits

A 'sink-hole' was recorded immediately to the east of Herringston Road during topsoil stripping for construction (Fig. 36, A). The eastern edge of this feature was identified during observations of contractors test-pits and boreholes; the full size of the feature when stripped was shown to be *c.* 20–25 m in diameter and over 10 m deep.

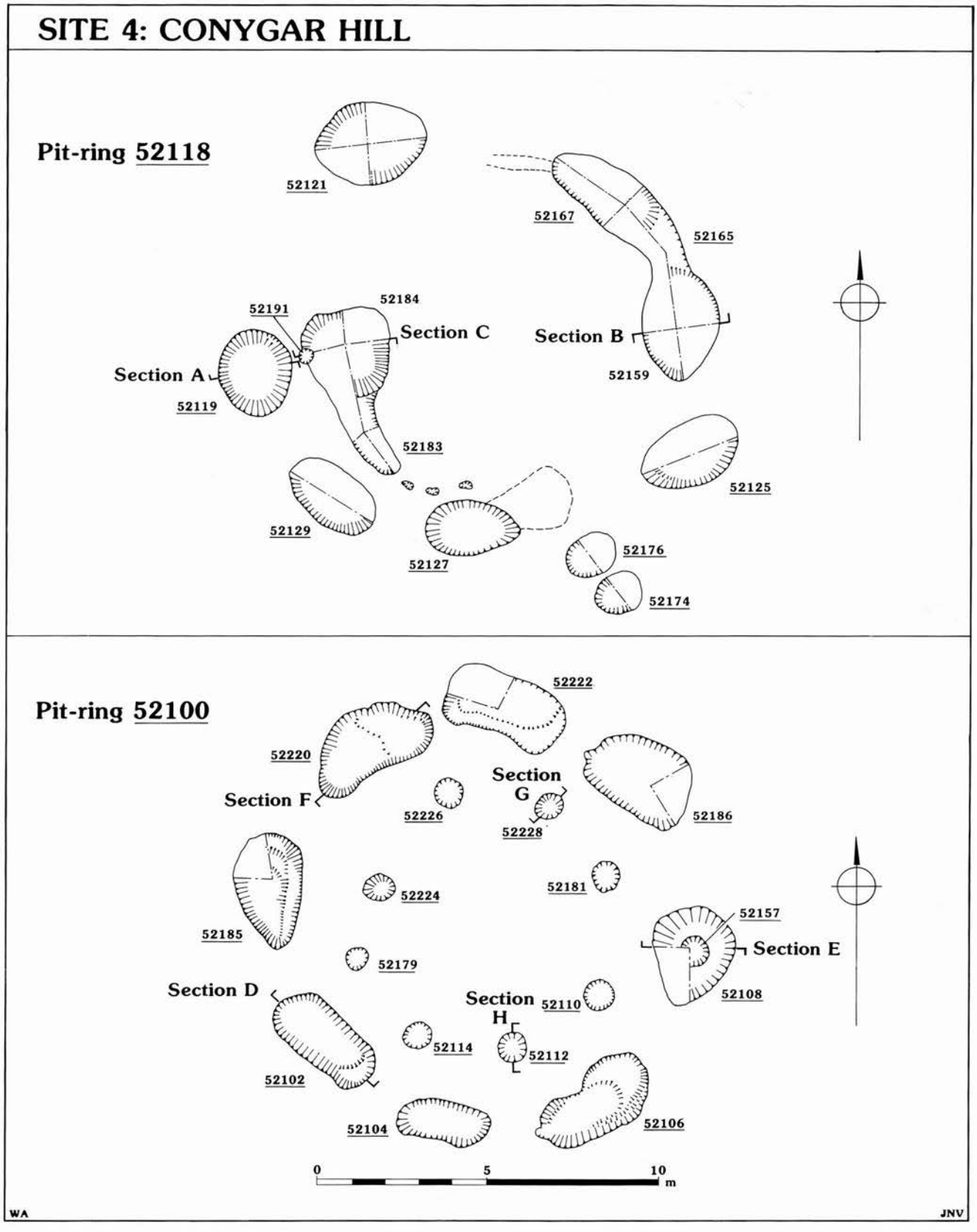


Figure 37 Conygar Hill: pit-rings 52118 and 52100

Figure 38 Conygar Hill: pit-ring 52100 as first discovered after topsoil stripping. Looking north-east towards Flagstones and Conquer Barrow / Mount Pleasant

Six irregular features, interpreted as tree hollows, were identified in two trial trenches adjacent to Alington Avenue (Fig. 36, F). These features consisted of irregular circular features, no greater than 1m in diameter, with uneven bases no greater than 0.3 m deep and generally less than 0.1 m. The most pronounced of these features was filled with a mid-brown silty clay, others were infilled with lighter, chalky material. No artefacts were recovered from any of these features. Other sporadic periglacial or tree hollow features were identified, but not recorded, during topsoil stripping north of Conygar Hill.

Period 1. Neolithic

Two pit-rings were recorded and excavated during topsoil stripping for construction to the north of Conygar Hill (Fig. 36, B and C; Fig. 38).

Pit-ring *52118*

Pit-ring *52118* (Fig. 36, B; Fig. 37) was identified on the 72 m OD contour on more level ground below the steeper north-facing slopes of Conygar Hill. The pit-ring consisted of seven pits and two segments consisting of more than one intercutting pit feature. A summary of the main characteristics of the pits is given here, details of the individual pits and segments are in archive.

The pits formed a near circle, a maximum of 17 m in diameter externally and 7.5 m internally. They were ovate with steep sloping sides and flat bases. Excluding the two smaller pits, *52174* and *52176*, that were *c.* 1.5 m in diameter and 0.34 m deep, the remaining features averaged 3 m in length, 2 m in width, and 0.58 m in depth. There was no significant variation in depth to the features around the pit-ring and no pit showed conclusive evidence of having been recut.

The two segments comprising more than one pit feature, *52184/52183* and *52167/52159*, were positioned opposite to each other to the south-west and north-east respectively. These two segments were internal to a near semi-circular arrangement of five pits. The two smaller pits *52174* and *52176* were positioned external to this arrangement on the south-eastern edge of the pit-ring.

In the absence of material from the primary fills and stratigraphic relationships, it was not possible to determine if the pits were contemporaneous or the arrangement of features reflects a number of phases of construction for the monument. The infilling of the segments was, however, different to those of the pits; in *52184/52183* consisting of chalk rubble (Fig. 39, section C) and in *52167/52159* consisting of a more mixed loamy fill (Fig. 39, section B). The pits were all infilled with pronounced primary chalk rubble fills with silty loam secondary fills (Fig. 39, section A). There was no indication of internal or external banks to the pit-ring. Three pits, *52127*, *52167* and *52159*, had rubble fills predominantly on their internal edges.

Material recovered from the primary chalk rubble fills of the pits consisted of small quantities of very worn struck flint, none of which was diagnostic, animal bone, and four fresh sherds of Grooved Ware, probably from a single vessel (Fig. 65, 27 and 28), recovered from the centre base of pit *52119* (Fig. 39, section A). The animal bone consisted of 40 fragments of pig from *52119*, and one cow and nine unidentified mammal fragments from *52125*. The upper pit fills contained small quantities of undiagnostic struck flint and a bronze coin of Helena from the upper fill of pit *52159*. Samples recovered for land snails from pits *52129* and *52160* suggest they were constructed in well-established, long, ungrazed grassland.

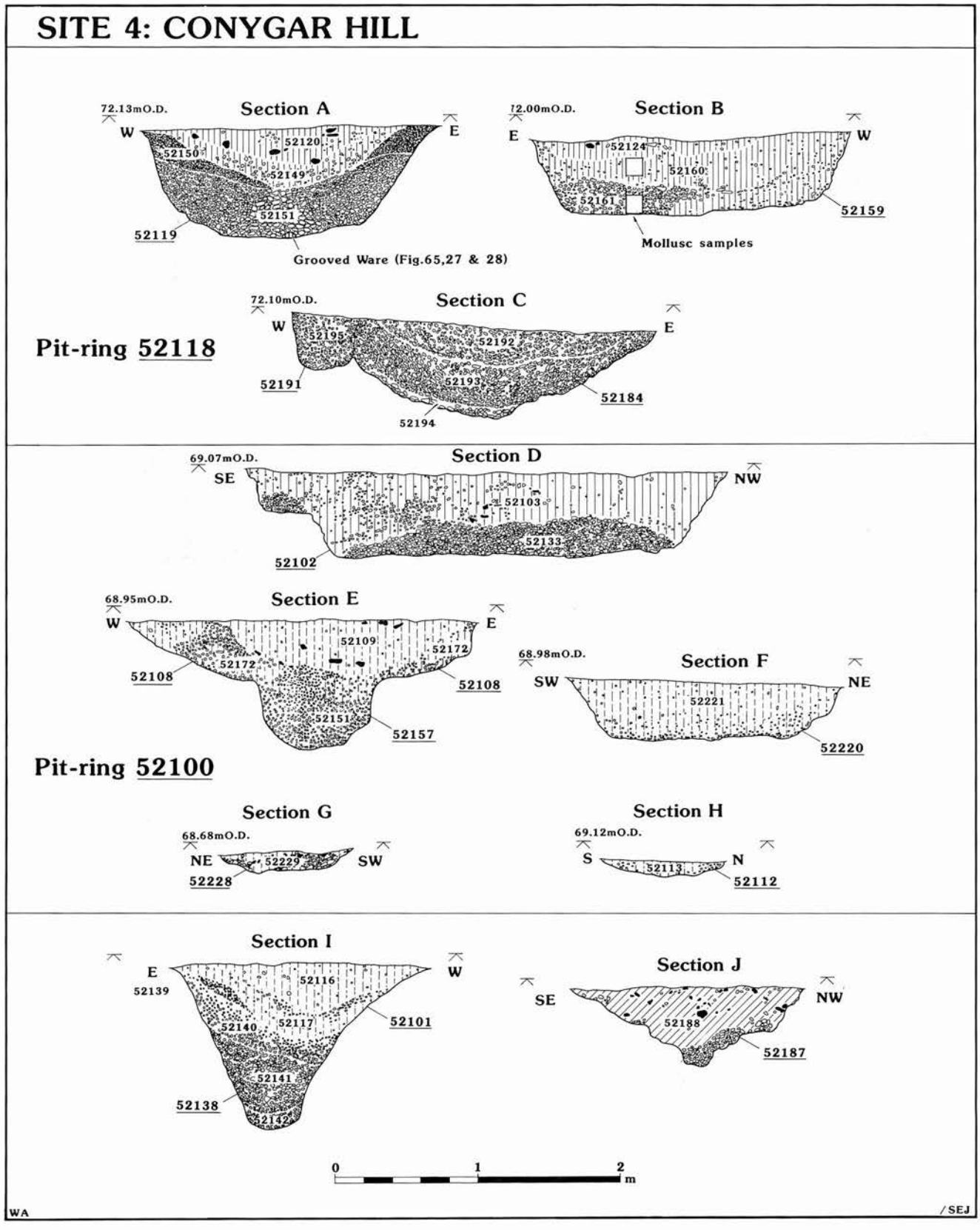


Figure 39 Conygar Hill: sections of elements of pit-rings 52118 and 52100 and other prehistoric ditches

Pit-ring *52100*

Pit-ring *52100* (Figs 36, C and 37) was 225 m east of *52118*. This feature was positioned around the 68 m OD contour on more level ground, below the steeper north-facing slopes of Conygar Hill (Fig. 38). This pit-ring consisted of eight pits with an internal arrangement of eight post-holes.

The pits were positioned in a near-circle with a maximum external and internal diameter of 15 m and 10.5 m respectively. The pits were ovate to sausage-shaped in plan and averaged 3.3 m in length, 1.85 m in width, and 0.5 m in depth. There was little variation in depth around the monument and the pits were regularly placed at *c.* 4.5 m intervals with gaps between each pit. The pits had generally shallow but occasionally steeper sloping sides and flattish bases (Fig. 39). Most pits exhibited some variation in profile, with apparent shallow scoops or shelves on the edges of some features suggesting some recutting. Pit *52108*, at the east of the pit-ring, had a post-socket, *52157*, cut into the centre base (Fig. 39, section E).

Internal to this pit-ring, was a ring of eight post-holes, regularly spaced opposite the 'causeways' between the outer pits. The post-holes averaged 0.82 m in diameter and 0.14 m deep, and all were similar in profile and infilling (Fig. 37).

Five pits, *52102*, *52185*, *52222*, *52186*, and *52108*, were filled with loose chalk rubble. This deposit was invariably shallow and occurred as a patchy and mixed deposit across the base of these features (Fig. 39, section D) and sometimes consisted of abraded chalk in a loam matrix (Fig. 39, section E). These deposits were sealed below grey–brown silty loams with mixed chalkier patches. Three pits, *52220*, *52104*, and *52106*, were filled with homogeneous grey–brown silty loams, with only a slight increase in small chalk inclusions towards the base of these features (Fig. 39, section F).

Small quantities of struck flint, with no diagnostic elements, and animal bone were recovered from the chalk rubble fills of these features. The upper soil fills contained a variety of material including sherds of earlier Neolithic, Roman and medieval pottery. No material was recovered from the internal post-ring. Land snails from pits *52186* and *52220* suggest they were constructed in well-established, long, ungrazed grassland.

The construction of one element of pit-ring *52118* is dated by four sherds of Grooved Ware in fresh to fair condition recovered from the base of one pit and sealed below primary chalk rubble. No other datable material was recovered from this pit-ring with the exception of a 4th century AD coin from the upper fill of one pit. A date of construction in the later Neolithic, around the middle of the 3rd millennium cal BC is postulated.

The quantity of material recovered from pit-ring *52100* was greater, but none can be used to indicate a construction date for this feature. The earlier Neolithic material is residual and the remaining material from the upper fills is of post-Iron Age date. As both pit-rings occupy comparable topographic locations and both share broadly comparable plans and dimensions, a later Neolithic date is also suggested for *52100*. The soils infilling the pits of both features were comparable in colour with a high clay content and the land snails suggest both monuments were constructed in a similar well-established, ungrazed grassland. There was a suggestion from the land snail evidence that pit-ring *52118* may have been constructed slightly before *52100* but the period of time may only have been minimal.

There was no suggestion from pit-ring *52100* that the pits originally held posts except for the post-pit dug in the centre of pit *52108*. The post-holes of the internal post-ring probably held posts although they survived to a very shallow depth. The similarity in diameter of post-hole *52157* in pit *52108*, may suggest that these internal post-holes were originally also *c.* 0.5 m in depth, before erosion reduced them to their present dimensions. The internal post-setting suggests a low external bank to pit-ring *52100*. There is no evidence for an entrance to the structure, although the width of the 'causeways' varies between pits, with slightly wider gaps adjacent to pit *52108*. The absence of pronounced chalk rubble fills to the pits suggest they were kept clean, many of the pits also showing smooth bases and appearing to have been recut, and were not deliberately infilled. The quantities of later material in the upper fills suggest the pits may have survived as earthworks for some length of time and were only gradually infilled.

The pits of pit-ring *52118* also showed no evidence for having held posts. There was no indication of any internal post-hole structure. Low banks were probably placed internal and external to the pit-ring. The pits do not appear to have remained open for long and their initial infilling with chalk rubble from erosion of bank material or pit edges appears to have been rapid, given the fresh nature of the Grooved Ware from the floor of pit *52119*. None of the pits showed evidence for having been recut and, in the absence of later material from the upper fills, the final silting of the pit-ring presumably preceded that of pit-ring *52100*.

Small quantities of animal bone were recovered from the chalk and soil fills of both features. Most probably represent accidental incorporation of material. The pig bones from the primary chalk rubble fills of pit *52119*, which also contained the Grooved Ware sherds, may be significant as these represent the only identified bones of this species from the two monuments.

A concentration of lithic material was recorded on the north-west slopes of Conygar Hill for the Maiden Castle Landscape Survey (Woodward and Bellamy 1991, 23) and occurred over pit-ring *52118*. This material contains an Early Neolithic component but is otherwise the result of more than one phase of activity. The high level of lithics in the ploughsoil is not reflected in the excavated assemblage from the two pit-rings and it is unlikely the two collections are directly related.

Period 2. ?Bronze Age / Prehistoric

Two linear ditches were recorded during topsoil stripping for construction (Fig. 36, D and E). The western of the two ditches (Fig. 36, D) was aligned south-east to north-west almost directly downslope. The ditch was filled with vacuous chalk rubble and chalky silt loams (Fig. 39, section I); this material, tipping in from the steeper east edge of the feature, possibly suggesting a bank originally on this side. One sherd of Black Burnished ware and a fragment of *imbrex* were recovered from the upper soil fills of the ditch. The high clay content of the ditch fills, increasing downwards through the feature point to a possible prehistoric date in the absence of any artefactual evidence.

The second linear ditch to the north-east (Fig. 36, E; Fig. 36, J) was aligned north–south on the northern fringes of the wide dry valley to the north of Conygar Hill. The ditch was filled with dark brown clayey silt from which was recovered a single sherd (1 g) of indeterminate prehistoric pottery. The alignment of this ditch conforms to the present day field boundary to the

east; however the ditch's V-profile and somewhat irregular course suggest the feature is not of recent origin and may be prehistoric. In addition, the ditch appears to be sealed below colluvium within the dry valley, a process thought to have been initiated in the area in the Bronze Age.

Period 4. Romano-British

A small quantity of Romano-British material, including a coin of Helena , was recovered from the upper fills of the pit-rings and possible Bronze Age ditch to the north of Conygar Hill (Fig. 36, B, C, and D). Six sherds of Black Burnished ware, including a rim form of 1st century BC/AD date, were recovered from a curvilinear ditch adjacent to the Wareham Road (Fig. 36, H) (*see below*).

Period 6. Medieval

A series of shallow linear ditches was recorded north of Conygar Hill and to the south of Alington Avenue. An unexcavated linear ditch, aligned north-north-east to south-south-west, was recorded to the east of pit-ring *52118* (Fig. 36, B) and two parallel, similarly aligned, ditches were recorded to the east of possible Bronze Age ditch (Fig. 36, D). Both ditches were shallow and U-profiled, no greater than 0.2 m deep, and were infilled with light grey–brown silty loams.

South of Alington Avenue two east–west ditches were recorded (Fig. 36, G) alongside four ditches aligned south-west to north-east. The most substantial was 0.46 m deep but the remaining were less than 0.12 m in depth. All the ditches were infilled with light grey–brown chalky silt loams. No finds were recovered from these features.

A curvilinear ditch was recorded to the west of Wareham Road (Fig. 36, H). This feature was recorded for 120 m mirroring the new alignment of the Wareham Road. The ditch was not continuous but had a short break of *c.* 3 m at its northern end, where the alignment changed abruptly to the west and beyond the stripped area. The ditch was V-profiled, 1.1 m wide and 0.45 m deep, and filled with light grey–brown silty loam. Four sherds (10 g) of indeterminate prehistoric pottery and six sherds (36 g) of Black Burnished ware, including a rim form of 1st century BC/AD date, were recovered.

5 Site 5. Maiden Castle Farm

This site extends from the A354 Weymouth Road to Maiden Castle Road (Fig. 40). Fieldwalking, the observation of contractors test-pits, and geophysical survey south of Maiden Castle Road (Linford and Shiel 1990) were undertaken in 1986 and 1987. A soilmark ring-ditch was subsequently examined by area excavation in spring 1987. Three further ring-ditches and a small number of other features were recorded in summer 1987 during topsoil stripping for road construction. The principal recorded features and deposits may be summarised as follows:

Period 7 Post-medieval ditch
Period 6 Medieval field ditches
Period 4 Roman finds
Period 2 Four Bronze Age ring-ditches
Period 0 Tree hollows

Period 0. Tree Hollows

Four features of natural origin were identified within two ring-ditches (Fig. 40, *52027* and *52032*). All four features were irregular in plan and profile and were no more than 0.52 m in diameter or 0.12 m deep. No artefacts were recovered from the light brown clay loam fills. These features may represent tree or root hollows.

Period 2. Bronze Age

The circular soilmark recorded to the south of Maiden Castle Road was identified during area excavation as a single apparently continuous ring-ditch (Fig. 40, 02027). The 1987 geophysical survey had failed to identify this feature and had not indicated that other ring-ditches or associated features might occur (Linford and Shiel 1990). The south-western half of ring-ditch 02027 and areas to the north-west and south-east were examined during area excavation (Fig. 40). Subsequent topsoil stripping during construction provided the opportunity to examine a further quarter of this ring-ditch and also revealed three further ring-ditches (Fig. 40) previously unrecorded as soilmarks or identified by geophysical survey.

The four ring-ditches formed a linear, north-west to south-east alignment, all above the 70 m OD contour (Fig. 40, A). The ditches were no more than 30 m apart, while a projection of rings *52045* and *52034* suggests they conjoined. The dimensions of these four features is provided below. The complete plan of ditch *52032* was recorded and this consisted of an irregular, semicircular feature. The shallowness of this ditch, probably as a result of erosion, suggests that it originally formed a complete circuit. The profile and infilling of this ditch differs from the other three rings (Fig. 41) and suggests a different function or form. The profile and infilling of the other ring-ditches was broadly similar (Fig. 41). The basal fills consisted of compact chalk rubble with occasional lenses of silty clay loam, sealed below flinty clay loams. There was no indication of internal or external mounds or banks, while some of the chalk rubble was probably eroded from the ditch sides. The presence of an internal mound to ring *02027* was suggested by a slight, 0.2 m, rise in the level of chalk bedrock within the ring-ditch, suggesting protection from erosion by mound material. No internal features were identified except for the four root hollows described above.

Ring-ditch	Int. diam. (m)	Ext. diam. (m)	Max. width (m)	Max. depth (m)
02027	22.25	25.25	1.80	0.60
52032	10.00	10.90	0.72	0.10
52034	13.00	16.50	2.10	0.60
52045	10.00	>13.00	1.30	0.45

With the exception of struck flint, material recovered from the ring-ditches was scarce. Three sherds of prehistoric pottery of indeterminate date, but possibly later prehistoric, were recovered from the upper soil fills of ring-ditch *52045*, with 29 sherds of Roman pottery recovered from the upper soil fills of *02027*. The quantity of struck flint from the upper soil fills of ring-ditch *02027* comprised the second largest excavated assemblage recovered from the By-pass (Fig. 79, 19–29). Overall the nature of the assemblage suggests a Middle–Late Bronze Age date and that it represents discarded knapping waste. Land snails from ring-ditches *02027*, *52034*, and *52045* suggest they were all constructed in a very open and intensively arable landscape.

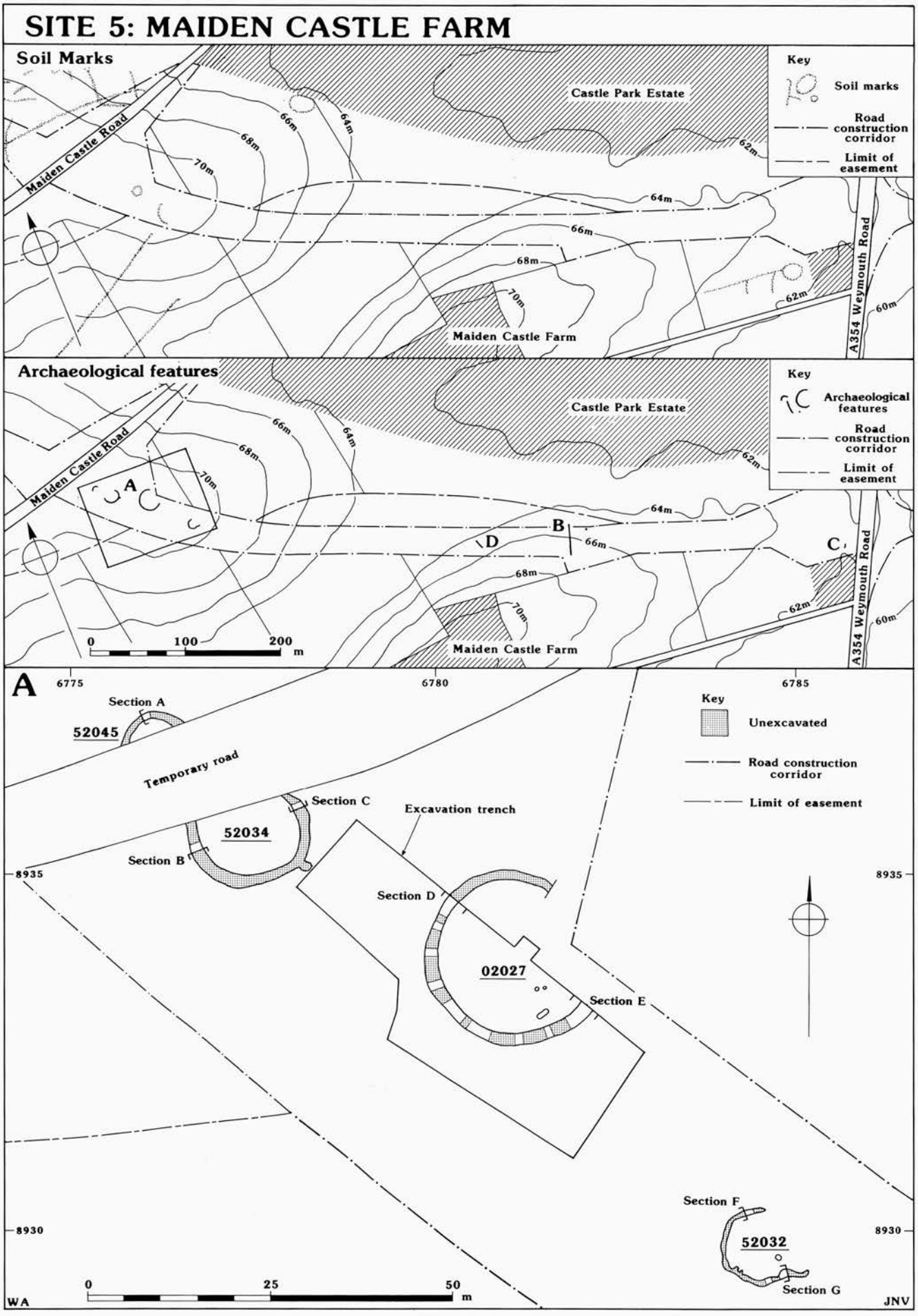


Figure 40 Maiden Castle Farm: trench location and archaeological features

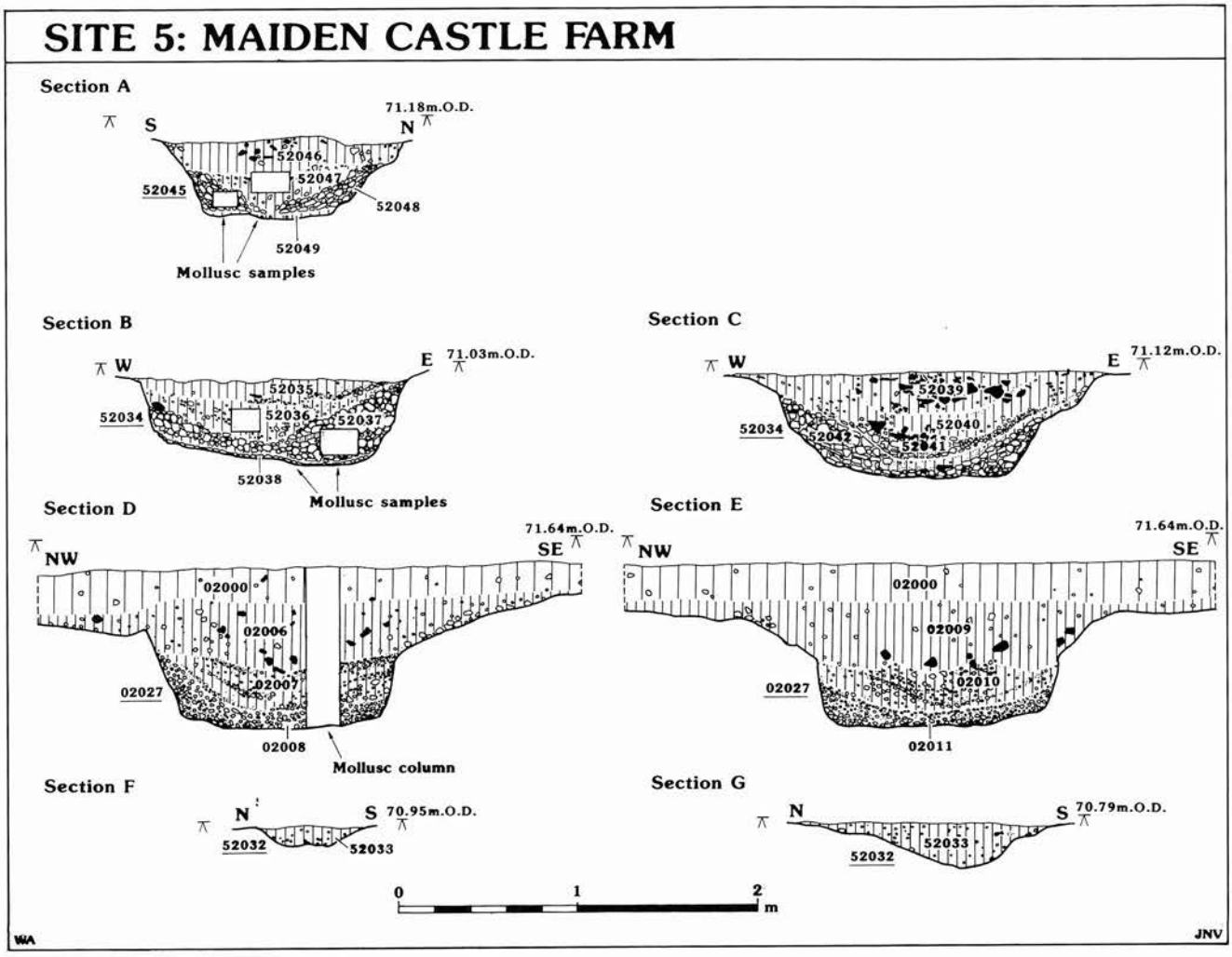


Figure 41 Maiden Castle Farm: ring-ditch sections

In the absence of other evidence these four ring-ditches probably represent the remnants of destroyed barrows. No internal features survived and, presuming all four rings were furnished with internal mounds, these have been entirely removed. The ring-ditches form a linear cemetery sited on a low spur, around the 71 m OD contour, projecting south-eastwards between two dry valleys. A Bronze Age date for the construction of these barrows is suggested by the quantities of struck flint in the upper fills of the rings. All were built and infilled in a very open, arable landscape. The quantity of Roman material, also in the upper fills, suggests that the ring-ditches may not have been completely infilled by this time, and that the complete levelling of the barrow cemetery may not have occurred until at least this date. However the large quantity of flint debitage in the upper soil fills and the land snail evidence do point to the majority of the ring-ditches being infilled during prehistory and probably the Bronze Age.

Period 4. Romano-British

Twenty-nine sherds, including one minute sherd of 1st century AD samian, were recovered from the upper soil fills of ring-ditch *52027*.

Period 6. Medieval

Two linear ditches were recorded to the north-east and east of Maiden Castle Farm (Fig. 40, B and C). Ditch B was aligned almost north to south and consisted of a V-profiled ditch, 1.7 m wide and 0.56 m deep. The chalky, light silty loam ditch fill contained one fragment of possible Romano-British tile. Feature C, 0.63 m wide and 0.15 m deep, was filled with very chalky, light silty loam; no artefacts were recovered. The ditch was aligned north-east to south-west, parallel to Weymouth Road. Both features may represent field boundary ditches, the surviving elements of a system of strip fields aligned approximately parallel to Weymouth Road to the east.

Period 7. Post-medieval

One further feature was identified (Fig. 40, D). This discontinuous ditch feature, no more than 10 m long, was aligned north-west to south-east; the northern extent of the feature was unclear where it merged with colluvium in the valley floor. The ditch, 0.4 m wide and 0.3 m deep, was U-profiled and filled with mid-brown flinty clay loam. Three sherds of 17th century pottery and two fragments of ceramic tile were recovered.

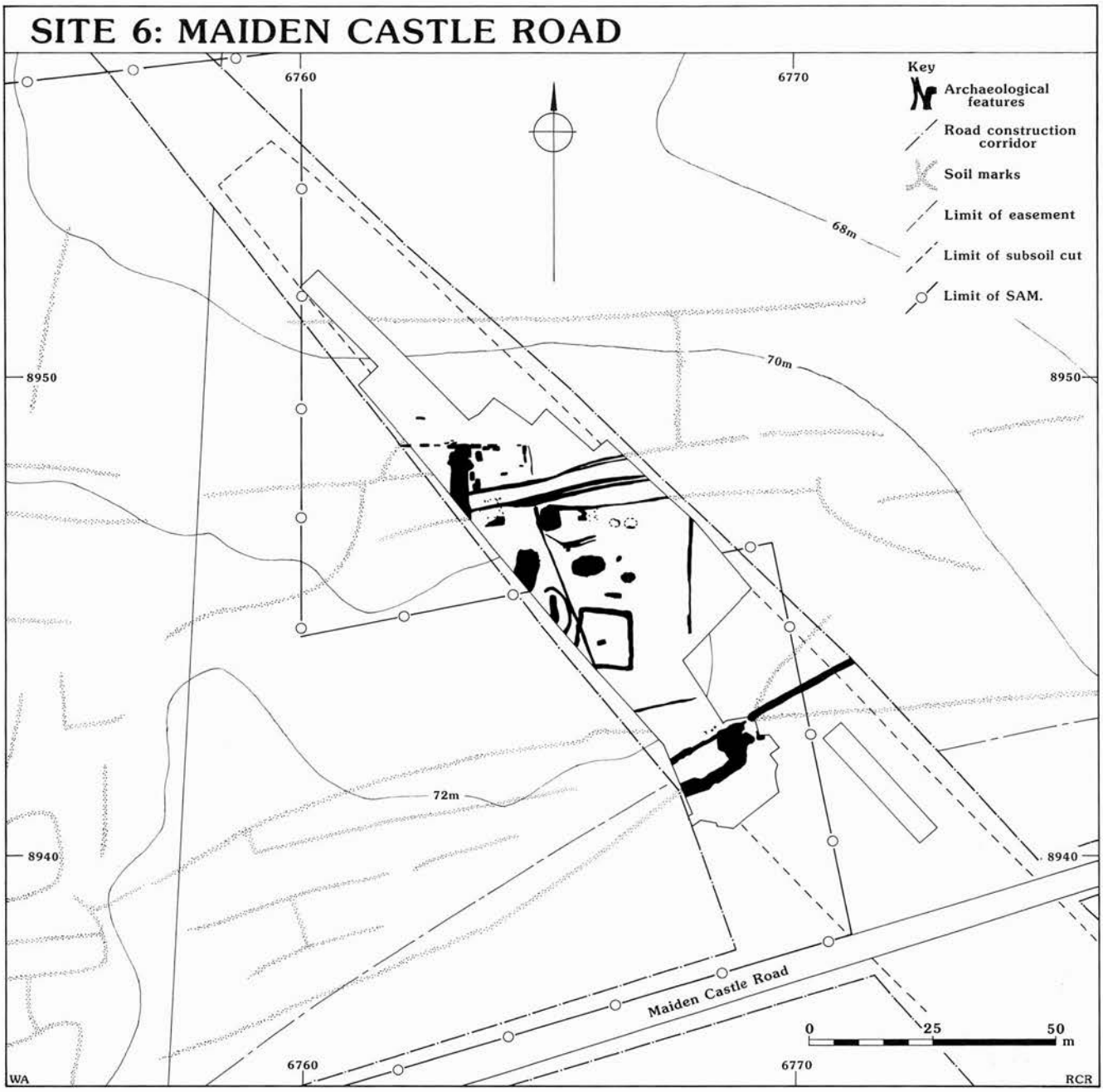


Figure 42 Maiden Castle Road: trench location and archaeological features

6 Site 6: Maiden Castle Road

This site, immediately north of Maiden Castle Road, crosses the east end of an extended soilmark complex, a Scheduled Monument (Fig. 42). Fieldwalking, geophysical survey (Linford and Shiel 1990), and trial excavation in 1986 and 1987 indicated a high density of archaeological features associated primarily with a Romano-British settlement and cemetery. In summer 1987 an area of 0.27 ha was machine stripped and excavated prior to road construction. A small number of additional features were subsequently examined during earthmoving for road construction. The principal recorded features and deposits may be summarised as:

Period 6 Medieval field ditches
Period 4 Roman trackway, settlement and cemetery
Period 1/2 ?Neolithic and Bronze Age quarries
Period 0 Tree hollows

Period 0. Natural Features

The Chalk bedrock surface was weathered and degraded, and was a dirty, off-white, almost yellowish, colour. Eight features, comprising one 'solution' feature and seven root or tree-holes, were recorded. The best preserved tree-hole (Fig. 40, *02491*) was sampled for soil and mollusc analyses. This suggested the tree-hole fills comprised the subsoil for acid, clayey, argillic brown earths. The mollusc analysis indicates an open country environment rather than a wood or shrubby environment.

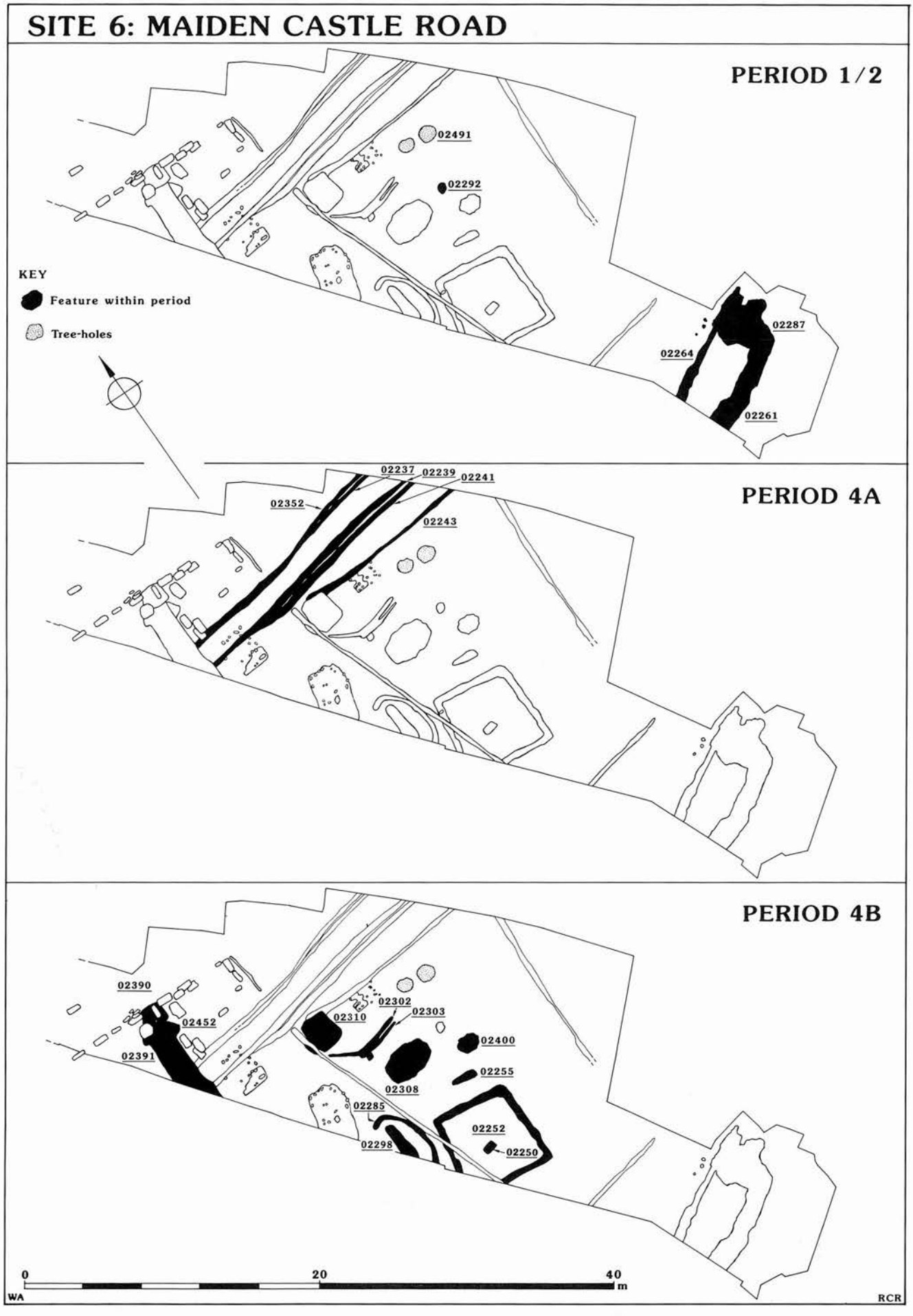


Figure 43 Maiden Castle Road: Periods 1/2 (Neolithic/Bronze Age) and 4A–B (earlier Romano-British)

Period 1/2. Neolithic and Bronze Age

Eight features were earlier prehistoric in date (Fig. 43). All were shallow features containing a small number of abraded sherds of earlier prehistoric pottery with small quantities of intrusive Romano-British material. The earlier Neolithic material was recovered primarily from the quarry scoops and adjacent features to the south of the site, while the Bronze Age or later pottery was from pit *02292* in the centre of the site. Two further sherds of indeterminate prehistoric pottery were residual in Roman contexts.

Quarry *02287* was an irregular feature, *c.* 8 m in diameter, comprising a series of intercutting hollows (Fig. 45), no greater than 0.7 m deep. No stratigraphic relationships could be discerned between these hollows and they were broadly contemporaneous. Two linear features (Fig. 45, *02261* and *02264*) extended from the west of quarry *02287*. Both consisted of shallow, no greater than 0.4 m deep, irregular, intercutting scoops, rather than deliberate ditch features and were part of the quarry complex. One further linear feature was identified to the east during road construction (Fig. 42) and may be comparable.

The base of these features was filled with angular chalk rubble in a brown silty matrix. Five sherds of flint-tempered earlier Neolithic pottery and four indeterminate prehistoric sherds (including Fig. 65, 29), were recovered from these fills in quarry *02287*, with four sherds (11 g) of intrusive Black Burnished ware. The upper fills of all these features consisted of pale brown clayey–silt loams and contained ten sherds of late 3rd–4th century Black Burnished ware and five fragments (2 g) of intrusive post-medieval glass. Three antler fragments and four sherds of Black Burnished ware were recovered from linear features *02261* and *02264*. Snail samples from the lower and upper fills of quarry *02287* indicate an open environment and no significant environmental change during the infilling of the feature.

Three additional features were recorded adjacent to these quarries. They consisted of small, shallow scoops *02257*, *02259*, and *02288* (Fig. 44). All were distinguishable by their pale brown clayey loam fills, comparable with the quarry features. Two sherds of earlier Neolithic pottery including a fragment from a cup or small bowl (Fig. 65, 30) were recovered from *02257* with a small quantity of struck flint from *02259*.

The majority of these features probably represent quarries for the extraction of flint, or possibly chalk for marling. Flint nodules occur in the Chalk, singularly and in bands, and this may partly be reflected in the irregular nature of these features. The few worn sherds of earlier Neolithic pottery from the basal chalk fills of the large quarry features provide a *terminus post quem* for their construction. If the Romano-British material in the upper soil fills indicates the quarries survived as low earthworks until this date, it must be considered unlikely that such shallow features were constructed millennia before their final infilling. The high clay content of the quarry fills suggests a prehistoric date for these features.

Three sherds of Bronze Age or later prehistoric pottery were recovered from pit *02292* in the centre of the site (Fig. 43), with two sherds (40 g) of gabbroic ware and two sherds (6 g) of Black Burnished ware. The fills of this feature had a high clay content and a prehistoric date is suggested.

Period 4. Romano-British

Romano-British features are assigned to three phases within this Period (Figs 43 and 48, 4A, 4B, and 4C). These phases are broad divisions into earlier (Periods 4A and 4B) and later (Period 4C) Romano-British activity, although pottery from the site spans the entire Roman period and may extend into the post-Roman period.

Period 4A. The Ditched Trackway

A ditched trackway was probably the earliest Romano-British feature (Fig. 43). The trackway was aligned east–west, parallel to the contours of the gentle north-facing slope. It was defined by four shallow, curvilinear, U-profiled ditches, no greater than 0.5 m deep, with *02237* and *02239* representing a recutting of ditches *02241* and *02352*. To the east the recut ditches reduced the width of the track from 5 m to 3 m. At its narrowest, the track was 2.2 m wide. There were no surfaces or metalling to the track and snail samples from the ditch fills indicate fairly stable, short-turfed, grassland with, in some cases, localised areas of longer grass in the ditches or on the trackway edge. A fifth ditch, *02243*, to the south of the trackway, was broadly comparable in alignment and profile and may be contemporaneous and associated. The continuation of the trackway to the west and east of the excavation is suggested by the alignment of soilmarks (Fig. 42).

Material from the earliest trackway ditches consisted of Black Burnished ware with a date range of 1st century BC to mid 2nd century AD. A fragment of prismatic glass bottle, late 1st–early 3rd century in date, was also recovered. A comparable date range was identified for the pottery from the recut ditches and a probable 2nd century date for the infill of these features is suggested. The trackway was cut by a linear quarrying feature (Fig. 43, Period 4B, *02391*) from which predominantly 2nd century AD material was recovered. Ditch *02243* contained a similar date range of material, including an abraded sherd of possibly pre-Flavian samian (Fig. 69, 6). A single sherd of Oxfordshire red-slip ware may be intrusive.

Period 4B. Earlier Romano-British features

Features in this Period (Fig. 43) represent those from which predominantly 2nd and 3rd century material was recovered. Some of these features post-dated the infill of the Period 4A trackway ditches or were cut by the Period 4C linear boundary ditch *02277*, which was contemporary with the late Roman cemetery. The features of this phase represent a diverse range of activities. Few were clearly contemporaneous and may represent activity perhaps over two centuries.

Quarrying features and pits

Five features were chalk or possibly flint quarries. Pit *02308* consisted of an irregular hollow, no greater than 6.75 m long and 0.76 m deep. The base of the hollow was filled with chalk rubble in a light brown soil matrix. The upper fills were darker and more loamy in texture and may result from the deliberate dumping of refuse. The majority of finds were recovered from the upper fills, although a sherd of 2nd century samian (Fig. 69, 8) and a body fragment from a deep blue glass vessel, probably of 1st century AD date, were recovered from the chalky fills. The upper soil fills contained predominantly 2nd–3rd century pottery, including a rim from a greyware vessel (Fig. 72, 38), with an iron lift key and an unfinished object (Fig. 74, 3 and 6).

Pits *02255* and *02400* to the south-east were irregular and uneven features. Both were filled with loamy chalk rubble below darker loamy soils. The pottery from both was highly abraded, with only plain body sherds from *02400* and forms generally of 1st century AD date from *02255*, including a sherd from a 1st century AD samian vessel.

Pit *02391* was a wide, shallow, elongated feature, no greater than 0.36m deep, with an even base and regular profile. The north end of the feature was unclear as it was cut by pit *02390*, described below, and the Period 4C pit *02387*. The feature cut across the Period 4A trackway and a shallow scoop *02452* which may represent an earlier quarry feature. Pit *02391* was filled with chalky loams. The pottery from the pit fills consisted of forms ranging from 1st century BC to early 3rd century. With the exception of four sherds (13 g) of New Forest red slip ware, the majority were 2nd century in date. An

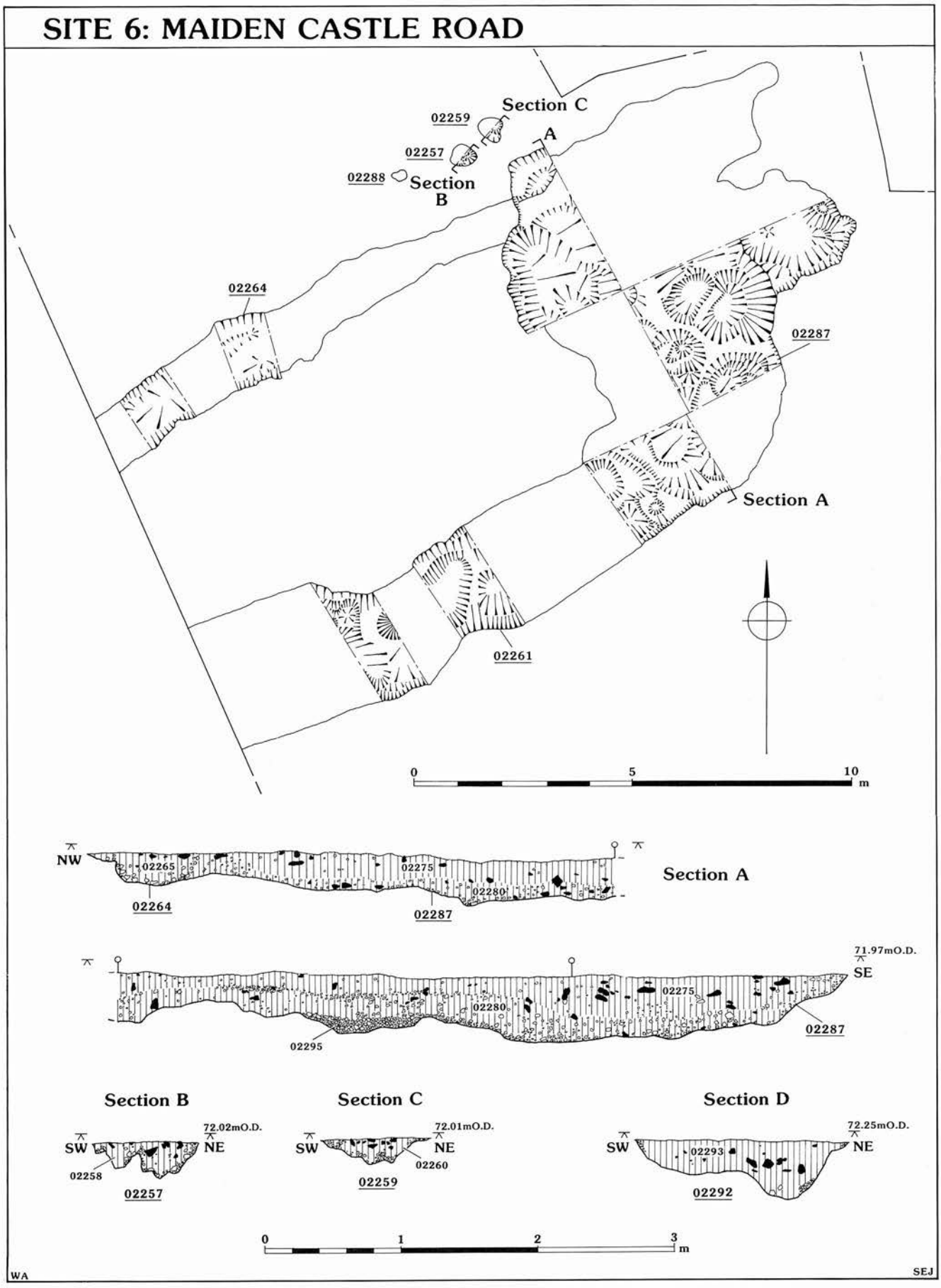


Figure 44 Maiden Castle Road: plan and sections of selected prehistoric features

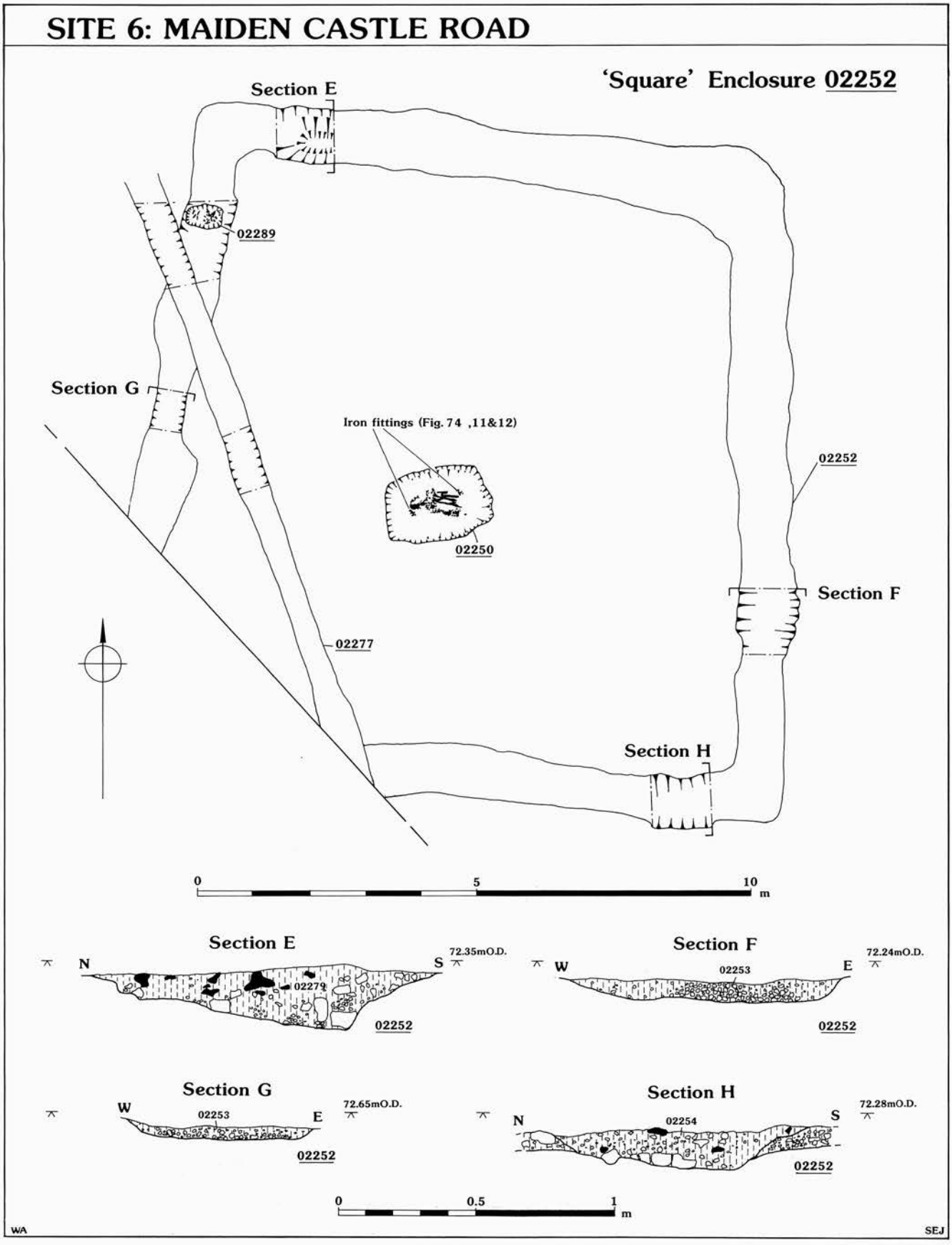


Figure 45 Maiden Castle Road: square enclosure 02252

Figure 46 Maiden Castle Road: square enclosure 02252 and central grave 02250 before excavation. Note late Roman ditch 02277 cutting across enclosure

iron knife and a penannular brooch (Fig. 74, 2 and 8) and a small fragment of Roman window glass were also recovered.

Pit *02390*, at the north end of and cutting pit *02391*, was square in plan, 0.86 m deep, with steep sloping sides and a flat base. The base of the pit was filled with loose chalk rubble, below a layer of flint nodules and undressed limestone blocks. The limestone blocks may have been associated with a structure at ground level around pit *02390*, whose function was undetermined. The stone may have been dumped as surplus to requirements for another structure somewhere on the site. The upper fills consisted of chalky loams indicating a gradual infilling. Pottery from these fills ranged from 1st–early 3rd century in date. The feature cut pit *02391* and was cut by two graves, *02217* and *02389*, of the Period 4C late Roman cemetery (Fig. 49), although neither grave was dated by associated material.

The 'square' enclosure 02252 and central burial 02250

This feature consisted of a near-square, ditched enclosure, at least 10.5 m wide internally (Figs 43, 45, 46). The enclosure ditch was no more than 0.2 m deep and was generally less than 0.1 m deep with an uneven base. The ditch was filled with mixed, loamy chalk rubble. Six sherds of Black Burnished ware were recovered from the ditch fills. A shallow grave *02289* was cut into the west ditch and contained fragments of an infant and an adult.

A rectangular grave occurred near central to the enclosure. It was aligned almost east–west, but was not parallel to the enclosure ditch. The grave was 1.9 m long, 1.35 m wide and no more than 0.35 m deep. The edges were steeply sloping and the base was uneven. Centrally placed within the grave, but with plenty of room to spare, was the flexed skeleton of an adult of undetermined sex, with head to the west. Above the head and below the feet were two iron strips (*see* Fig. 45) which may be coffin fittings, although it is unclear how they may have been attached to a wooden coffin.

The date of the ditched enclosure and the central burial cannot be determined from the excavated finds. The enclosure was respected by the earlier Romano-British features, and was cut across by the Period 4C ditch *02277*, which was contemporary with the late Roman cemetery in the north of the site. On this evidence, an earlier Romano-British date is suggested. The shallow enclosure ditches probably defined the burial area, rather than acted as quarries for a bank or mound.

Semi-cellared building 02310

Structure *02310* (Fig. 47) was rectangular in plan, 5 m long and 4 m wide. The feature had steep, sloping sides, with a shallow ledge, possibly for cill beams, around the upper edges. The feature was no more than 0.75 m deep. The floor was smooth and worn and sloped gently towards the north-east corner. Here a narrow channel, possibly a sump, comprised the deepest part of the feature, although a block of unexcavated chalk bedrock disrupted the symmetry of the structure. A very thin, 0.04 m, and intermittent layer of fine silt, with occasional patches of dark brown fired clay, lined the base of the structure and probably represents a trampled deposit associated with the use of the building. This was sealed by a generally undifferentiated layer of chalky, light brown, silty loams and probably represents a gradual infill. Few finds were recovered from these deposits, with six sherds of Black Burnished ware from the trampled layer and with predominantly 2nd–3rd century

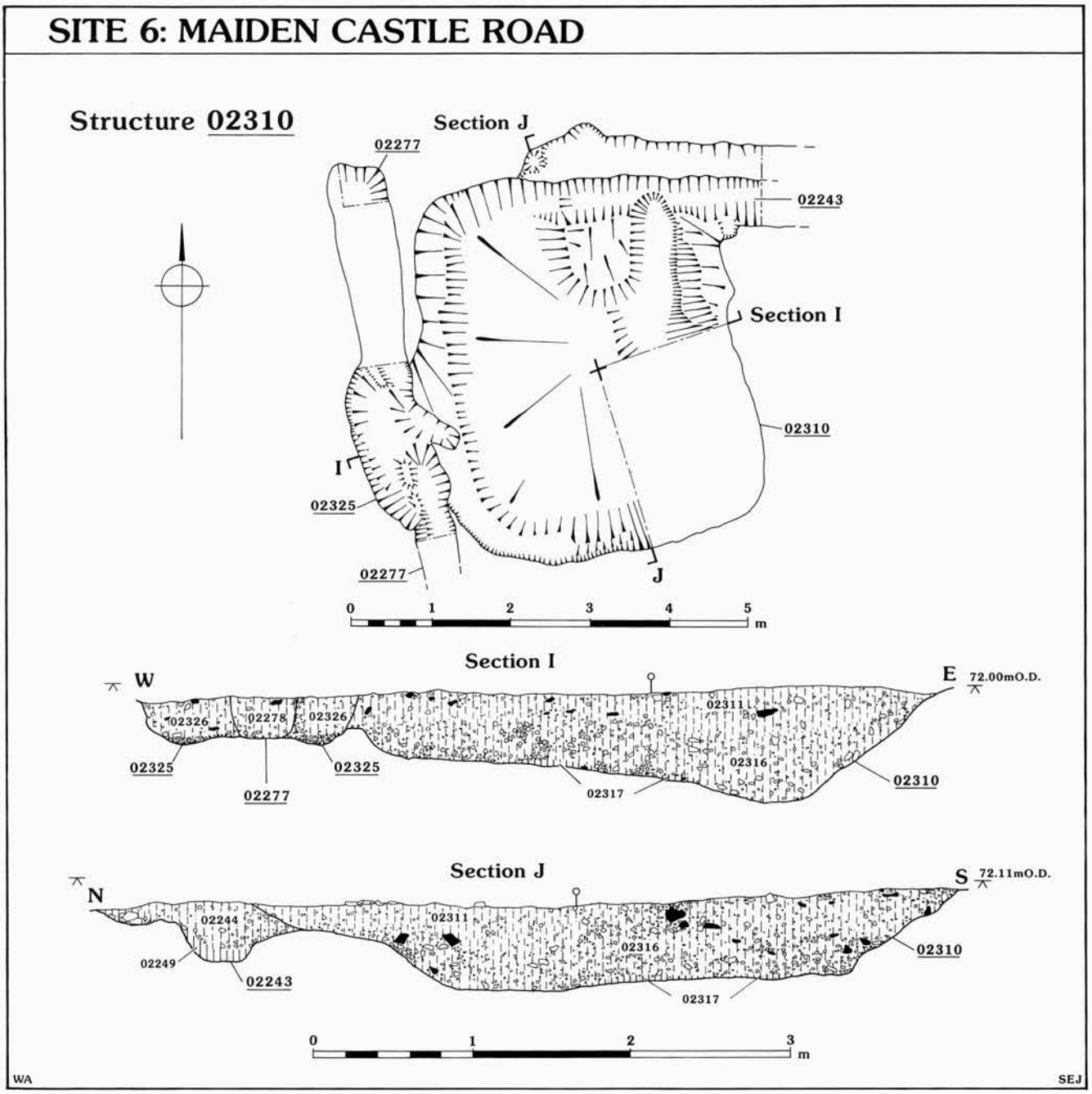


Figure 47 Maiden Castle Road: structure 02310

pottery from the upper loamy deposits. This included three sherds from a possible North Gaulish colour-coated ware beaker (Fig. 72, 39) and a sherd of Rhenish Ware. A single piece (1 g) of post-medieval glass is probably intrusive. The structure cut the Period 4A ditch *02243*, probably associated with the early trackway, and was cut by the Period 4C ditch *02277*.

Curvilinear features

Curvilinear feature *02285* (Fig. 43) extended beyond the west edge of the excavation. This very shallow feature defined a possibly oval area, *c.* 9 m in diameter. The termination of the feature to the north is probably the result of truncation rather than indicating an intentionally discontinuous feature. Fifteen sherds of Black Burnished ware were recovered from the chalky ditch fills, which were cut by the Period 4C ditch *02277*. The internal pit or ditch *02298* continued beyond the west limit of the excavation. The small and abraded quantity of Black Burnished ware from pit or ditch *02298* contained some 1st–2nd century forms. The function of both features is unknown.

Two further curvilinear ditches, *02302* and *02303* (Fig. 43) were also recorded. These shallow features were truncated to the west and east and their relationship to other structures and to each other is unclear, although one probably represents a recutting of the other ditch. The ditches enclosed an undefined area, possibly surrounding the semi-cellared building *02310*, although this cannot be proven on stratigraphic or finds evidence. Four sherds of Black Burnished ware were recovered from the two features.

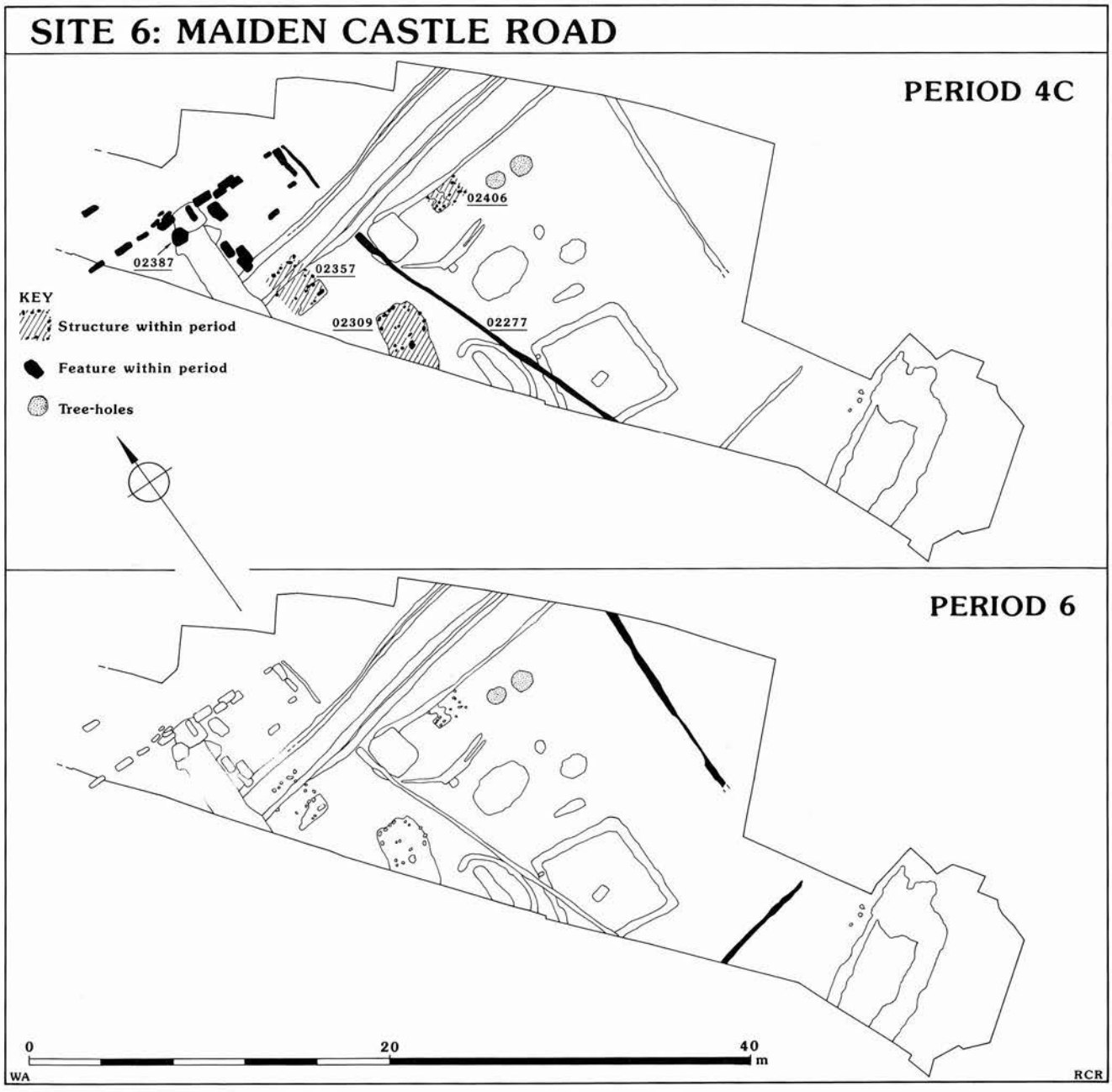


Figure 48 Maiden Castle Road: Period 4C (later Romano-British) and Period 6 (medieval)

Period 4C. Later Romano-British Features

One pit, an inhumation cemetery and associated ditches, and three buildings were ascribed to this period (Fig. 48). All were associated with pottery dating from the late 3rd century onwards, except for structure *02406* and ditch *02277*, which can be ascribed a late date on stratigraphic grounds.

Pit *02387*

Pit *02387* (Fig. 49) was rectangular, 2 m long, 1.5 m wide, and 3 m deep. The upper edges had been weathered and were rounded and sloping. The lower portions were vertical-sided with a flat base. The lower part of the pit was filled with loamy loose chalk rubbles and an ashy layer representing rapid and deliberate filling. A clean chalk rubble layer sealed these deposits and was sealed below light chalky loams representing the gradual settling of the pit fills over time.

The majority of the finds from this pit were recovered from the deliberate chalk and ash fills. These consisted of pottery predominantly of late 3rd–4th century date and included a complete jar (Fig. 72, 40) and sherds of New Forest colour-coated ware. A large proportion of the animal bone from the site was recovered from this feature. This material was in good condition and included a large number of neonatal dog bones, possibly representing the deliberate disposal of an unwanted litter.

The pit cut the Period 4B ?quarry pit *02391*, infilled by the end of the 2nd century, and was deliberately infilled after the 3rd century. As the pit probably represents a storage feature, it is unlikely to be contemporary with the inhumation cemetery (*see below*). The encroachment of the cemetery area may have caused its abandonment and deliberate infilling.

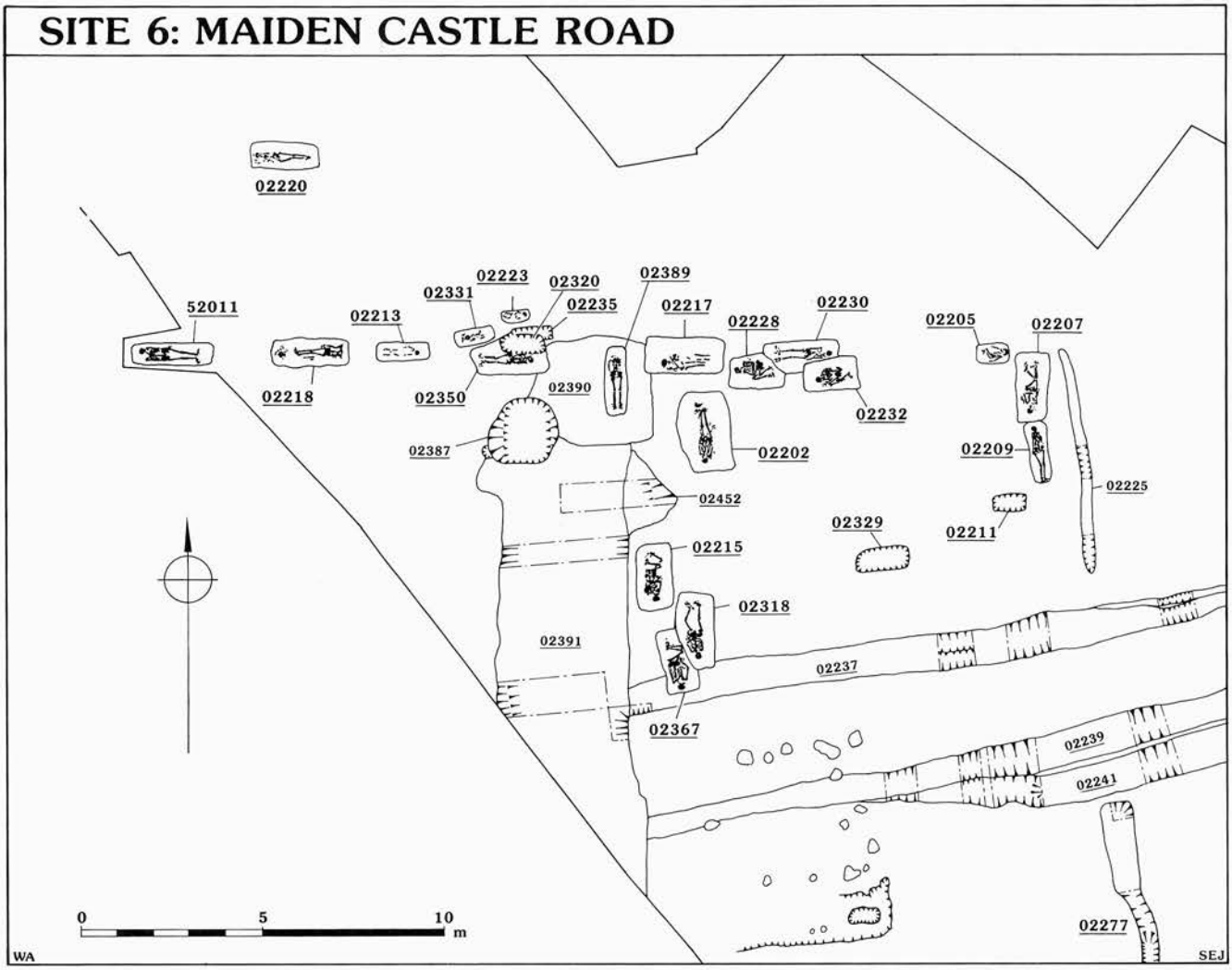


Figure 49 Maiden Castle Road: late Roman inhumation cemetery

The inhumation cemetery

Twenty-three graves or possible graves were excavated (Fig. 49). Twenty-two skeletons were recovered from 19 graves; four features contained no skeletons and are suggested as unoccupied or uncompleted graves. These graves and skeletons are summarised here and on Figure 49 and Table 2 and described in the report on the human remains.

The cemetery area

The 23 graves of the cemetery were the most northern group of features on the site. The east of the cemetery was delimited by a shallow ditch *02225*, 0.1 m deep. To the north, an arrangement of graves on a single east–west alignment, with the exception of the outlying grave *02220*, implies a boundary, for example a low bank or hedge, that does not survive as a chalk-cut feature. This linear arrangement continued beyond the west limit of the excavations. To the south of the cemetery, no graves encroached over the earlier, Period 4A, ditched trackway. Grave *02367* cut the edge of the northernmost trackway ditch, probably infilled by the 2nd century, but otherwise no graves lay within the trackway and this feature delimited the southern edge of the cemetery area. The cemetery, therefore, seems to be set within a defined plot attached to an earlier, but still extant, ditched trackway.

Within the cemetery, the graves were aligned either east–west or north–south, the majority being set out in the east–west linear arrangement marking the northern limit of the cemetery. The north–south graves were laid out parallel to the ditch defining the east of the cemetery or to the earlier pit features *02391* and *02390*. An exception is grave *02389*, which was cut into the upper fills of pit *02390*. The exceptional shallowness of this grave, however, suggests the grave diggers were avoiding disturbing what they thought was a possible earlier grave. The graves of the cemetery were stratigraphically the latest features. The close positioning of graves suggested an ordered sequence of burial, within a defined and planned cemetery area.

The burials

The 22 skeletons represent 9 female adults, 6 male adults, 1 adult of unknown sex, and 6 children. Three graves contained two skeletons each; *02202* an adult male and female, *02217* two children of 4–5 and 9–14 years, and *02218* an adult female and one of undetermined sex. In all three graves, the primary burial had been disturbed by the insertion of the secondary burial. These may represent interments from the same family group.

At least 15 skeletons from 13 graves were buried in wooden coffins. This has been calculated on the presence of a minimum of ten nails and/or coffin fittings within the grave. Coffin stains were not always recognised during excavation and because coffins could have been constructed by a variety of jointing

Figure 50 Maiden Castle Road: crouched adult female inhumation in grave 02228. Note the Black Burnished ware beaker (Fig. 72, 43) and small jar, possibly New Forest or Oxfordshire ware (now lost) to the right of the head. Note also the position of nails to the right and above the body

Figure 51 Maiden Castle Road: adult female inhumation in grave 02318 with bracelet on left wrist, finger ring with glass intaglio on right hand, and large iron nail/pin beside left hip (Fig. 73, 5 and 6; Fig. 74, 15)

methods, no skeleton within the cemetery can conclusively be shown not to have been buried in a wooden coffin. Two 'coffined' burials, in graves *02202* and *02220*, were sealed below limestone slabs. That in grave *02202* was below several large slabs which were thought on excavation to have originally been 'just one large slab'. These slabs had rested on a shallow ledge around the top of the grave. The wooden coffin in grave *02220* had a single slab placed at its west end, over the head and body of the skeleton.

The majority of the skeletons (19) were supine and in an extended or flexed posture. Their arms were crossed either over the stomach or pelvis, or they were by their sides. Of the three remaining skeletons, two, from graves *02228* (Fig. 50) and *02232*, were in a crouched posture and one, from grave *02218* (Fig. 52), was disarticulated, probably the result of disturbance from the insertion of a secondary burial into the grave. The two crouched skeletons need be no earlier (or later) than the other burials of the cemetery on stratigraphic or finds evidence.

Grave goods

Seven skeletons were accompanied by grave goods, material presumed to have been deliberately deposited with the skeleton or in the coffin. Two of these graves, and three further graves, also had material within the grave fill that could not be shown clearly to be associated with the skeleton or coffin, but may represent a disturbed grave good. All this material is listed by grave in Table 2 as are hobnails, which were found at the feet of seven skeletons.

Date of the graves and the cemetery

Three graves can be shown from grave goods or finds in the grave fill to be no earlier than later 4th century in date. The New Forest red-slipped ware bowl (Fig. 72, 44) from grave *02350* was produced c. AD 345–380. Two conjoining fragments of the same vessel were also recovered from graves *02220* and *02320*. In addition a further four graves were probably also 4th century in date. Grave *02205* contained a rim sherd of an Oxfordshire Young type C45 vessel, produced *c.* 270–400+. Grave *02228* (Fig. 50) contained grave goods of a Black Burnished ware beaker (Fig. 72, 43) and the grave fill contained a rim of a dropped flange bowl dating to the late 3rd–early 5th century AD. This grave also contained a possible New Forest or Oxfordshire ware jar, unfortunately now lost. This grave fill was cut by grave *02230*, which was cut by grave *02232*.

Five further graves were at least late Romano-British (post-2nd century) in date either on stratigraphic grounds by

Figure 52 Maiden Castle Road: decapitated adult female inhumation in grave 02218. Note also the disarticulated backbone. Other disarticulated bone from a second adult of undetermined sex occurs within the grave

Table 2 Details of burials in the late Roman inhumation cemetery at Maiden Castle Road

Grave	Skele.	Sex	Age	Grave goods	?Grave goods	Min. No. hobnails
02202	SF16	M	35–40	Cu alloy finger ring (Fig. 73, 4)	Bones of immature chicken	–
	SF19	?F	25–35		Fe leaf-shaped object (Fig. 74, 16)	–
02205	SF23	?	1–2		Perforated chalk object (Fig. 77, 6)	–
02207	SF22	F	Adult		Cu alloy strip brooch (Fig. 73, 3)	–
02220	SF28	?F	Adult	2 cu alloy bracelets on arms/wrists (Fig. 73, 7 & 8)	Fe buckle (Fig. 74, 17)	43
02228	SF97	F	Adult	Black Burnished ware Type 10 beaker (Fig. 72, 43) & possible Oxfordshire ware vessel (lost) adjacent to head		27
02230	SF98	F	17–25	Skull, mandibles, axis & atlas of juvenile sheep		36
02318	SF90	F	18–20	Cu alloy bracelet (Fig. 73, 6) on l. arm/wrist. Cu alloy finger ring with glass intaglio (Fig. 73, 5) on r. hand. Large Fe nail with Cu alloy covered head (Fig. 74, 15) beside l. hip		51
02350	SF72	F	18–19	New Forest red-slipped ware bowl (Fig. 72, 44) above head		71
02367	SF122	M	Adult	Lower forelimb of juvenile sheep between r. arm & stomach		66
02389	SF133	M	Adult		Cu alloy Hod Hill brooch (Fig. 73, 2). 2 pierced bone objects (Fig. 75, 8 & 9)	–
52011	SF1400	M	25–35			112

cutting the fills of earlier features, ie. *02217*, *02318*, and *02389*, or because of personal objects attached to the skeleton, ie, *02202* and *02318* (Fig. 51). None of the remaining graves can be dated by artefacts or stratigraphy. However, the comparable extended and supine posture of the skeletons, the presence of hobnails at the feet and the use of coffins in these graves makes it unlikely that any were significantly earlier or later in date. The graves within the cemetery area, therefore, were most likely to be late Roman and probably late 3rd or 4th century in date and all could be later 4th century.

Ditch 02277

Ditch *02277* (Fig. 48) occurred to the south of the Period 4A ditched trackway, opposite ditch *02225*, which defined the east limit of the cemetery area. Both respected the trackway, both were aligned approximately north–south, and both delimited plots attached respectively to the north and south of the trackway. Both may therefore represent a single phase of boundary ditch. The ditch defining the east limit of the cemetery was probably 4th century in date (*see above*) and ditch *02277* may, therefore, be of similar date. There were few finds from the ditch but these included Black Burnished ware of 2nd–3rd century date and an iron key stem (Fig. 74, 5).

The respect for the trackway by both ditches is curious as this feature probably failed to function as such when the Period 4B ?quarry pit *02391* was cut across it sometime in the 2nd century. However, since not only do these late Roman ditches, but also the graves of the cemetery respect this feature, it seems likely that it continued to act as a boundary feature separating settlement from cemetery.

Buildings *02309, 02357* and *02406*

Three, timber, rectangular buildings were set out to the south of the cemetery. Two buildings, *02309* and *02357* to the west and one, *02406*, to the east of ditch *02277* (Figs 48 and 53).

Structure *02309*

This rectangular structure (Fig. 53) was 5 m wide and at least 8.5 m long, its southern end lying beyond the limits of the excavation. It consisted of a shallow terrace, no greater than 0.12 m deep, cut into the gentle north-facing slope to create a level area. The west and east edges, and probably its southern edge, were defined by the near-vertical cut of the terrace. Timber beams may have been set against these edges to support a timber frame for the west, east, and south walls. The northern end of the building was defined by a semi-circular arrangement of 11 post-holes. Internally the surface of the chalk bedrock was uneven and pitted, possibly suggesting a raised wooden floor. Six internal post-holes also suggest supports for internal furniture or possible partitions within the building. Near central to the structure was a flint and tile-lined pit, probably the base for a hearth. There was no indication of an entrance.

The building terrace was filled with an inconsistent spread of dark loams, with a more flinty spread towards the base of the terrace. Two hundred and ninety sherds of Black Burnished ware were recovered from these soil layers and included a large proportion of a coarse and predominantly oxidised Black Burnished ware fabric which is possibly very late Roman or even early post-Roman in date. A few sherds of Black Burnished ware were recovered from the post-holes and hearth features. A small quantity of other categories of material were recovered from these deposits, including a lump of unworked shale, eight iron nails or nail fragments, two iron sheet fragments, and two fragments from glass prismatic bottles.

Structure 02357

This rectangular building (Fig. 53) was 5.7 m long and 4.7 m wide externally. It consisted of a shallow terrace at its southern end, no greater than 0.17 m deep, cut into the gentle north-facing slope to create a level platform. A series of post-holes defined the north and east walls of the building, including a particularly large post-hole in the south-east corner. Two additional small post-holes were positioned towards the centre of the south edge of the building, although the wall here may have partly consisted of an unmortared flint wall set against the terrace edge. This was suggested by the large quantities of flint rubble infilling this southern edge of the building. A single post-hole may represent the only surviving post-hole of the west wall of the building. There was no indication of the position of an entrance.

An internal, east–west partition wall, defined by five post-holes, subdivided the building into two rooms, 3.3 x 4.0 m and 1.3 x *c.* 4 m internally. Similar to structure *02309*, the surface of the chalk bedrock within the structure was irregular and uneven, possibly suggesting a raised wooden floor. In the north-east corner of the northern room, a complete Black Burnished ware jar (Fig. 72, 41) was *in situ* set within a 0.3 m diameter hole, the rim of the vessel coinciding with the surface of the chalk bedrock. This feature is probably internal to the building, although, because of the slightly erratic line of the east wall, could conceivably be the foundation for a timber post for this wall.

The southern end of the shallow building terrace was infilled with a dense deposit of flint nodules in a loam matrix. This deposit may have derived from the collapse of a low wall on the inner edge of this terrace. Few datable artefacts, with the exception of the complete jar, were recovered from the post-holes of the building. The Black Burnished ware from the rubble layers included a large number of sherds from jars (Fig. 72, 42) in the coarse and predominantly oxidised fabric which is possibly very late Roman or even early post-Roman in date. Other material included fragments from at least one millstone.

The northern wall-line of the building encroached on the line of the earlier Period 4A ditched trackway, although no individual post-hole cut the ditch fills.

Structure 02406

This structure (Fig. 53) was the most poorly defined. It was rectangular, 4 m long and 2.5 m wide, aligned near east–west. A shallow terrace defined the west and south walls of the building, which otherwise consisted of a spread of redeposited chalk and a series of post-holes cutting this surface. The majority of these post-holes were extremely shallow and few penetrated any depth into the Chalk bedrock. A number of post-holes on the edge of the building probably acted as wall and roof supports, although the majority lay within the structure and may relate to internal partitions or furniture. None of the post-holes of this structure cut the early ditch *02243* to the north. However the soil spread infilling the structure sealed the upper fills of this ditch and suggests that at least by the time the building was abandoned, the ditch had been infilled.

A shallow spread of flint loam infilled the west of the building terrace. Few finds were recovered. The 206 sherds of Romano-British pottery recovered were of a very mixed date range although the late material was in the minority, but included a sherd of New Forest greyware 'dog-dish'. The few diagnostic sherds recovered from post-hole *02434* were of a pre-3rd century date. A pierced chalk object (Fig. 77, 7) was also recovered from this feature.

All three structures provided little secure dating evidence for their construction. The majority of datable material was recovered from the rubble layers derived from the collapse of the buildings. A late Roman date can be suggested for *02406* and *02357* on stratigraphic grounds and is supported by the presence of a complete Black Burnished ware jar (Fig. 72, 41) from a post-hole of structure *02357*. However the majority of the Black Burnished ware from the collapsed material within

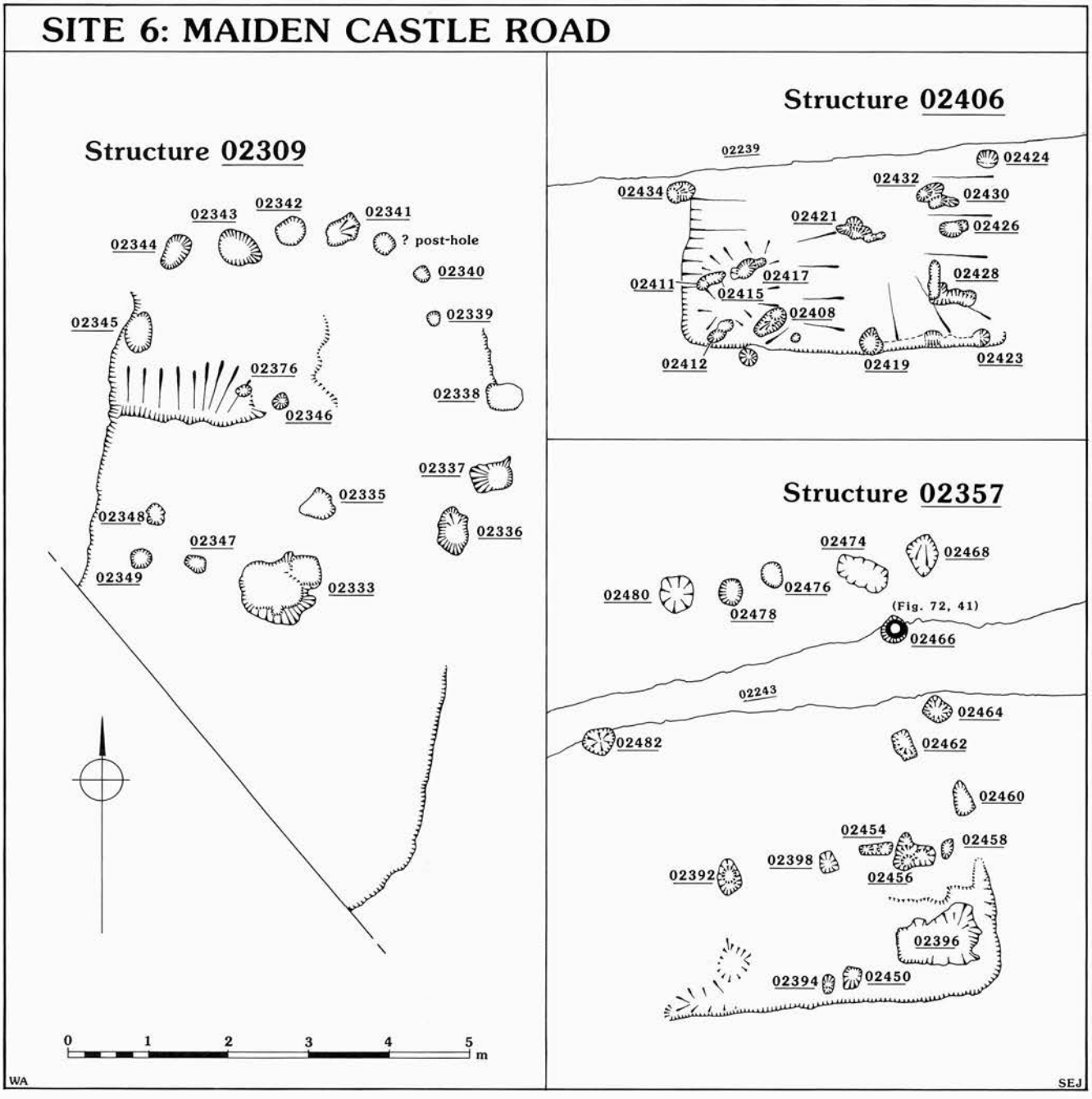


Figure 53 Maiden Castle Road: Period 4C Roman structures 02309, 02406, and 02357

the buildings can be ascribed a very late or even early post-Roman date. The preservation of such large sherds of this material, including Figure 72, 42, in these deposits suggests the very late Roman occupation of these buildings.

Period 6 and 7. Medieval and Post-Medieval

Two shallow, inconsistent field boundaries, set at right-angles, represent this period (Fig. 48). Their form and alignment separates them from the more pronounced and deeper Romano-British ditch features, although neither contained material of medieval date. Small quantities of 12th–19th century pottery were recovered from the topsoil or as intrusive material in the top of Roman features.

Maiden Castle Road: Summary

Eight prehistoric features were recorded and 19 sherds of prehistoric pottery were recovered. No features are precisely datable but both earlier Neolithic and Bronze Age sherds are present. The quarries to the south of the site were probably the earliest features and these were constructed in an already extremely open environment. They survived as low earthworks into the Roman period and it is, therefore, unlikely that the earlier Neolithic material from the lowest quarry fills is contemporary with their construction.

Early Neolithic features with which this material may have been associated either lie beyond the excavated area or have been eroded away by later activity. Although Bronze Age material is in the minority, this date for these features may be more likely with the Neolithic material as a residual element.

The quarries may have been used for the extraction of flint, in which case there was no evidence for the preliminary working of the raw material. A low quantity of highly worn and undiagnostic struck flint was recovered from all excavated features, and reflects general activity within an arable agricultural regime. The quarries may have been excavated for chalk for marling the clayey, acidic soils of the surrounding land, indicated by the high clay content of the lower quarry fills. The linear arrangement of the quarries may point to extraction along the edges of pre-existing fields defined by low earthworks or lynchets.

There is no recognisable activity from the Bronze Age to the 1st century AD. Quarry *02287* survived as an earthwork into the Roman period but neither soil nor molluscan analyses indicate an hiatus within the fills. The fills remained consistently clayey and the molluscs indicate no break to the open, intensively farmed, environment.

In the 1st century AD a ditched trackway was set out on the northern slopes of and parallel to the east–west ridge. It probably led to a focus of settlement somewhere to the west within the extensive cropmark complex on the ridge. No other features could be ascribed a 1st century date and there were no finds of pre-Conquest Late Iron Age date and no Durotrigian Black Burnished ware vessel forms present as residual material in later features. Small quantities of later 1st century AD material were recovered as a residual element from later features, including sherds of Corfe Mullen ware, two sherds of pre-Flavian samian (including Fig. 69, 6), Hod Hill type and strip brooches (Fig. 73, 2 and 3) and a fragment from a 1st century AD deep blue glass vessel.

The ditched trackway was probably grassed. The ditches were recut at least once and the feature was maintained probably beyond the 2nd century. With the exception of the ?quarry pit *02391*, the trackway and its alignment influenced the location and layout of features into the 4th century.

Sporadic activity, probably over two centuries, is represented by a series of features to the south of the trackway. One of the earliest was a square burial enclosure set on the high point of the spur at the end of the east–west ridge. The skeleton of an adult of indeterminate sex, probably in a wooden coffin, had been buried in the central grave. The enclosure was not associated with other burial features, was earlier than the late Roman cemetery, and was probably set outside and on the periphery of contemporaneous settlement.

Other earlier features occur between and with respect for the trackway and the enclosure. Activities include the sporadic excavation of pits, probably for chalk. Each, including the prehistoric quarry to the south of the site which survived as a low earthwork, was gradually and in some cases probably deliberately backfilled, with settlement rubbish. These features may lave lain within an infield or plot, attached to the trackway and defined by hedges or low banks. They were sufficiently close to settlement to warrant either deliberate backfilling, or the plots were cultivated and required regular manuring with settlement debris.

The exception is linear quarry *02391*, which slices across and with no respect for the trackway. This feature was infilled by the early 3rd century. The enduring importance of the alignment of the trackway, however, is shown by the respectful layout of the late Roman cemetery. Quarry *02391* may have been rapidly backfilled on the line of the trackway to ensure only a short disruption to traffic. The feature may have been excavated for chalk for building construction for settlement somewhere to the west. Pit *02390* was partly backfilled with limestone blocks and flint nodules, possibly surplus to building requirements.

One structure, semi-cellared building *02310*, was set against the ditched trackway, possibly within a small plot, defined by a shallow, recut ditch, *02302*, and butting onto the trackway. The floor consisted of the surface of the chalk bedrock and the wooden walls were probably set on beams around the upper edge of the building. Little domestic debris was recovered, although fragments of fired clay on the floor may have derived from a hearth. The building was abandoned and infilled by the 3rd century. The absence of contemporary buildings, the unusual design and the lack of settlement debris may indicate it served as a workshop or store and not as a dwelling. Another building may have been defined by curvilinear feature *02285*.

All these features represent sporadic activity on the periphery of settlement to the west during the 1st–3rd centuries. This is supported by the abraded, residual, and redeposited nature of much of the material recovered from these features. Small numbers of objects were also recovered including an iron knife, lift key, and penannular brooch (Fig. 74, 2, 3, and 8) and small quantities of 2nd–3rd century vessel glass.

By the late 3rd or, more likely, the 4th century settlement features, represented by domestic and/or storage buildings, and an inhumation cemetery had encroached from the west into the excavation area. Both settlement and cemetery areas were defined by plots attached to the earlier, but still influential, boundary represented by the ditches of the trackway; the settlement and cemetery occurring to the south and north respectively. These plots were marked both by shallow ditches and possibly hedges or low banks. A deep storage pit within the later cemetery area may have been deliberately abandoned and backfilled when the cemetery encroached upon it.

Three rectangular, post-built structures were set out to the south. All were of very simple construction. Two, *02309* and *02357*, with maximum floor areas of 43 m^2 and 27 m^2, consisted of shallow terraces, cut into the slight slope. Low, unmortared, flint walls or cill-beams supported a timber frame on the terrace edges and timber posts acted as wall and roof supports for the remaining walls. The roofs were probably thatched and the buildings probably had raised wooden floors. Internal subdivisions were apparent in both buildings, and *02309* also probably had a central hearth. Both may have been constructed in the late 3rd or 4th centuries and are probably contemporaneous. The quantities of large, unabraded sherds of very late Roman storage jars

in the rubble fills of these buildings point to a long occupation possibly into the early post-Roman period. The buildings, set within their own plot, may have been complementary and perhaps set within a courtyard.

Except for Roman pottery, few finds were recovered from either building. These consisted of small numbers of iron nails, ceramic building material, and three fragments from at least one Greensand millstone from *02357*. There were no personal objects or domestic equipment. Lowly status, the subsequent erosion of deposits or possibly systematic removal or robbing could explain the notable absence of these from building *02309*. The large number of Black Burnished ware jars and the quern from building *02357* may indicate it was used primarily for the preparation of foodstuffs and storage rather than as a dwelling.

Building *02406*, in the adjacent plot, was of even simpler design. Wooden posts, set in shallow post-holes, defined a maximum floor area of 10 m^2. The building was floored with redeposited chalk. A pierced chalk object (Fig. 77, 7) of unknown function was recovered. The building appears to be little more than a shed or possibly workshop and is set on the extreme outskirts of the settlement.

In the 4th century a cemetery was established to the north of, and aligned on, the northern ditch of the earlier trackway. The cemetery was set within a plot defined by the northern trackway ditch, a low bank or hedge to the north and a shallow ditch to the east. The deep pit *02387* was probably deliberately abandoned and backfilled to ensure the plot was reserved only for burial. The eastern ditch was a component of an enclosure system continuing to the south of the earlier trackway ditches and associated with the simple, timber buildings. Both cemetery and buildings are therefore probably contemporary and the former probably served the latter. Three graves can be shown to be of late 4th century date and all were probably 4th century. The burials were laid out in an ordered and planned manner. None disturbed earlier burials, unless where there was probably an intentional insertion of another family member.

Sixteen adults, of which nine were female, six male and one indeterminate, and six children were buried in the cemetery. Most of the skeletons were supine and extended, with arms crossed over stomach or pelvis. Two skeletons were in a crouched posture, but neither need be significantly earlier or later than the other graves. All were probably buried in simple wooden coffins accompanied, in seven cases, by grave goods consisting of personal ornaments or objects (Fig. 73, 4–8; Fig. 74, 15), pottery vessels (Fig. 72, 43 and 44), hobnails at the feet or joints of meat. One coffin was sealed below a substantial stone slab.

The latest graves were no earlier than the late 4th century. The settlement buildings also contained material of a very late date. The date of the abandonment of the buildings, however cannot be determined but they may have been occupied into the early post-Roman period.

After the abandonment of the settlement the site was returned to farmland up to the present day. A field system comprising shallow linear ditches was laid out across the east–west ridge and may be of medieval date. Consistent manuring of fields is indicated by pottery of 12th–19th century date recovered from the topsoil or as intrusive material in earlier features.

7 Site 7. Fordington Field

This site extends from the north limit of the Scheduled Monument at Maiden Castle Road to the trackway leading to Middle Farm (Fig. 54). Observations of contractors' test-pits and trial excavation of soilmark features in 1986 and 1987 identified a small number of features. Area excavation was not considered appropriate in spring 1987. Topsoil stripping for road construction in summer 1987 identified the continuation of known, and a small number of additional, features. The principal recorded features and deposits may be summarised as:

Period 6 Medieval field system
Period 4 Roman corndrying oven
Period 0 Tree hollows

Period 0. Tree Hollows

Nine features were recorded that were of natural origin (Fig. 54, A and B). The features consisted of irregular, shallow depressions in plan and profile, 1.9–0.48 m in diameter and 0.1–0.33 m deep. No artefacts were recovered from any feature, all of which were filled with mid-brown silty clays. One of these features was sampled for soil analysis. The similarity of these features to those recorded at Maiden Castle Road (Site 6; Period 0) suggests they may represent tree hollows.

Period 4. Romano-British Corndrying Oven

A possible corndrying oven was identified and may be Romano-British in date (Fig. 54, C). The oven was oval in plan, at least 1.25 m in length and 0.4 m deep with near-vertical sides and a flat base. The feature was filled with a mid-brown clayey loam with a smear of orange/black clay on its floor. Three small abraded sherds of Black Burnished ware were recovered.

Period 6. Medieval Field System

Five linear ditches were recorded, three aligned north–south and two east–west (Fig. 54). The most eastern ditch corresponds to a north–south soilmark and indicates this feature extends some distance to north and south. Otherwise the ditches, especially those to the east, survived intermittently. The ditches were no more than 0.45 m wide, with shallow U-profiles no more than 0.25 m deep. The features were infilled with light grey–brown silty loams with many flint and chalk inclusions. One sherd of 2nd century samian and a fragment of ceramic building material were recovered from the southern of the two east–west ditches. The ditches were field boundaries defining a series of narrow strips of irregular width, but not less than 27 m wide. One sherd of possible 14th century date and three sherds of 16th century date were recovered from the topsoil.

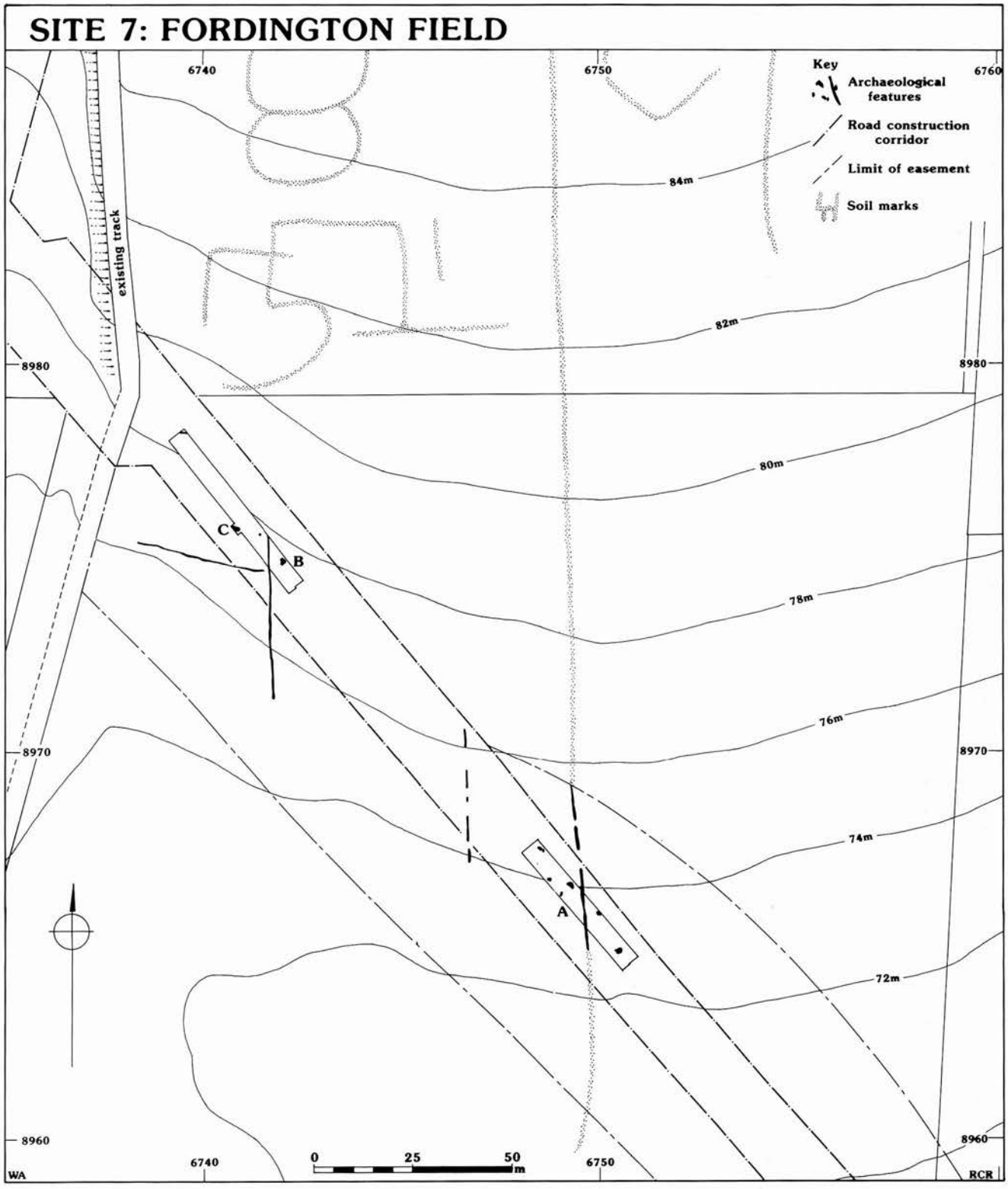


Figure 54 Fordington Field: trench location and archaeological features

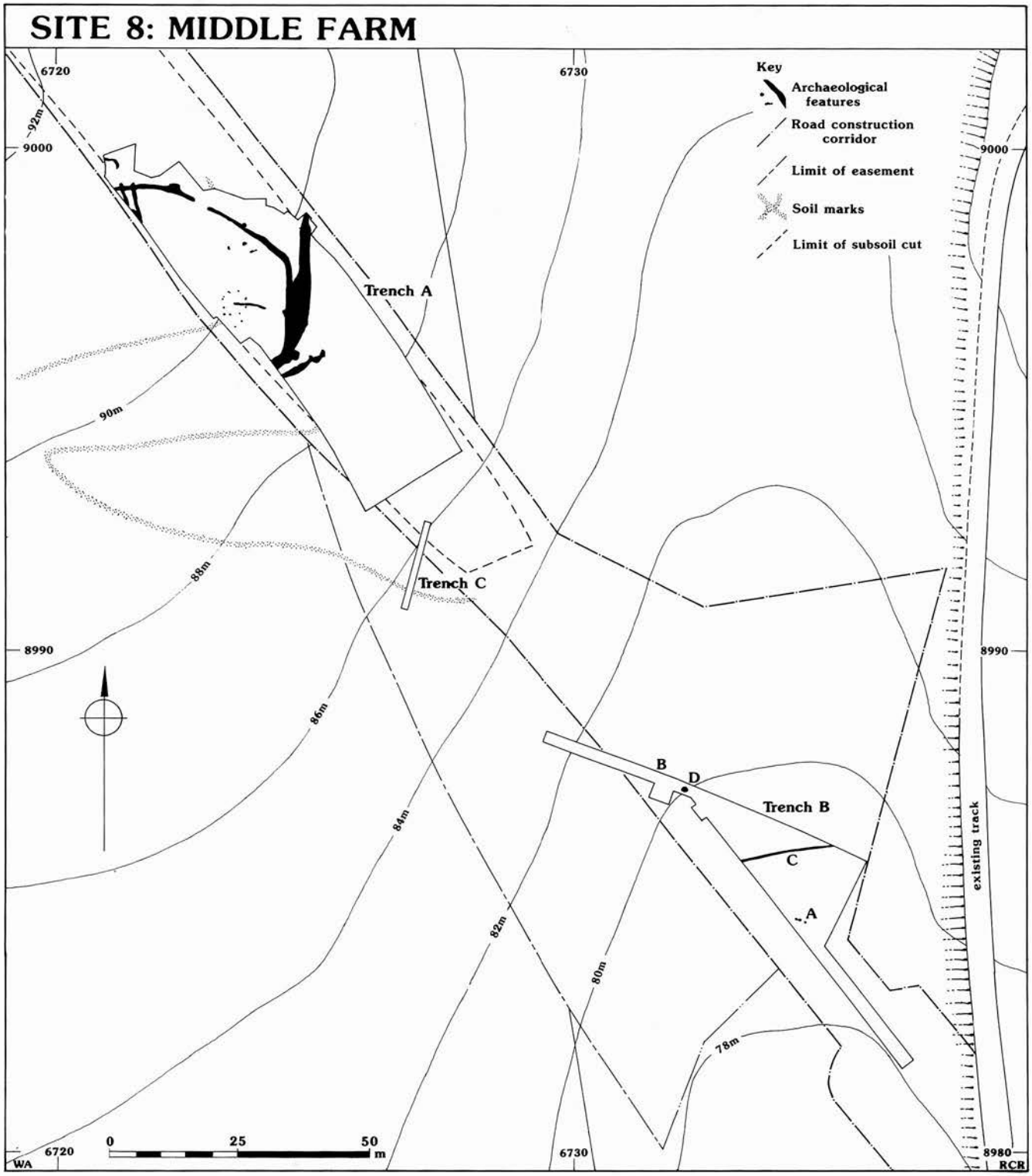


Figure 55 Middle Farm: location of trenches A, B, and C and archaeological features

8 Site 8. Middle Farm — Trench A

The site at Middle Farm lies south-west of the farm buildings of that name and within two fields to the west of an existing trackway (Fig. 55). Fieldwalking, geophysical survey (Linford and Shiel 1990), and trial excavation of soilmark features were undertaken in 1986 and 1987. A machine-excavated trench was cut through the colluvium in the dry valley to assess the potential for environmental data and sealed settlement deposits. These survey works revealed a Bronze Age enclosure and substantial linear ditch on the spur above the dry valley. Colluvium in the valley, 1.5 m deep and dated by Bronze Age and Romano-British pottery, sealed post-holes containing Beaker pottery. In summer 1987 two trenches (A and B), totalling 0.21 ha were examined after machine-stripping prior to road construction. The principal recorded features and deposits may be summarised as:

Period 6/7 Medieval and post-medieval colluvium and finds
Period 4 Roman colluvium and finds
Period 2 Beaker post-holes, Early/Middle Bronze Age enclosure, hut, linear ditch, lynchets, and colluvium
Period 1 Neolithic flint assemblage
Period 0 Periglacial features and tree hollows

Period 0. Natural Features and Deposits

The excavation lay on deposits of Upper Chalk. Immediately to the north-west, Chalk was overlain by deposits of plateau drift comprising reddish flinty clays. This change in subsoil was reflected in the excavation area by a high density of 'solution'-type features in the north-west of the excavation. The density of these features decreased towards the south-east and they were absent on the steeper slopes of the valley edge. Eight of the more pronounced of these features were recorded. They consisted of irregular features, up to 3.7 m wide, filled with dark brown silty clay. One possible tree-hole was excavated and sampled for soil analysis.

Period 1. Neolithic Flint Assemblage

A small component of the lithic assemblage recovered from excavated contexts comprised a residual earlier Neolithic element, including several Early Neolithic types such as a leaf arrowhead, a serrated blade, and an unfinished flaked axe.

Period 2. Beaker–Bronze Age

Period 2A. The enclosure ditch *03050* and ?internal ditch *03056*

This Period is represented by a curvilinear ditch enclosing the west of the excavated area (Fig. 56). The ditch ran beyond the excavation area to the north and was cut away by the Period 2C linear boundary to the south. A logical extension of the ditch to the west suggests the ditch represents the eastern part of an ovate or sub-rectangular enclosure. The soil marks recorded adjacent to the excavation (Fig. 55) do not match precisely with the alignment of the excavated enclosure ditch, although some elements of these marks presumably relate to this enclosure system.

Within the excavation, the ditch enclosed an area of *c.* 526 m^2 (0.05 ha). An entrance, 2.75 m wide, provided access into the enclosure from the north. The enclosure ditch *03050* was no more than 1.2 m wide and 1 m deep, becoming gradually less wide and deep to the north and upslope. Similarly the ditch profile changed from a steep-sided feature with a narrow flat bottom to a more rounded U-profile towards the north (Fig. 59, sections A and B). The fills of the ditch reflected this varying profile and also the varying nature of the subsoil. To the north, where the density of solution features was greatest, the ditch was infilled with an undifferentiated deposit of dark brown silty clay (Fig. 59, section B). To the south, as the density of solution features within the chalk bedrock decreased, three fills could be differentiated; a basal deposit of chalk rubble in a pronounced silty clay matrix, a secondary deposit of chalk rubble, and finally a silty clay loam deposit with lenses of chalk and flint (Fig. 59, section A). The final fills of the ditch had been truncated suggesting erosion of the upper levels of the ditch. There was no indication from the ditch fills of an internal or external bank or earthwork associated with the enclosure. The infilled enclosure ditch was cut by the Period 2B pit *03157*, and by the linear ditch *03051* (Fig. 59, section C) and lesser ditches *03202* and *03204* of Period 2C.

Four pieces of struck flint were recovered from the basal fills of the enclosure ditch. The secondary and upper fills of the ditch contained 20 sherds of earlier prehistoric pottery, including one sherd of grog-tempered Globular Urn (Fig. 66, P37), the base of a grog-tempered vessel (Fig. 66, P40) and two sherds of unusual fabric (Fig. 66, P38 and P39), both of which could conceivably be of Late Neolithic or Early Bronze Age date. Struck flint, including (Fig. 80, 30 and 31), and animal bones were the only other categories of material recovered from the enclosure ditch. Low quantities of both finds were recovered compared to that from the later Period 2C boundary ditch *03051*, although for the animal bone the more clayey and acidic soils of the ditch fills may have affected the survival of this material.

Possible internal ditch 03056

Ditch *03056* (Fig. 56) occurred in the south of the enclosure. This short segment of ditch, aligned east–west, may have represented an internal sub-division of the enclosure although the association of these two features is only on the grounds that ditch *03056* pre-dates the construction of Period 2B post-ring *03252*. No finds were recovered from this shallow, irregular feature (Mf 6) with the exception of an oblique transverse arrowhead.

Period 2B. Structure *03252* and associated features

Structure 03252

Structure *03252* (Figs 56 and 58) consisted of a ring of ten post-holes, 5 m in diameter. Eight of the post-holes were positioned at regular 2 m spacings, with two smaller such features, *03079* and *03270*, lying immediately adjacent to two north-western post-holes of the ring. A single post-hole was positioned in the centre of the structure. These 11 post-holes were generally U-profiled and averaged 0.33 m in diameter and 0.15 m in depth. Flint packing stones were evident in post-hole *03059* and were suggested as occurring in most other post-holes. There was no evidence for post-pipes.

A shallow intermittent gully, *03071*, formed an arc, parallel and external to the post-ring, east of the structure. The profile of the feature was irregular and was infilled with chalky clay loam (Fig. 58).

Three post-hole features occurred to the south of the structure. Post-hole *03073*, a very shallow feature (Fig. 58), may represent a surviving portion of gully *03071* to the south-west of the structure, presuming this feature originally completed a full circuit of the structure. The two other features, *03266* and *03268*, were more sharply defined and were more representative of post-holes. These post-holes may represent part of a fence-line adjacent to structure *03252*.

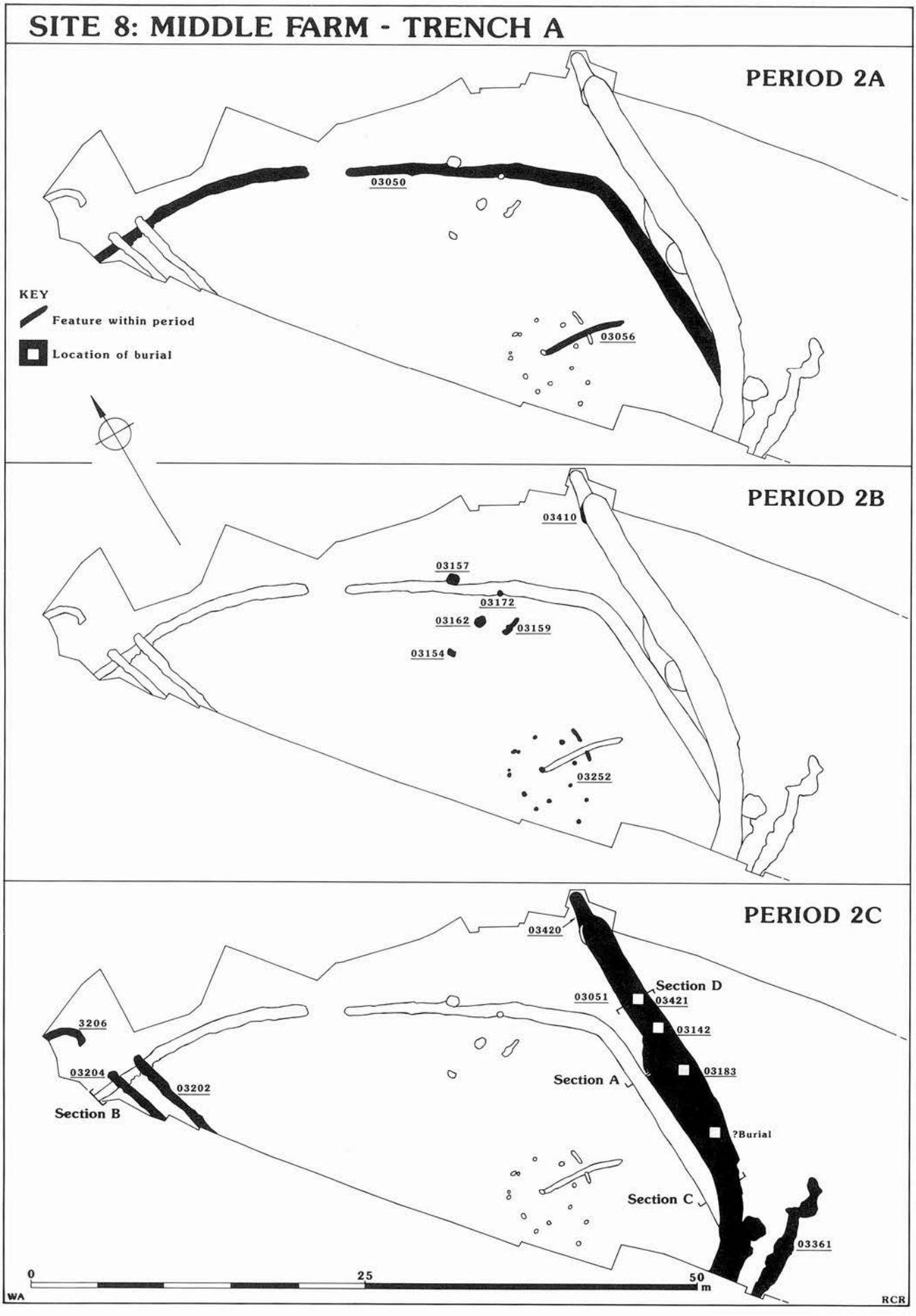


Figure 56 Middle Farm: trench A Periods 2A–2C (Middle Bronze Age)

Figure 57 Middle Farm: trench A Middle Bronze Age enclosure 03050 and linear ditch 03051, looking north-west

With the exception of one sherd (6 g) of grog-tempered Bronze Age pottery from post-hole *03268*, no datable finds were recovered from the structure or associated features. An amalgamated sample of charcoal recovered by sieving from post-holes *03057*, *03061*, and *03069* produced a radiocarbon date of 4800±70 BP, 3780–3380 cal. BC; OxA–2382). The central post-hole of structure *03252* and gully *03071* cut the Period 2A linear ditch *03056*, although the date of this ditch is unclear.

Pits and other features to the north of structure 03252

Five features were recorded to the north of structure *03252* (Fig. 56). These consisted of two circular, steep-sided and flat-bottomed pits, *03157* and *03162*, both 0.4 m deep, two irregular shallow features, no greater than 0.3 m deep, both of indeterminate function, *03154* and *03159*, and a post-hole *03172* (Mf 6). The fills of the two steep-sided pits were completely different, with *03157* filled with predominantly chalk rubble in a silty clay matrix and *03162* filled with a dark brown clay loam, with only occasional flint inclusions. Two sherds of grog-tempered, probably Bronze Age pottery, were recovered from each pit. Six fragments of a probably cylindrical or bun-shaped weight were also recovered from pit *03157* alongside one sherd (1 g) of intrusive Black Burnished ware. No finds were recovered from the three other features.

Pit *03157* and post-hole *03172* both cut the fills of the Period 2A enclosure ditch, with pit *03157* positioned on the external edge of this feature. The small quantities of settlement material recovered from the pits suggest they may be associated with structure *03252* although the structural features of this building are undated. As pit *03157* cut the upper fills of enclosure ditch *03050*, this may suggest that activity associated with structure *03252* occurred when the enclosure survived as only a partial earthwork.

A sixth feature, pit *03410*, has been assigned to this period on the grounds that it pre-dates construction of the Period 2C linear ditches *03051* and *03420*. The pit had been substantially cut away by these later features (Mf 6) but enough survived to suggest that it originally comprised a circular, steep-sided, and partially undercut pit. Finds recovered from the feature consisted of nine pieces of struck flint and a small number of animal bones.

Period 2C. Linear boundary *03051* and other ditches post-dating the enclosure ditch *03050*

Linear boundary ditch 03051

This Period is represented by the construction of a substantial linear ditch (Fig. 56) to the east of the Period 2A enclosure (Fig. 57). Ditch *03051* was aligned approximately north–south. A terminal to the feature was identified in the north of the excavation, while at the south the ditch changed to a more south-west alignment and cut through the infilled enclosure ditch *03050*.

The northern ditch terminal cut the fills of two earlier features. Pit *03410* is described with the Period 2B features. Feature *03420* consisted of a 2 m section of ditch on a comparable alignment to the later linear ditch. This ditch was less wide and deep (Mf 7) but also terminated at the north of the

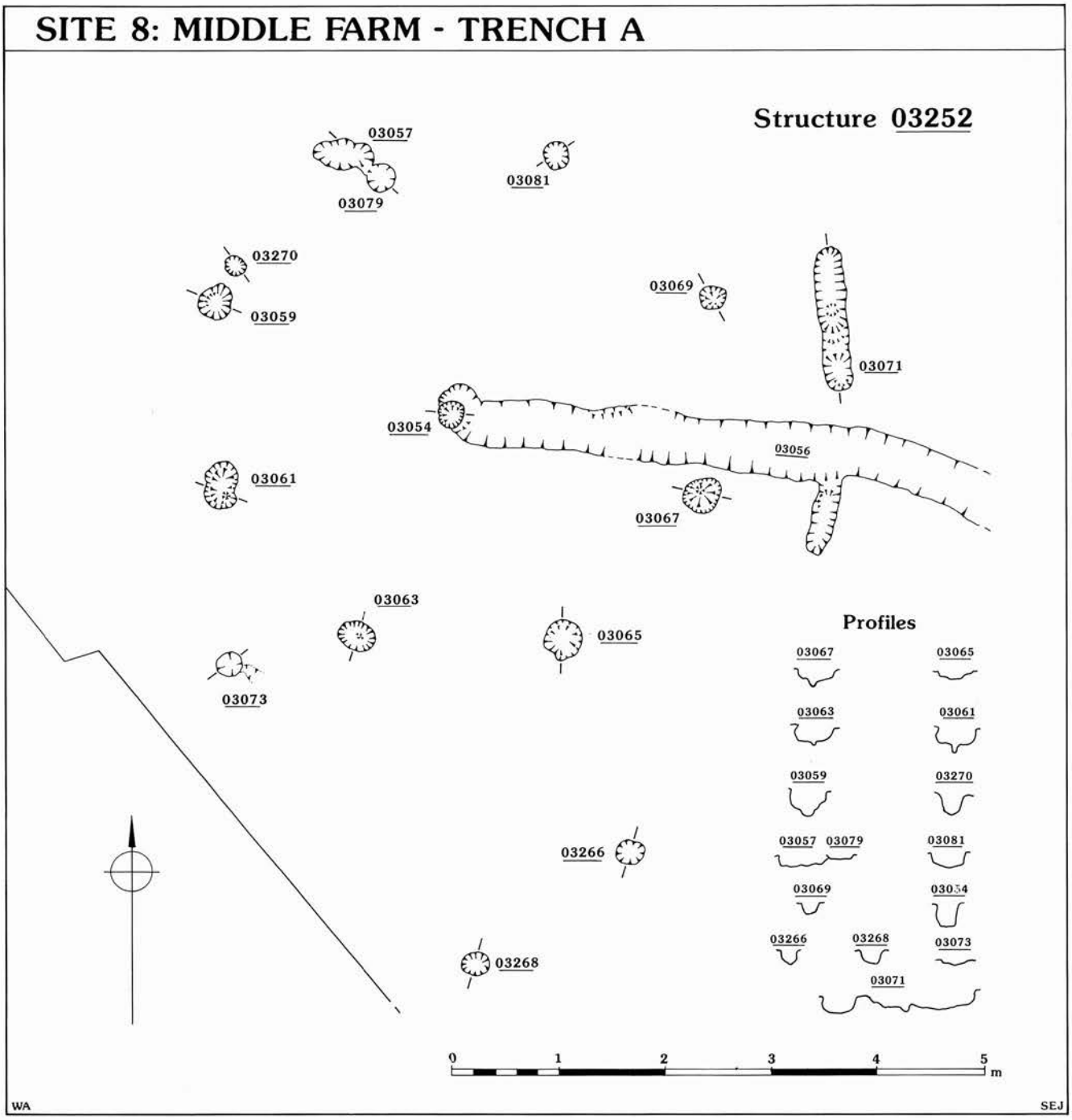


Figure 58 Middle Farm: trench A structure 03252

excavation. This feature may represent an early ditch alignment for which the later ditch *03051* represents a complete recutting. No finds were recovered from ditch *03420*.

Linear ditch *03051* had a variable profile, changing from a deep, steep-sided and flat-bottomed feature to the north becoming shallower and more rounded to the south (Fig. 59, sections C and D). Erosion and collapse of the upper, west edge of the profile was suggested by a series of shallow scoops on this ditch edge. Because of the variable profile and depth, the nature of deposits infilling the ditch varied along its length, although a broad sequence was determined. The primary fill comprised a shallow and inconsistent deposit of chalky clay on the floor of the ditch (Fig. 59, 03089 for example). No finds were recovered from this deposit which may represent trampled topsoil material during ditch construction.

This deposit was sealed by a substantial fill of loose, vacuous chalk rubble. This comprised a series of chalk rubble layers and, in two ditch sections, these were separated by silt layers (Fig. 59). These silt layers were probably too shallow to represent stabilisation horizons and correspondingly much of this chalk rubble was likely to have resulted from rapid erosion of the ditch edges. There was no indication from these fills for a bank or earthwork specifically to the east or west of the ditch.

Finds from the chalk rubble fills consisted of 11 sherds of earlier prehistoric pottery. The majority of this consisted of grog-tempered fabrics, including (Fig. 66, P42 and P43) both

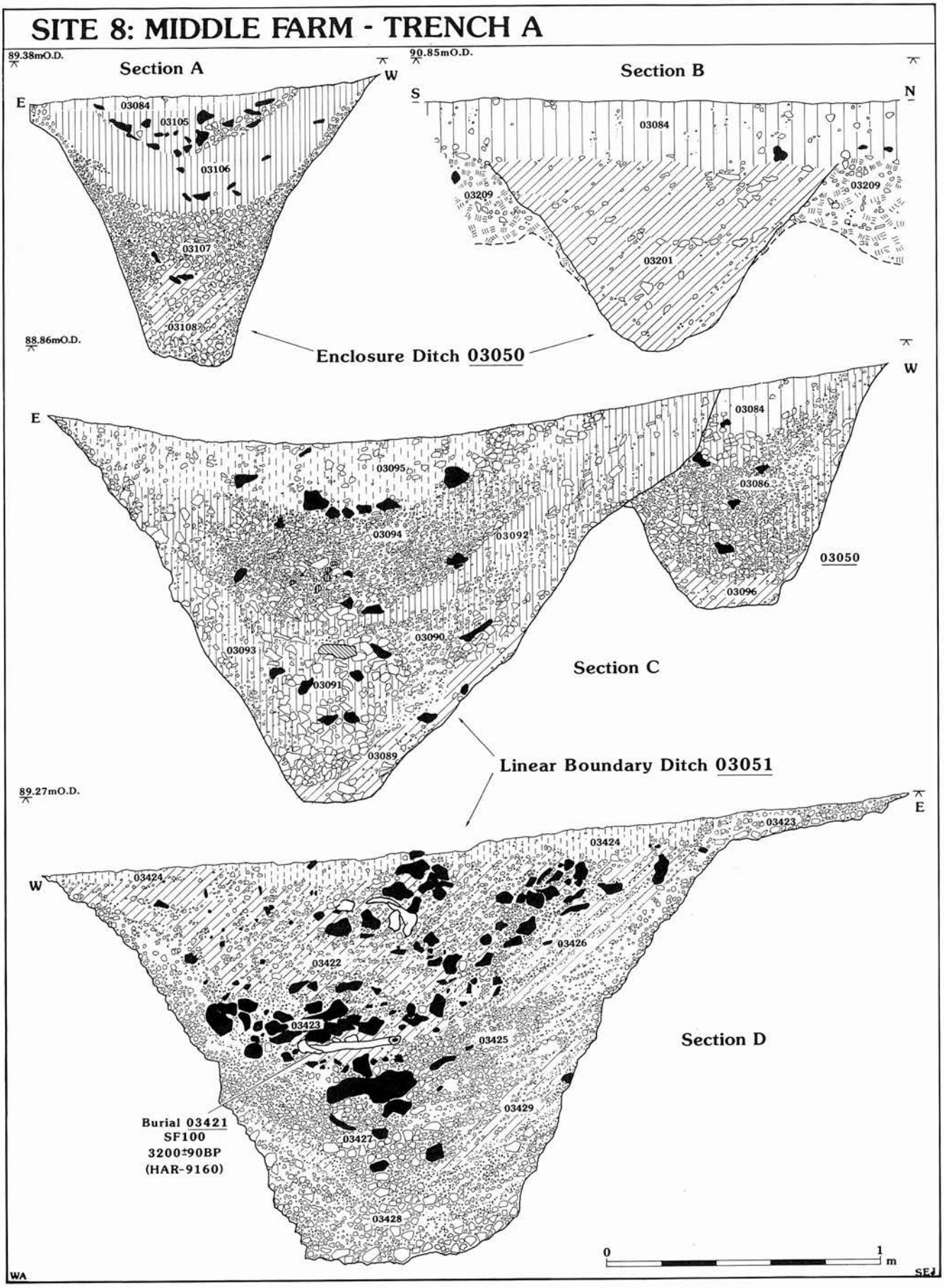


Figure 59 Middle Farm: trench A sections of enclosure ditch 03050 and linear ditch 03051

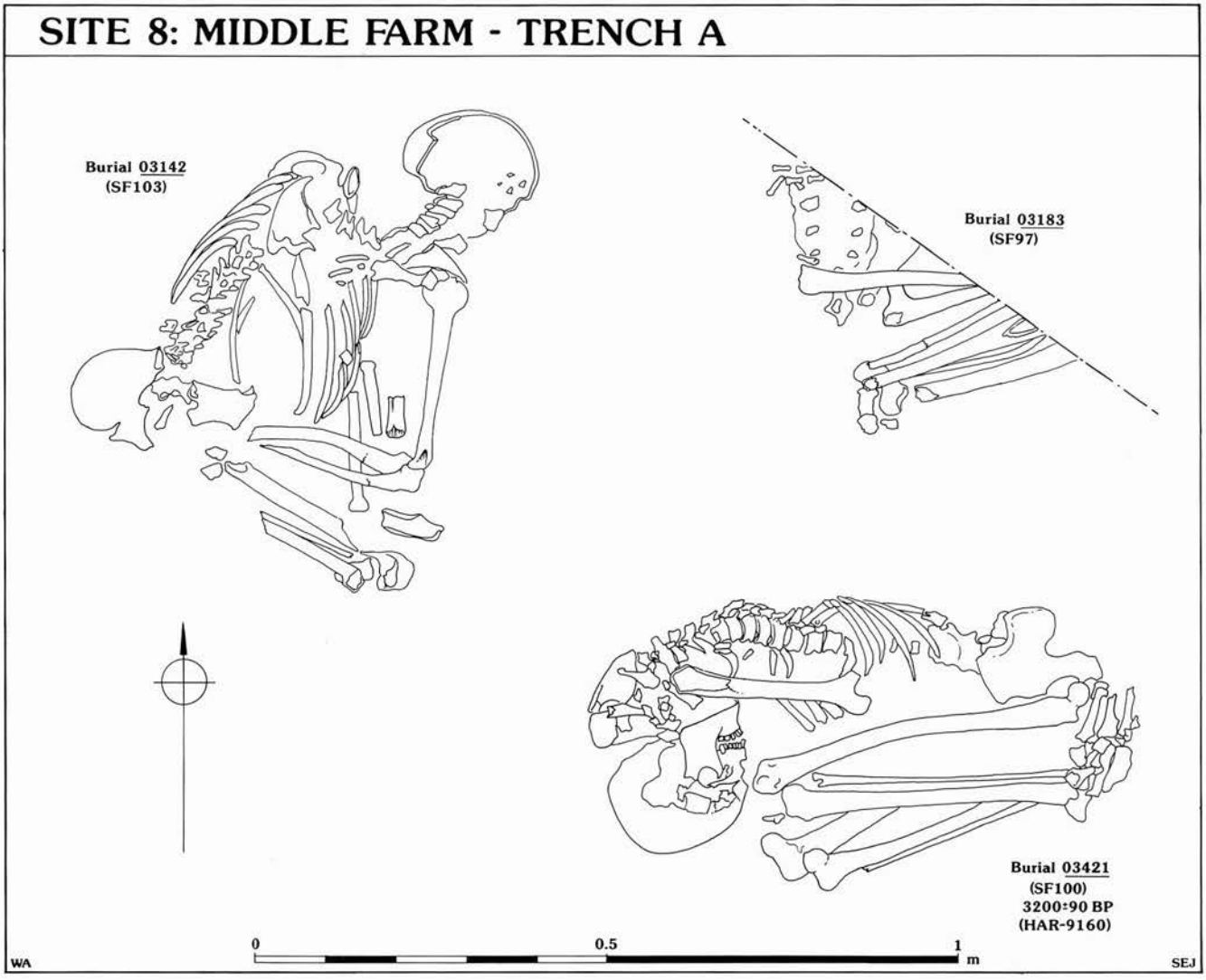


Figure 60 Middle Farm: trench A burials 03142, 03183, and 03421

almost certainly of Early or Middle Bronze Age date. A sherd of quartz-tempered fabric (Fig. 66, P41) was also recovered and may be related to the sherd of similar fabric from the fill of the enclosure ditch *03050* (Fig. 66, P39). A bone gouge (Fig. 75, 4) and a saddle quern fragment were also recovered.

The chalk rubble was sealed below deposits of chalky and flinty silt-clay loam. This set of deposits was especially variable along the length of the ditch (Fig. 59, sections C and D). Three inhumation burials were identified at the junction between these two deposits (Fig. 60). A fourth possible burial was recovered during the excavation of a machine trench through the ditch fills during the evaluation phase. None of the burials were recovered from clearly identifiable graves, but were laid down on the floor of the partially infilled ditch and then deliberately sealed below deposits of flint rubble (Fig. 59, section D). This illustrated section suggests the inhumation was placed at the base of a recut although there was no evidence for this in any other section. Each body was tightly flexed, suggesting the bodies may have been 'trussed' before burial (Fig. 61). The three burials consisted of three adult males and an adult female, the remains of both an adult male and female being recovered from burial *03183*. A sample of bone from inhumation *03421* was submitted for radiocarbon determination and produced a date of 3200±90 BP (HAR–9160; 1690–1260 cal. BC). No finds were recovered with the burials.

One sherd of quartz-tempered prehistoric pottery and a fragment of fired clay were recovered from close to inhumations *03183* and *03142* respectively.

The flint rubble sealing the inhumations and the primary chalk rubble fills were sealed below a substantial deposit of silt-clay loams. Variable lenses and bands of more chalky or flinty material occurred within this deposit along the length of the ditch (Fig. 59 — see, for example, layer 03094, section C). Most of this material was derived from the west edge and upslope of the ditch. A pronounced stonefree silt loam occurred in the south of the ditch and represented a stabilisation horizon at the top of these chalky loam secondary deposits. Sixty-five sherds of prehistoric pottery were recovered from these ditch fills. The majority of the pottery was flint or grog-tempered and all the featured sherds (Fig. 66, P44–P48) in this latter fabric were of Early or Middle Bronze Age date. One sherd of calcite-tempered pottery (Fig. 66, P49) may be of Late Bronze Age date. Two bone points (Fig. 75, 1 and 3), a saddle quern fragment, and fragments of a fired clay weight were also recovered from these deposits.

The final infilling of ditch *03051* was represented by a shallow deposit of light silty loam (Fig. 59, section D, 03424 for example) and also by a slightly more chalky silty loam above the stabilisation layer in the south of the ditch. This deposit was differentiated by the absence of flint and chalk inclusions,

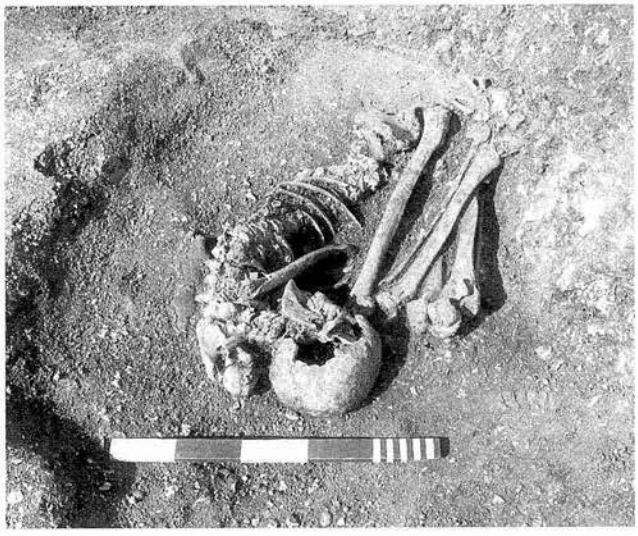


Figure 61 Middle Farm: trench A burial 03421, an adult male from the partially silted ditch 03051

otherwise present in large quantities in the secondary fills of ditch *03051*. Twenty-one sherds of prehistoric pottery were recovered from this fill, including grog- and flint-tempered material probably of Bronze Age date. The one featured sherd (Fig. 66, P51) in a hard-flint fabric may date to the Late Bronze Age. A bone point, one bone needle (Fig. 75, 2 and 7), and a shale object (Fig. 76, 1) of undetermined function were also recovered from this deposit. Three iron nails, two sherds of Black Burnished ware, and one sherd of possible 17th century date may all be intrusive or point to a very late date for the final infilling of this feature.

A small quantity of additional material was recovered from ditch *03051* although its precise stratigraphic position cannot now be determined. This included two sherds of Middle Bronze Age material including one from a Bucket Urn (Fig. 66, P53) and one from a Globular Urn (Fig. 66, P52) and a possible whetstone fragment.

Ditches 03202, 03204 and 03206

Two north–south linear ditches, *03202* and *03204* (Fig. 56), in the north-west of the excavation crossed the interior of the enclosure defined by ditch *03050* and cut across the enclosure ditch fills. These ditches terminated on the outer edge of the enclosure ditch *03050*, suggesting that this feature may have survived as a low earthwork when these later ditches were cut. The profile, dimensions and infilling of the features were comparable (Mf 7). The two ditches occurred too close together to form a ditched trackway and they may represent the re-cutting of an established boundary. Finds from the two features comprised small quantities of animal bone and struck flint.

A short curvilinear section of ditch, *03206*, to the north may be associated and consisted of a ditch of comparable profile and dimensions (Mf 7). The break of 3 m between this ditch and *03204* to the south suggests an entrance into a possible enclosure, although the two ditches cannot be proven to be contemporary on stratigraphic or finds evidence. Two sherds of grog-tempered, possibly Bronze Age, pottery and one sherd of intrusive post-medieval pottery were recovered from ditch *03206*.

One further feature may also be Bronze Age in date, although unassignable to any one period. Scoop *03361*, was identified external to and south of the Period 2A enclosure ditch *03050*. This feature could not be stratigraphically related to the Period 2C linear ditch *03051*. The feature comprised a series of shallow, irregular intercutting scoops possibly representing the eroded remnants of quarrying activity. One sherd of flint-tempered probably Bronze Age pottery was recovered.

Period 4. Romano-British Finds

Eight sherds of Black Burnished ware were recovered from Trench A. Three sherds may be intrusive in Bronze Age contexts while five sherds were recovered from the topsoil and unstratified contexts. The colluvial deposits are described below.

Middle Farm, Trench A: Summary

Neolithic activity in the vicinity is represented by residual material in later contexts. This includes a small earlier Neolithic element within the excavated flint assemblage, two sherds of earlier Neolithic bowl from the colluvial sequence in Trench B (*see below*), and the charcoal from three post-holes of structure *03252*. The latter can be dated to the mid 4th millennium cal. BC from a radiocarbon determination (Table 3: OxA–2382, 4800±70 BP).

This early date is surprising because of the context from which it was derived and because of the high possibility of contamination of the charcoal as indicated by molluscs also extracted from the sample (M. Allen pers. comm.). The early date may be explained by the Bronze Age structure being built through a topsoil impregnated with charcoal of earlier Neolithic date. By implication, therefore, the posts of the structure were probably not burnt and either rotted *in situ* or were pulled out leaving only the early charcoal within the post-hole fills. The reuse of earlier Neolithic timbers for the Bronze Age structure can probably be discounted because of the enormous timespan between the date of the charcoal and the likely date of construction of the building in the mid 2nd millennium cal. BC.

The nature of the early activity cannot be determined from this limited evidence, but provides supporting evidence for the land snail analyses which suggest clearance prior to the Late Neolithic with a very open, downland landscape by the 2nd millennium cal. BC.

A series of Bronze Age features was established in this open environment. Probably the earliest was a sub-rectangular enclosure of at least 0.05 ha. The enclosure occupied a pronounced spur above dry valleys to

Table 3 Middle Farm: radiocarbon determinations

Lab. No.	*Sample*	*Context*	*BP*	*Cal. BC*
OxA–2382	charcoal	Structure *03252*. Fills of post-holes *03057*, *03061*, & *03069*	4800±70	3780–3380
HAR–9160	human bone	Burial *03421* (SF100), adult male in partly infilled ditch *03051*	3200±90	1690–1260

the east and south. The construction of the enclosure cannot be dated precisely, although a late Early or Middle Bronze Age date in the earlier 2nd millennium cal. BC is suggested by the material recovered from the secondary and tertiary ditch fills. The two anomalous sherds (Fig. 66, P38 and P39) from the enclosure *03050* and linear ditch *03051* respectively may possibly be of Late Neolithic or Early Bronze Age date. These worn and possibly residual sherds may indicate early activity otherwise not represented by excavated features. Internal ditch *03056* may be contemporary with the enclosure and represent an internal subdivision or perhaps a pre-existing ditch system into which the enclosure was set.

The enclosure probably defined a settlement as represented by post-structure *03252*. Small quantities of settlement debris were recovered from the enclosure ditch. Structure *03252* consisted of a post-built round-house. The building comprised a post-ring 5 m in diameter, representing the internal supports for a roof, with a shallow parallel gully representing the foundations for the wall of the structure. The diameter of the building was 7 m with a floor area of 11 m^2. There was no evidence for an entrance. The two double post-holes to the west of the structure suggest some level of repair and maintenance for the building. There were no internal features or surviving floor levels, although two adjacent post-holes may represent a fence-line butting up to the external walls of the structure. The building was abandoned after an unknown length of time. The structure was probably not burnt down, with the timbers pulled out and reused.

A number of features to the north may be contemporaneous, although two of these cut the fills of the enclosure ditch *03050*. This suggests that settlement within the enclosure and possibly occupation of structure *03252* continued at least up to the partial infilling of the enclosure ditch.

Subsequent Bronze Age activity was represented by the establishment of a large linear boundary ditch *03051* along the west and south limbs of the earlier enclosure. This may have been accompanied by modification of the layout of the enclosure and ditch system with the addition of the internal and external ditches in the north of the excavation.

A *terminus ante quem* for the date of construction of the linear boundary, and therefore by association the enclosure ditch, is provided by the radiocarbon determination (HAR–9160, 3200±90 BP; 1690–1260 cal. BC) for the inhumation from the secondary fills of the linear ditch. This could place the construction of this ditch in the mid 2nd millennium cal. BC and therefore the construction of the enclosure sometime in the first half of the 2nd millennium cal. BC. Ceramically at least the lower ditch fills are of Middle Bronze Age date with predominantly grog-tempered pottery comparable in tradition to that from the enclosure and there is no reason to assume a significant break in occupation between the two features.

The linear boundary ditch, although cutting the enclosure ditch fills, redefined its alignment and suggests it survived as a low earthwork at this time. Similarly the quantities of settlement debris in the primary and secondary fills of the linear ditch suggest also that occupation within the enclosure continued at this time. The four adults buried in the secondary fills of the ditch may have been part of that settlement and possibly even former occupants of building *03252*. Structure *03252* was probably occupied throughout the life of the enclosure and during the construction and early infilling of linear boundary *03051*. Settlement debris from these ditches and associated pits included 'every-day' pottery predominantly comprised of bucket-shaped urns, fragments of two possibly cylindrical clay weights, a series of bone points (Fig. 75, 1–4), two saddle quern fragments, and a whetstone. Sheep/goat and cattle were the dominant species represented by the animal bone with small numbers of pig, horse, dog, and goose.

The large size of the linear ditch suggests an association with stock-control perhaps separating the stock from the settlement area. Molluscan evidence from the ditch fills suggests that the upper portions of the ditch were filled in an open and arable environment. This final infilling may have taken place after the end of occupation adjacent to the ditch and the quantities of settlement debris in the upper ditch fills result from ploughing and erosion of settlement remains into the linear ditch.

A late date for the final infilling of this linear ditch is suggested by the small quantities of Romano-British material from the final soil fills. A single sherd (Fig. 66, P51) probably of Late Bronze Age date and also from the final infilling, may suggest some limited use of the site at this date.

The ditches in the north-west of the excavation were associated with the linear boundary only on stratigraphic grounds, in that they all post-date the infill of the enclosure ditch. The position of the ditches suggest the enclosure may still have survived as an earthwork at this time. The ditches subdivided the enclosure, possibly defining a new enclosure to the west. These ditches and linear ditch *03051* indicate a phase of realignment and modification for the enclosure system sometime in the Middle Bronze Age.

With the cessation of occupation perhaps shortly after the mid 2nd millennium cal. BC, the site was returned to agriculture. Small quantities of Late Bronze Age and Romano-British pottery were recovered. No deposits or finds of Iron Age date were identified. The ditches of the site may have survived as low earthworks into the Romano-British period and evidence from the dry valley (*see Trench B below*) suggests that elements of the Bronze Age field system were respected until at least this time.

9 Site 8. Middle Farm — Trench B, the Dry Valley Deposits

The Dry Valley

The dry valley at Middle Farm is aligned approximately north–south (Fig. 55). The valley is one of a dendritic pattern of such features running down off the ridge on which lies the Bridport Road (Fig. 2). The head of the dry valley at Middle Farm lies *c.* 0.6 km to the north-west of the excavation. The present valley consists of a shallow, almost flat-bottomed feature, with the floor at

c. 79 m OD where crossed by the road-line, with a short but moderately steep western edge rising up to *c.* 90 m OD. The eastern valley side consists of a short, steep incline up to the present trackway that runs along the upper edge of the valley side at this point. This slope is partly formed by a substantial lynchet immediately to the west of the trackway (Fig. 55).

The dry valley was examined during the assessment stage with one machine-excavated trench, aligned north-west to south-east. This trench examined the depth, extent, and nature of colluvial deposits for the central and eastern edges of the valley. During the area excavations this assessment trench was enlarged and extended to the north and west to provide a complete section through the colluvial deposits at right-angles to the contours of the dry valley. The full width of colluvial deposits, to a maximum depth of 1.5 m, was examined across the floor of the valley (Fig. 62). This showed that the valley at the level of chalk bedrock consisted of an asymmetrical V-profile, with a steep west edge (*c.* 20°) and a shallow eastern edge (*c.* 6°).

The dating of the colluvial sequence was achieved by the hand-excavation of a 3 m^2 section for artefacts where the deposits were deepest (Fig. 62). This section was sampled for land snails and soil analyses. The colluvial sequence and the dating evidence is described below; full details of the land snail and soil analyses are presented in the appropriate reports. Summary details are presented here to aid interpretation.

A series of features was also recorded on the floor of the dry valley (Fig. 55 and Mf 8). These features are described first, referring where possible to their stratigraphic relationships with the colluvial sequence. The colluvial sequence is described secondly and this is followed by an interpretation of the sequence of all the deposits from the valley trench.

Period 0. Natural Features

Nine periglacial 'solution' features were excavated. Each occurred in the base of the trench cutting the Chalk bedrock and was representative of a dense series of such features throughout the floor of the dry valley, sealed below the basal colluvial deposit (layer 50809). The features were irregular in plan and profile and were filled with flinty brown silty clay. Five were linear, running directly downslope on the west of the valley side. Their irregular nature and profile suggested they also represented 'solution'-type features.

Period 3. Bronze Age

Beaker post-holes

An arc, 2.5 m long, of three post-holes was recorded in the south-east of the trench (Fig. 55, A, Mf 8 and 9). The features were no greater than 0.65 m in diameter and 0.4 m deep, with the eastern post-hole the smallest of the three (Mf 9, section Q). This eastern post-hole cut an irregular feature, *03009*, that was periglacial in origin. The post-holes were filled with dark brown silty clays with occasional flints and charcoal flecks.

Twenty-five sherds of Beaker, representing probably no more than five vessels, were recovered from these post-holes (Fig. 65, P31–P36). Conjoins between sherds of one vessel (Fig. 65, P35) indicates that post-holes *50850* and *50855* may be contemporaneous and sherds which almost certainly belong to the vessel represented by Figure 65, P34 were also found in post-holes *03047* and *50850*. The stratigraphic relationship between these features and the colluvial sequence could not be determined as the post-holes were only exposed in the base of the machine-excavated trench.

Lynchets *03026* and *03044*

In the west of the excavation a shallow terrace extended across the trench aligned parallel to the contours of the valley side. This shallow cut was apparent in the colluvial section (Fig. 62, section P, *03026*) as a negative lynchet infilled with layer 50806 of the colluvial sequence (*see below*). To the west and upslope of negative lynchet *03026*, a positive lynchet was identified within the valley section (Fig. 62, section P, *03044*). The association of this feature to the negative lynchet is suggested by their stratigraphic relationship to the colluvial deposits, both features sealed below and post-dating layer 50805.

Ditch *03001*

This ditch (Fig. 55, C) was aligned east–west across the valley floor. The profile of the feature was consistent along its length (Mf 9, section S), although the ditch decreased in depth up the east slope of the valley (Fig. 62, section P). At the west edge of the trench the ditch cut layer 50806, and its fills were sealed below layer 50805 of the colluvial sequence (*see below*). Two sherds of grog-tempered Bronze Age pottery were recovered from the ditch fills and one sherd of 19th century pottery which is assumed to be intrusive.

Unphased pit *03022*

A shallow circular pit (Fig. 55, D; Mf 9 section R) was recorded at the base of the west slope of the valley. The feature was filled with a deposit of burnt flint and ash in a dark clay matrix. With the exception of burnt flint, no material was recovered from this feature. The feature was entirely exposed by machine at the base of the trench and no relationship to the colluvial sequence was recovered.

The colluvial sequence

The stratigraphic sequence (Fig. 62)

Layer 50809. A densely packed deposit of flint (90%) in a brown clay silt matrix. The layer was thickest (0.4 m) at the base of the west edge of the coombe and became gradually less thick on the gentle east slope. No finds were recovered from this deposit, which is assumed to be remnant Valley Gravel material.

Layer 50808. A 0.1 m thick deposit of dark brown silty clay with occasional flint inclusions and absent of chalk flecking apparent in the above layers. The deposit occurred on the base of the coombe and was not as extensive as layer 50809. This layer was cut by ditch *03001*.

Layer 50807. An inconsistent band of flint in a brown silty clay matrix, 0.05 m thick, occurring only in the deepest parts of the coombe and tapering away to the east. The layer was most pronounced at the centre of the coombe. This layer was cut by ditch *03001*.

Layer 50806. A 0.22 m thick deposit of brown silty clay with 7–8% small flint and 5% chalk fleck inclusions. The deposit occurred across the floor of the coombe and to the west infilled a negative lynchet (Fig. 62, *03026*), aligned approximately north-east to south-west, parallel to the contours of the valley sides. To the west of this negative lynchet and upslope was a 0.4 m thick bank of brown silty clay loam (Fig. 62, *03044*) that formed a positive lynchet. The negative lynchet caused the truncation of layers 50809, 50808, and 50807 on this west slope of the valley side. Layer 50806 was cut by ditch *03001*.

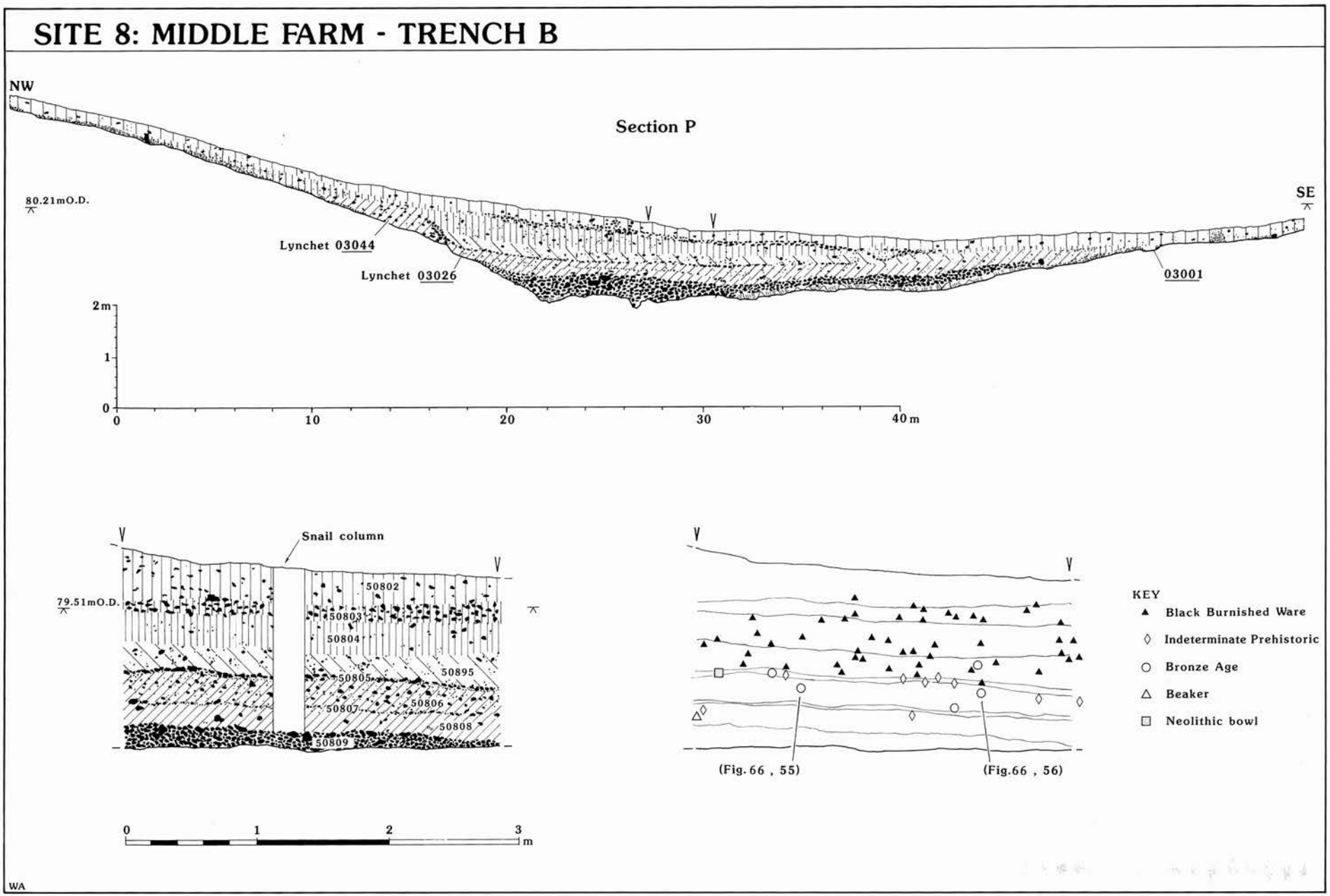


Figure 62 Middle Farm: trench B section through the colluvial deposits

Layer 50805. A band of 70% flint with flecks of chalk and pea grit in a brown silty clay. This deposit, 0.05,m thick, occurred only across the centre of the valley floor and tapered away to the east, while to the west it 'butted' the positive lynchet, *03044*. This layer also sealed the upper fills of the ditch *03001* (Mf 9, section S).

Layer 50895. A 0.22 m thick deposit of brown silty clay with occasional small flint and chalk inclusions. This deposit occurred only across the centre of the valley.

Layer 50804. A 0.4 m thick layer similar to layer 50895 but distinguishable by a slightly paler brown colour. The deposit also only occurred across the centre of the valley and 'butted' the positive lynchet *03044* on the west slope of the valley.

Layer 50803. Layer of 70% flint in a brown silty clay loam matrix. The deposit varied from 0.15–0.2 m in thickness, being greatest at the centre of the valley floor.

Layer 50802. Present topsoil consisting of a 0.25 m thick deposit of dark grey brown silt loam with *c.* 5% flint inclusions.

Dating the colluvial sequence

A total of exactly 700 objects was recovered and recorded 3-dimensionally from the hand excavated section through the colluvial deposits. This included 83 sherds of pottery, 55 of which could be assigned to a ceramic style on decoration or fabric type and whose location within the stratigraphic sequence could be precisely identified. Figure 62 indicates these locations and includes those of nine sherds of indeterminate prehistoric pottery. Details of the quantities and fabrics of the prehistoric pottery are provided in Table 5 (*below*). The flint contained no diagnostic elements to support the pottery dating evidence. Quantities and locations of all other categories of material are recorded in the archive.

Pottery

One sherd of Neolithic bowl tempered with 'beef'-type calcite was recovered from layer 50805 (Fig. 62). One sherd of flint-tempered Neolithic bowl was also recovered from layer 50895 but its precise position is unrecorded. One sherd of grog-tempered and impressed Beaker was recovered from layer 50808. The fabric and decoration are the same as Beaker sherds recovered from post-hole *50850* (Fig. 65, P32, P33, and P36). Two sherds of quartz-tempered pottery (Q99) of indeterminate prehistoric date were also recovered from layer 50808. Five sherds of pottery representing grog-tempered and flint-tempered Bronze Age fabrics were recovered. Four of the sherds including decorated sherds (Fig. 66, P55 and P56) were recovered from layers 50806 and 50805, alongside nine sherds of shell, limestone, and flint tempered prehistoric pottery of indeterminate date. One sherd of later prehistoric pottery was recovered from layer 50802 but is not shown on Figure 62.

Sixty-one sherds of Late Iron Age/Romano-British Black Burnished ware were recovered, 48 of which are precisely located within the sequence (Fig. 62). With the exception of one sherd from layer 50805, all this material was recovered from layers 50895, 50804, 50803, and 50802. The material was evenly distributed between these layers and showed no strong concentration within any one layer. One sherd of Dressel 20 amphora and one sherd of decorated samian (Fig. 69, 10) were recovered from the topsoil (layer 50802). Neither is shown on Figure 62.

Two sherds of post-medieval material were recovered from layers 50804 and 50802 respectively, although their precise location is unrecorded. A further three sherds of uncertain medieval date were recovered from layers 50803 and 50802. None of these sherds are shown on Figure 62.

Middle Farm – Trench B: Summary

The lowest deposits on the floor of the dry valley consisted of remnant valley gravels (50809), above Chalk bedrock. The original soils in the valley bottom were probably flinty acid argillic brown earths. These soils were eroded from this part of the valley prior to the deposition of the first recorded colluvial deposit. This consisted of a non-calcareous deposit (layer 50808) probably derived from soils formed in plateau drift upslope and on the valley sides. This deposit was formed in open country conditions and the absence of a woodland assemblage indicates that the original soil profile has been eroded away. This colluvium was deposited in the dry valley as a result of cultivation activity on the surrounding slopes. The date of this activity is suggested as being no earlier than Early Bronze Age as a single sherd of Beaker was recovered from this deposit. This activity may be associated with the Beaker domestic occupation represented by the three post-holes on the valley floor.

The date of initial clearance prior to this colluviation and of the erosion of the original soils on the valley floor cannot be determined within this sequence. The early Neolithic radiocarbon determination (OxA–2382, 4800±70 BP; 3780–3380 cal. BC) for the charcoal from structure *03252* within the enclosure in Trench A and the presence of two sherds of Neolithic bowl in this sequence point to early activity upslope.

The second episode of colluviation is represented by layer 50807. This flinty band represents the basal element of a soil resulting from the downward sorting of stones through earthworm activity, and, alongside the molluscan evidence, points to a stable period of grassland conditions. Layer 50806 contained Bronze Age material and was cut by ditch *03001* which is probably Bronze Age in date. This flinty band was sealed below layer 50806 which contained land snails more representative of arable conditions. This deposit can be associated on stratigraphic grounds with ditch *03001* and the lynchets on the west side of the valley. This evidence points to extensive cultivation upslope associated with a field system on the valley edges and across the valley floor. This change from grassland to arable conditions has therefore resulted in the erosion and loss from this sequence of the stonefree soil that should have been associated with the flinty band 50806. This arable activity dates to no earlier than the late Early–Middle Bronze Age on ceramic evidence. The presence of a positive lynchet on the western edge of the valley, by acting as a barrier to the downslope movement of soil, suggests that at least some of the Bronze Age material within layer 50806 is derived from further up the valley to the north rather than from adjacent slopes. It is notable that the two featured sherds from layer 50806 (Fig. 66, P55 and P56) are in a flint-tempered fabric unrepresentative of the predominantly grog-tempered material from the excavated features in Trench A. The more calcareous nature of this and the subsequent colluvium suggests extensive erosion of the chalky valley edges.

The third phase of colluviation is represented by layers 50805, 50895, and 50804. The base of these deposits was represented by a pronounced band of flint.

This layer was not associated with land snails indicating a return to grassland conditions. Therefore, unlike flint band 50807, this probably represents a phase of rapid erosion of the adjacent slopes, depositing the coarse, flint material at the base of the slope and taking the finer soil material further down the valley (M. Allen pers. comm.). The remaining silty deposits consisted of calcareous material indicative of cultivation and subsequent erosion on the chalky valley slopes and arable activity is supported by the land snail assemblages from these layers. The survival of the earlier lynchet on the west slope of the valley suggests this material was predominantly derived from the north and up-valley rather than adjacent slopes and that this activity therefore showed some respect for the pre-existing field system. The date of this activity was no earlier than the Late Iron Age. Material recovered from these deposits consisted of residual Bronze Age pottery alongside almost exclusively Black Burnished ware.

The dating of these deposits from artefacts points to a hiatus from the later Bronze Age to the Late Iron Age. This was not, however, apparent in the soil or land snail analyses although it is impossible from available evidence to determine if erosion has removed these layers from the sequence or they were never deposited in the first place.

The final episode within the colluvial sequence at Middle Farm was represented by a thick flinty layer (50803) occurring across the full width of the dry valley and was sealed below topsoil. Such a deposit may have derived from a rapid episode of deposition resulting from intensive arable activity and erosion on the valley edges. The deposit was laid down after the truncation of the earlier colluvial deposits on the east valley side and similarly overlies the earlier lynchet on the west valley side. A single sherd of post-medieval material from the top of layer 50804 and one piece of clay pipe from layer 50803 may date this episode of activity to the post-medieval period or later.

10 Site 9. Bridport Road Ridge

This site covers the area from the north of the Middle Farm spur to the A35 Bridport Road at Monkeys Jump (Fig. 63). Fieldwalking, observations of contractors' test-pits, and geophysical survey (Linford and Shiel 1990) were undertaken in 1986 and 1987. Trial excavation of soilmark features was undertaken in spring 1987. A number of features were recorded including a possible Bronze Age ditch. No area was subsequently targeted for area excavation. Observations during road construction in summer 1987 failed to identify any additional features. The principal recorded features and deposits may be summarised as:

Period 4 Roman corndrying oven
Period 2 Bronze Age enclosure
Period 1 Neolithic flint assemblage
Period 0 Periglacial features

Period 0. Periglacial Features

The Upper Chalk bedrock was overlain with plateau drift deposits consisting of reddish and yellowish flinty clays. These deposits were recorded to a depth of 1.1 m below topsoil to the east of Monkeys Jump and they occur throughout the Bridport Road Ridge. This deposit sealed, at a depth of 0.5 m, two linear periglacial features (Fig. 63, A). The features were aligned at right-angles, approximately north–south and east–west. Each feature was no more than 0.9 m wide and consisted of a series of well-rounded, smooth, conical pits infilled with identical material to the plateau drift deposits. The east–west feature aligns with a soilmark (Fig. 63), although as the former was sealed below drift deposits, the two are presumably co-incidental.

Period 1. Neolithic Flint Assemblage

Considerable lithic material was collected from the Bridport Road Ridge from the topsoil during earthmoving for road construction. Although this material is heterogeneous, a small fraction may be Early Neolithic in date.

Period 2. Bronze Age Enclosure

The southern part of a curvilinear ditch was identified (Fig. 63, B), enclosing an undefined area. The ditch had been cut through plateau drift deposits making identification difficult. Further elements to this enclosure were not identified during earthmoving for road construction.

Ditch *50823* (Fig. 63, section A) was filled with mid-brown silty clay; a concentration of flint nodules within the fill occurred along the northern, internal, edge of the ditch. Two sherds of possible Bronze Age pottery from the same vessel (Fig. 66, 57 and 58), a Phyllite whetstone (Fig. 77, 3), and also a quantity of struck flint (Fig. 80, 32–6), possibly representing a deliberate dump of knapping waste, were recovered. Pit *50826* (Fig. 63, section B) was identified to the south of the ditch. The stratigraphic relationship with ditch *50823* was not clear but this feature probably cuts it. No artefacts were recovered from the pit, which is undated. One further feature of undetermined function and date was identified to the north of the ditch and possibly internal to the enclosure. Pit *50827*, 2.2 m long, 1.5 m wide, and 0.75 m deep, was U-profiled but poorly defined. The pit was filled with mid-brown silty clays; no artefacts were recovered.

Period 4. Romano-British Graindrier

One Romano-British feature was identified (Fig. 63, C). The feature was pear-shaped, at least 2 m long and 1 m wide, with steep sloping sides and a shallow U-profiled base. The base of the pit was lined with bands of dark, charcoal-rich clay, and burnt clay to a depth of 0.4 m. This was sealed by an homogeneous mid-brown silty clay, similar to the plateau drift deposit through which the feature had been cut. No artefacts were recovered. The feature was probably a graindrier similar to the Roman graindrier identified at Fordington Field (Fig. 54, C) and St Georges Road (Fig. 12, *01185*).

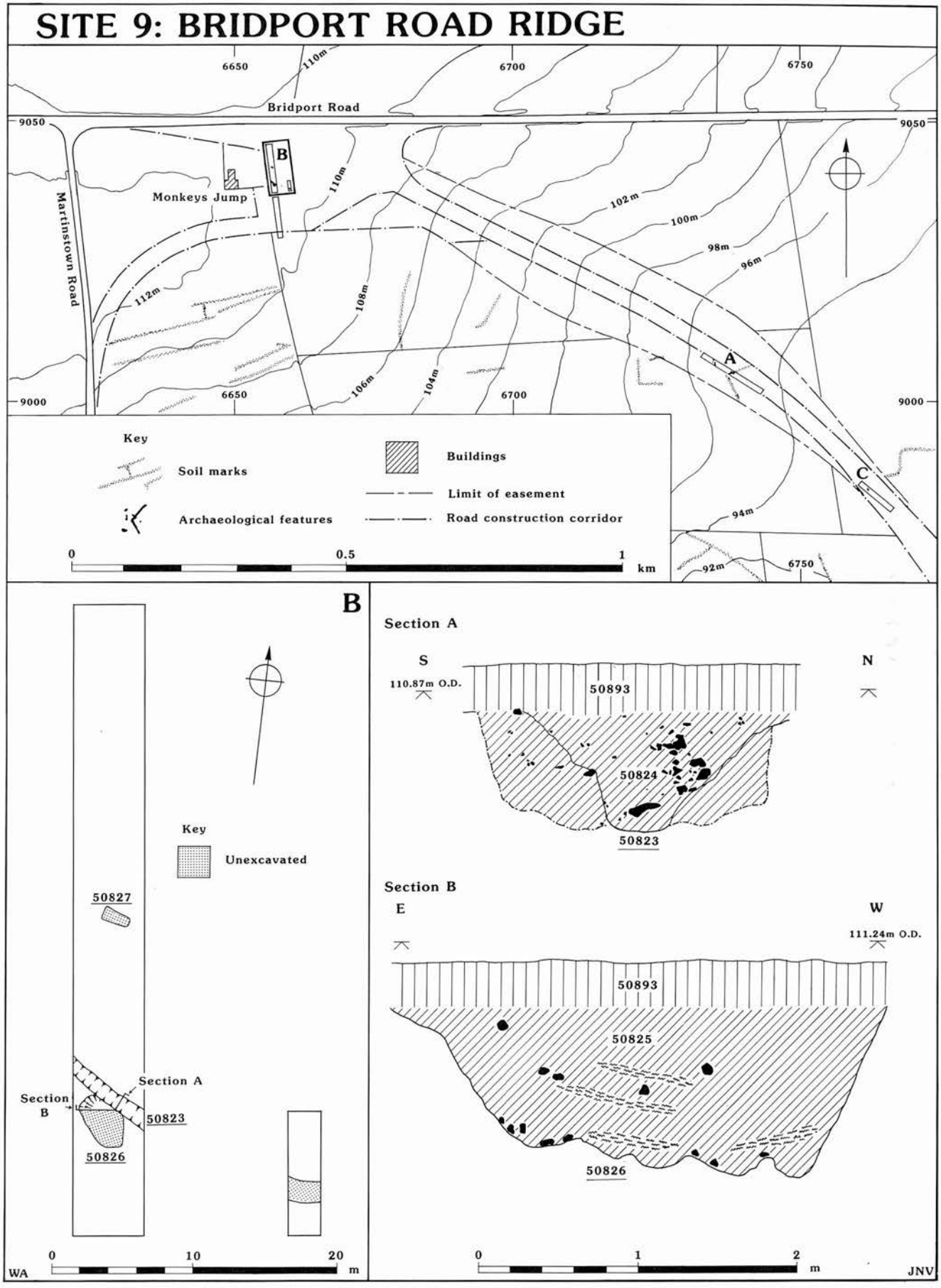


Figure 63 Bridport Road Ridge: trench location and archaeological features

3. Artefacts and Human Remains from the Southern By-pass: Evidence for Dating and Social and Economic Adaptation

edited by Elaine L. Morris

The recovery of artefactual evidence along the Southern By-pass was targeted to provide information regarding site chronology and function. The artefacts and human remains are examined in this section by material and then discussed by period and site as appropriate. Bulk finds are presented by types in full text with tabulated information by period or phase. Except where rare or unusual items are present, only general discussion is included in the published text, accompanied by tables summarising the distributions. The significance of these remains is then discussed by period with regard to production, exchange, and used as evidence for social and economic adaptation. Full descriptions of the prehistoric pottery fabrics, and of Iron Age and Roman pottery fabrics, forms, and decoration types which are new to the Dorchester type series (Seager Smith and Davies 1993) are included in microfiche. Full details and catalogues of all finds are in the archive. Archive catalogue reference numbers are included in text as appropriate.

The finds were recorded and processed using the Wessex Archaeology finds processing system (Morris 1992) and have been curated in accordance with UKIC (Walker 1990) and Dorset County Museum guidelines (1992).

1 Earlier Prehistoric Pottery, by Rosamund M.J. Cleal

Nature of the Assemblage

This report was completed in 1992. A total of 636 prehistoric sherds (6075 g) was recovered from nine sites (Table 4). The sherds are generally small, exceptions consisting of the groups from the earlier Neolithic pits at Flagstones and the material from the Bronze Age ditches at Middle Farm, which include large sherds in good condition. Detailed analysis of the pottery was undertaken to elucidate the date of occupation at the excavated sites, and to integrate these sites into the local and regional framework (eg, Wainwright 1979a; Green 1987; Woodward 1991).

Method

Sherds were counted and weighed individually, and the following attributes recorded where present: fabric, form, extent of rims and bases, thickness, conjoins, rim and base diameters and percentages of those diameters present, residues, surface treatment, and decoration. This information was computerised, using the standard Wessex Archaeology recording system (Morris 1992), and is available in the archive. Most rim and decorated sherds are illustrated in this report (Figs 64–6), but there are, in addition, drawings of other featured sherds in the archive. Overall sherd count and weight totals are given by phase and fabric for all sites in Table 5.

Thirty-three fabrics were defined with the aid of a binocular microscope at x20 magnification and are described and explained in the fabric catalogue (Mf 10). One sample from each of the majority of these was also thin-sectioned for petrological analysis. The fabrics are presented below in a coded format. The notation has been devised by the writer to give concise information on ceramic style and on type, frequency, and size of inclusions.

Because of the nature of the material, which is generally fragmentary, it has not been possible to define forms, except in a minority of cases, and the identification of material as belonging to specific ceramic styles is on the basis of extrapolation from sherds to known forms and styles. The exceptions to this are discussed below.

Forms

It did not prove possible to reconstruct vessel profiles of any of the pottery, but sufficient survives of a small number of vessels, mainly from the earlier Neolithic assemblage at Flagstones, to be confident of the forms. These are directly comparable to the assemblage from Maiden Castle, for which a coded system of terms applied to the vessel forms and rim morphology has been established (Cleal 1991a), using as criteria the presence or absence of a carination and the overall vessel shape as follows: 'open' is defined as a vessel with maximum diameter at the rim, 'neutral' as one with equal body and rim diameters, and 'closed' as a vessel with maximum diameter around the body. The angles of the rims are not certain in most vessels, so that a range is given in most cases. Three attributes were recorded as follows: form, which is considered to be the major treatment of the lip of the vessel, with 'simple' indicating no treatment other than finishing off the body wall neatly, 'rolled over' indicating that the lip is turned over, outwards, sharply, and 'enlarged' indicating an addition of some clay to the rim; attitude, which is a record of the angle

Table 4 summary of earlier prehistoric pottery by site

Site	*No.*	*Weight (g)*	*Mean sherd size (g)*	*Comment*
St Georges Road	9	61	6.8	Mainly undiagnostic; 1?later prehistoric
Flagstones	378	3021	8.0	Mainly earlier Neolithic
Conygar Hill	14	146	10.4	4 sherds Grooved Ware; 10 undiagnostic
Maiden Castle Farm	3	11	3.7	Likely to be later prehistoric
Maiden Castle Road	19	183	9.6	Mainly undiagnostic; earlier Neolithic element
Middle Farm (inc. colluvial sequence)	211	2627	12.5	Middle Bronze Age with small Beaker and Late Bronze Age groups
Bridport Road Ridge	2	26	13.0	?Middle Bronze Age

of the rim to the vertical axis of the vessel, and is confined to 'out-turned', 'upright', and 'in-turned'; and finish, which describes the minor treatment of the rim, and may be very variable around the circumference and can be 'rounded', 'pointed', and 'squared'.

The following vessel forms were identified (all forms are round-bottomed).

Open, slack-shouldered vessel (Fig. 64, 14): having a slightly open mouth and ill-defined shoulder; expanded, out-turned, rounded to flat-topped rim; fabric S2; similar to Rowden (Davies *et al.* 1991, fig. 52, 1, 3 and 6); earlier Neolithic; South-Western Regional Style.

Neutral, carinated bowl (Fig. 64, 8, 15): with rim diameter almost certainly approximating to that of the shoulder, and a well-defined shoulder angle below a slightly concave neck; simple, out-turned to upright, rounded to flat-topped rim; fabric S2; similar to Maiden Castle (Cleal 1991a, fig. 141, 1); earlier Neolithic; South-Western Regional Style.

Neutral, uncarinated straight-sided, deep, bowl (Fig. 64, 22): simple, upright, flat-topped rim; fabric F1; similar to Maiden Castle (Wheeler 1943, fig. 27, 9 and 19); earlier Neolithic; unspecific ceramic style.

Neutral to closed, uncarinated bowl (Fig. 64, 6–7): with rim diameter equal to or slightly less than maximum body diameter; simple, out-turned to upright, rounded rim; oval, horizontal, vertically perforated lug attachment; fabric S2; similar to vessels from Maiden Castle, although no exact parallels; earlier Neolithic; South-Western Regional Style.

Fabrics

The fabrics are presented here in coded summary form only, full details are available in archive. The description is notated in the following order: inclusion types present, excluding rare inclusions/frequency of inclusions/size of inclusions. Inclusions are given in alphabetical order, and in the same order in each category eg:

F;S / s; m / 5 (2); f denotes a fabric with sparse flint <5 mm, but with most inclusions <2 mm, and moderate fine sand.

Abbreviations used are:

Inclusions
Bf: Beef-type calcite
C: Non-Beef-type calcite
Ca: Calcareous of unidentifed type
Fe: Iron oxides
F: Flint
G: Grog
L: Limestone
Oo: Oolites; V (Oo) denotes represented by voids
Q: Angular quartz or quartzite
S: Sand (quartz unless otherwise specified)
Sh: Shell
Unident: Unidentified inclusion
V: Voids

Frequency (% by area)
s: sparse (3–7%); m: moderate (10–15%); c: common (20–25%); vc: very common (30%); a: abundant (40–50%).

Size
Maximum dimension of inclusions is given, with preferred maximum given if this is clearly different from the overall maximum. For sand a division into fine (f) and coarse (c) is given.

Codes with the figure 99 indicate sherds in unclassifiable fabrics (usually because of the smallness of the sherd or fragment) in which the inclusion type prefixing the figure is the only or dominant inclusion present (eg. F99 is an unclassifiable fabric with flint as the dominant or only inclusion visible).

The fabrics were assigned to ceramic style on the basis of the form and decoration of sherds occurring in those fabrics. Fabrics in which no diagnostic material occurs carry the abbreviation for Indeterminate (eg. F6/Indet), except in cases where there are compelling reasons for assigning the fabric to a particular style (eg. in the case of the gabbroic ware sherds). Abbreviations used are: 'Neo' for earlier Neolithic, 'GW' for Grooved Ware, 'Bkr' for Beaker, 'BA' for Early or Middle Bronze, 'LBA' for Late Bronze Age, 'LP' for indeterminate later prehistoric pottery and 'Indet' for pottery of unknown ceramic style.

Established fabrics (ie in TWA fabric type series)
E1/Neo gabbroic ware (Peacock 1969)
E90/LP Hobarrow type briquetage (Farrar 1975)

Other fabrics
Flint-gritted
F1/Neo C; F; Fe; S / s; m; s; m / 4; 8; 1; c
F2/BA F; G / m; m / 2; 2
F3/LP F; S / m; c / 3; c
F4/Bkr F; M; S / s; s; s / 2; f; f
F5/BA Ca; F; G; S / s; s; s; c / 2; 4; 2; c
F6/Indet F; S / m; c / 10(2); c
F7/BA F; S / c; s / 7; c

Grog-tempered
G1/BA G; S / m; s / 6; f
G2/BA G; S / vc; m / 1.5; f
G3/Bkr ?C; G; S; Unident / 2(1); 2; f; 2(1)
G4/Bkr G; S / m; c / 2(1); c
G5/Indet F; G; S / s; c; s / 3(2); 5; f

Limestone-gritted
L1/Neo Bf; S / a; s / 10; f
L2/BA Bf; G; S / m; s; s / 3; 2; f
L3/LP L; S / c; s / 3; f
L4/?LP L / c / 10
L5/?Neo Q; S; V(Oo) / s; m; s / 1; c; 3
L6/?Neo C; S / m; m / 4; c
L7/Indet G; O; S / m; c; s / 1; 1; f

Quartz-gritted
Q1/LNBA Fe; Q; S / s; s; s / 4; 6; f
Q2/Bkr Ca; Fe; G; S / s; s; s; m / 4(2); 1; 5; c
Q3/Indet S; Unident / m; s / c; 10
Q4/?LP S / c / 2
Q5–Q6 Not used
Q7/?LP S; V / c; s / c; 4

Rock-gritted
R1/Indet mixed minerals / c / 5(2)
R2/BA G; Q / m; m / 6; c
R3/?LP mixed minerals / c / 3

Shell-gritted
S1/GW Sh / s / 12
S2/Neo S; Sh / s; c / f; 9(5)
S3/Neo S; Sh / m; s / c; 8
S4/?LP Fe; L; S; Sh / s; s; m; s / 1; 7; c; 5(2)

Fabric by Ceramic Phase

Earlier Neolithic

The only site to have produced a large amount of earlier Neolithic pottery is Flagstones, and there the assemblages from the pre-enclosure pits and those from the enclosure ditch segments are dominated by two fabric types: those with flint temper and shelly fabrics. In the pre-enclosure pits the division between the fabrics is approximately 50/50, and there are no other fabrics present (Table 5). The assemblage is homogeneous, and may well represent a short period of manufacture and use. The Neolithic pottery from the enclosure segments, however, is more varied in fabric and includes one with beef-type calcite inclusions, gabbroic ware, and a single sherd which may have contained oolitic limestone, although no inclusions survive.

Petrological analysis was carried out on fabrics E1, F1, L1, S2, and S3 and with the exception of E1, which was confirmed as gabbroic ware derived from the Lizard peninsula in Cornwall, all the fabrics could be the result of local manufacture. The analysis was unable to determine whether the shell inclusions in S3 were fresh or fossil, but some recrystallisation of the shell in S2 suggests it is of fossil origin. No flint or chalk, which could point to a local origin, occurred in the thin section of this fabric, and Williams suggests that the source is likely to be Jurassic, rather than in the immediate vicinity of the site. Jurassic deposits occur, however, only about 8 km to the south of Dorchester (Williams, archive). Too little shell occurred in fabric S3 for the presence or absence of recrystllisation to be identified, but flint was noted in this fabric during macroscopic examination, thus perhaps indicating a more local source for this fabric than for S2. Fabric L1 contains calcite which was probably crushed and added to the clay. Calcite of the fibrous form known as 'beef' occurs in the Purbeck Beds, which run east–west approximately 5–6 km south of Dorchester, most notably in the Chief Beef Beds (Melville and Freshney 1982, 62–4). The nearest source to Dorchester is in the Upwey/Poxwell area.

Late Neolithic: Grooved Ware

The single Grooved Ware vessel, from a pit-ring on Conygar Hill, is in a fabric containing sparse shell and argillaceous material, some of which may be grog (S1) (archive). Shell is a preferred inclusion type in Grooved Ware, and in the Dorchester area also occurs in the Grooved Ware at Mount Pleasant (Longworth 1979, 84).

Late Neolithic/Early Bronze Age: Beaker

Beaker pottery is represented only at Middle Farm, where it occurs in three post-holes which cannot be stratigraphically related to the colluvial sequence. Grog, flint, quartz sand, and chalk occur in the Beaker fabrics (F4, G3, G4, and Q2), all of which could have been derived from local sources (archive). Grog and sand are extremely common inclusions in Beaker pottery, both almost certainly added to the clay as temper, and flint is also a not uncommon additive.

Early–Middle Bronze Age

Although there are a few sherds from other sites, most of the pottery of this date is from Middle Farm. There, the majority of the pottery from both the enclosure ditch and the linear boundary ditch is in the grog-tempered fabric G1. A small number of sherds are in other fabrics, including fabrics R2 and Q1, the sources of which are unknown but may be non-local, and the probably local fabrics L2 (with beef-type calcite) and F2, a distinctive Globular Urn fabric with flint and grog. Grog-tempered fabrics are a feature of Early and Middle Bronze Age ceramics in southern Dorset, occurring in the assemblage from Site A, Rowden (Davies *et al.* 1991, predominantly fabric 1), and at Poundbury (Smith 1987, fabric A). Neither of the fabrics from Rowden is a close match for G1, which is softer and contains larger and more frequent grog fragments. The Poundbury grog-tempered fabric appears to be similar (from Smith's description) although not identical, to those of both Middle Farm and Rowden. Because of the difficulty of distinguishing grog from the clay matrix without preparing thin sections, it is probably not possible to identify more than general similarities or dissimilarities in ceramic practices. Unlike the Middle Bronze Age of central Wessex, the ceramic traditions of southern Dorset exhibit a long-term preference for grog which extends from the Early Bronze Age well into the Deverel-Rimbury and associated ceramic forms of the Middle Bronze Age.

Pottery by Site

The quantity of prehistoric pottery is listed by site in Table 4 and by fabric group and phased features in Table 5. Any features containing prehistoric pottery which cannot be assigned to a specific period are not included in the discussion below, nor is any of the featureless pottery recovered from Roman and later contexts.

St Georges Road

The small collection of nine sherds includes only one featured sherd (Fig. 64, 1), a simple upright rim. The fabric of this sherd, F3, is one which elsewhere (Middle Farm, Fig. 66, 51) occurs in a vessel likely to be of Late Bronze Age or Early Iron Age date. This sherd was recovered from the Romano-British rectangular enclosure from which a sherd, almost certainly briquetage (fabric R3), was also recovered. The latter may be later prehistoric in date, although it is possible that it belongs to the Romano-British use of the site.

Flagstones

The majority of the prehistoric pottery is of earlier Neolithic date, and most sherds were recovered from the pre-enclosure pits. A small Bronze Age element appears to be associated with the ring-ditch.

Pre-enclosure pits

Two pits, *00274* and *00221*, produced a large assemblage (252 sherds, 2026 g) of earlier Neolithic pottery of the South-Western regional style (Whittle 1977; also formerly known as 'Hembury Ware'). Pit *00274* had not been subsequently disturbed, but *00221* was cut by a segment of the enclosure ditch. Pit *00274* produced sherds representing at least ten vessels (Fig. 64, 2–13), and *00221* a minimum of three (Fig. 64, 14–16). No conjoins occur between the two features, but the pottery is similar in form and fabric, and seems likely to belong to the same episode of use. Figure 64, 15 almost certainly belongs to the same vessel as Figure 64, 8 so strengthening this argument.

Vessel forms identified within this assemblage comprise neutral carinated (Fig. 64, 8) and uncarinated bowls (Fig. 64, 14) and lugged bowls (Fig. 64, 6 and 7). At least one vessel (Fig. 64, 7) appears to be a closed bowl with lugs set close beneath the rim, but the angle of the rim is not certain. The size of most of the vessels is also uncertain, but some small cups or bowls may be represented among the thin-walled rims (eg. Fig. 64, 4 and 5). Figure 64, 3 is an unusual sherd in that there is almost no curvature in any direction. It is just possible that this represents a flat, square or rectangular platter, such as are rare occurrences at Carn Brea, Cornwall (Smith 1981). However, the sherd is very small and an alternative is that it belongs to an unusually deep, straight-sided vessel of large diameter, such as a slightly more-straight-sided version of one of the vessels at Maiden Castle (Wheeler 1943, fig. 29, 40).

The enclosure

Primary infilling of the pits and pit segments: a single featured sherd in fabric F1 (Fig. 64, 17) from segment 28, exhibits a very slightly thickened rim of diameter 200–300 mm. This thickening is so slight as to suggest that it was not intentional. The sherd is in fair condition, and is in the same fabric as much of the pottery from the pre-enclosure pits, the nearest of which, pit *00274*, is 10 m to the north-east. The form is not exactly paralleled in the pit assemblage. The vessel represented, therefore, is almost certainly of earlier Neolithic date. A further nine body sherds were recovered from similar contexts in the primary infilling of other ditch segments.

Initial soil fills within the segments: All 18 sherds are featureless, but are likely to be earlier Neolithic on the grounds of fabric. Gabbroic ware first appears in this phase, consisting of one body sherd in segment *14*.

Final silting of the enclosure pit segments: Seven rim sherds occurred including Figure 64, 18–21. The large perforation in Figure 64, 20 is most likely to be the mortice hole for a lug (cf. Smith 1991, P12). Thirty-nine featureless sherds, including one (35 g) of gabbroic ware from segment *28*, were also recovered, all but two of which are of likely to be earlier Neolithic. The two exceptions, small sherds in grog-tempered fabrics, from segments *02* and *30*, are almost certainly of Bronze Age date.

The ring-ditch complex

This complex includes the upper filling of pits *00191*, *00193*, *00199*, *00403*, *00406*, *00407*, and *00414*, a group on the north side of the ring-ditch. Only one featured sherd (Fig. 64, 23) of earlier prehistoric date was recovered from this group, from context 00194 in pit *00191*. This sherd, a small, plain, unthickened, rounded rim, is almost certainly of Early or Middle Bronze Age date. Although it is featureless, and even the angle of lie of the rim is not ascertainable, the fabric contains some grog and shows some resemblance to fabric G1, a Bronze Age fabric. One featureless sherd, also in fabric G1, was recovered from the same feature.

Upper filling of central ring-ditch: The two featured sherds recovered from this phase (Fig. 64, 24, 25) are also both likely to be of Early or Middle Bronze Age. The sherds are small and the form of the vessels from which they derive is uncertain, but the grog-tempered fabrics are distinctive, and are paralleled in the Bronze Age assemblage from Middle Farm, discussed below. Featureless body sherds in the same fabrics also occur in this phase.

Conygar Hill

Pit-Ring 52118: Four sherds in fabric S1, almost certainly belonging to a single Grooved Ware vessel (Fig. 65, 27 and 28), were recovered from the primary fill of the pit in this group and can therefore be considered to be contemporary with its excavation. The sherds are in fresh to fair condition, and belong to a vessel of the Durrington Walls sub-style (Wainwright and Longworth 1971, 240–2)

Pit-Ring 52100: Five featureless sherds (in fabric F1/Neo) from this phase may be of earlier Neolithic date and therefore residual in this context.

Maiden Castle Farm

Ring-ditch 52045: One small rim sherd in fabric Q7 was recovered. The rim form is unthickened and pointed, and the angle at which it lies is not ascertainable. Both the fabric and rim form could be accommodated in the local Iron Age ceramic tradition, although the fabric is not one exactly paralleled at Maiden Castle (Brown 1991). Although two other sherds probably of the same vessel also occur in this context, the smallness of the sherds must render tentativeany identification.

Maiden Castle Road

Quarry scoop 02287: One featured sherd (Fig. 65, 29) is certainly of prehistoric date, although its precise affinities are not clear. It is in a fabric not exactly paralleled by any other diagnostic pottery from the By-pass: the use of dense flint and the hardness of the fabric seem to suggest a Middle Bronze Age date, although the wide range of temper size would be slightly unusual in such fabrics and suggests a later prehistoric date. As the use of flint as a temper and fingernail impression as a decorative technique, are both ubiquitous in the 3rd and 2nd

Table 5 distribution of prehistoric pottery by ceramic style (No. and weight (g) of sherds)

	Earlier Neolithic	*Grooved Ware*	*Beaker*	*Bronze Age*	*Later prehist.*	*Brique-tage*	*Indet.*
St Georges Road							
Period 4B rectangular enclosure							
Ditch *01103*	–	–	–	–	1/3	1/25	–
Ditch *01075*	–	–	–	–	–	–	1/1
Period 6A field boundaries	–	–	–	–	1/8	–	3/18
Period 6C field system	–	–	–	–	–	–	2/6
Flagstones							
Period 1A pre-enclosure pits							
Pit *00274*	224/1647	–	–	–	–	–	–
Pit *00221*	28/379	–	–	–	–	–	–
Period 1B enclosure: primary filling of ditch segments							
07	1/1	–	–	–	–	–	–
15	1/3	–	–	–	–	–	–
16	1/4	–	–	–	–	–	–
27	1/7	–	–	–	–	–	–
28	2/42	–	–	–	–	–	–
30	2/20	–	–	–	–	–	–
32	1/11	–	–	–	–	–	–
37	1/8	–	–	–	–	–	–
Stabilisation horizon above primary fills in ditch segments							
04	5/15	–	–	–	–	–	–
07	1/5	–	–	–	–	–	–
Initial soil fills within ditch segments							
14	1/16	–	–	–	–	–	–
30	1/6	–	–	–	–	–	–
32	4/15	–	–	–	–	–	2/6
33	1/2	–	–	–	–	–	–
37	3/8	–	–	–	–	–	–
38	5/31	–	–	–	–	–	1/1
Final silting of ditch segments							
02	–	–	–	1/6	–	–	–
04	1/8	–	–	–	–	–	–
08	1/7	–	–	–	–	–	–
13	1/10	–	–	–	–	–	–
18	1/2	–	–	–	–	–	–
24	6/23	–	–	–	–	–	–
25	2/16	–	–	–	–	–	–
28	15/138	–	–	–	–	–	–
29	5/44	–	–	–	–	–	–
30	3/26	–	–	–	–	–	1/1
32	2/18	–	–	–	–	–	–
36	1/86	–	–	–	–	–	–
38	6/56	–	–	–	–	–	–
Period 2							
Grave *00430*	3/29	–	–	–	–	–	–
Pit *00191*	–	–	–	3/20	–	–	–
Soil fills of N group of peripheral pits	–	–	–	3/19	–	–	–
Soil fills of ring-ditch	–	–	–	10/63	–	–	–
Soil layer inside ring-ditch	1/7	–	–	–	–	–	–

Table 5 (cont.)

	Earlier Neolithic	*Grooved Ware*	*Beaker*	*Bronze Age*	*Later prehist.*	*Brique-tage*	*Indet.*
Period 3							
Boundary ditch *00011*	1/5	–	–	–	–	–	–
Primary fill	–	–	–	–	–	–	1/4
Upper fill	–	–	–	–	–	–	1/21
Pit *00018*	1/2	–	–	–	–	–	–
Pit *00054*	–	–	–	–	–	–	1/10
Pit *00074*	1/6	–	–	–	–	–	–
Pit *00305*	1/2	–	–	–	–	1/18	–
Pit *00019*	2/6	–	–	–	–	–	2/50
Feature *00057*	–	–	–	–	–	–	1/15
Period 6 linear ditches							
00241	1/2	–	–	–	–	–	–
00239	1/2	–	–	–	–	–	–
00289	1/19	–	–	–	–	–	–
Period 7 post-medieval							
Features, topsoil, cleaning surfaces	1/18	–	–	–	–	–	1/6
Misc. modern features	2/7	–	–	–	–	–	–
Unphased	1/1	–	–	–	–	–	5/21
Conygar Hill							
Period 1 Construction and primary chalk filling							
Pit *52119* in pit-ring *52118*	–	4/105	–	–	–	–	–
Soil infilling of pit-ring *52100*							
Pit *52106*	4/15	–	–	–	–	–	–
Pit *52222*	1/15	–	–	–	–	–	–
Period 2							
Ditch *52187*	–	–	–	–	–	–	1/1
Period 6							
Ditch *52210*	–	–	–	–	–	–	4/10
Maiden Castle Farm							
Period 2 tertiary infilling ring-ditch *52045*	–	–	–	–	3/11	–	–
Maiden Castle Road							
Period 1/2 quarrying features							
Quarry *02287*	5/35	–	–	–	–	–	4/29
Linear feature *52022*	–	–	–	–	–	–	1/5
Scoop *02257*	2/35	–	–	–	–	–	–
Pit *02292*	–	–	–	1/20	–	–	4/45
Period 4B square enclosure							
Central burial *02250*	1/13	–	–	–	–	–	–
Period 4C structure *02309*							
Hearth 02333	–	–	–	–	–	–	1/1
Middle Farm							
Trench A Period 2							
Enclosure *03050*							
2ndry chalky fills, S limb	–	–	–	1/7	–	–	1/2
Tertiary fills S limb	–	–	–	2/80 1/25*	–	–	2/8
Infilling of N limb	–	–	–	13/303	–	–	–

Table 5 (cont.)

	Earlier Neolithic	*Grooved Ware*	*Beaker*	*Bronze Age*	*Later prehist.*	*Brique-tage*	*Indet.*
Post-hole *03268*	–	–	–	1/6	–	–	–
Pit *03157*	–	–	–	2/100	–	–	–
Pit *03162*	–	–	–	–	–	–	2/41
Construction & primary chalk fills linear boundary *03051*							
W. portion of ditch	–	–	–	2/17 1/28*	–	–	–
E. portion of ditch	–	–	–	7/48	–	–	1/10
Grave *03083*	–	–	–	–	–	–	1/1
Secondary soil infilling boundary *03051*							
W. portion of ditch	–	–	–	4/22	–	–	5/16
C. portion of ditch	–	–	–	40/570	–	–	1/7
E. portion of ditch	–	–	–	8/128	–	–	7/20
Ditch *03051*, final infilling, soil layers to W.	–	–	–	2/9	1/13	–	18/107
Unphased fills ditch *03051*	–	–	–	3/86	–	–	–
Ditch 03206, external to enclosure ditch *03050*	–	–	–	–	–	–	2/14
Scoop *03361*	–	–	–	1/17	–	–	–
Topsoil	–	–	–	–	–	–	1/18
Trench B							
Post-holes *03097, 05850, 50855*	–	–	29/257	1/23	–	–	–
Lynchet *03026*	–	–	–	–	–	–	1/4
Linear ditch *03001*	–	–	–	2/25	–	–	–
Colluvial sequence (by context)							
50802	–	–	–	–	1/5	–	–
50895	1/2	–	–	1/16	–	–	–
50805/50895	1/7	–	–	–	1/6	–	5/11
50806	–	–	–	3/33	–	–	2/9
50808	–	–	1/3	–	–	–	2/4
Unphased clearance	–	–	–	1/13	–	–	2/10
Unstratified	–	–	–	11/395	12/75	–	4/26
Bridport Road Ridge							
Period 2 ditch *50823*	–	–	–	2/26	–	–	–

* denotes sherds which which may be Late Neolithic or Early Bronze Age in date
All pottery is either asigned to a ceramic style or designated indeterminate on the grounds of fabric; fabrics are designated as belonging to a ceramic style on the basis of diagnostic sherds occurring in them

millennia cal. BC, as well as the earlier 1st millennium, the dating of this sherd must remain uncertain.

Scoop 02257: One rim sherd (Fig. 65, 30) belonging to a cup or small bowl of earlier Neolithic date was recovered.

Pit 02292: Five body sherds were recovered from this small pit. Three are likely to be Bronze Age or later; the other two (40 g) are in gabbroic ware and therefore almost certainly earlier Neolithic.

Middle Farm

Most of the prehistoric pottery is late Early or Middle Bronze Age date, although there is also a small Beaker group. Featureless body sherds are listed (Table 5) but not discussed if consistent with the diagnostic material.

Trench A

The Enclosure Ditch 03050: The only featured sherd from the secondary chalky filling of southern limb of *03050* is from a Globular Urn (Fig. 66, 37).

Tertiary filling of southern limb of 03050: Two unusual featured sherds (Fig. 66, 38, 39) were recovered; both are in fabrics not represented elsewhere than at Middle Farm. Figure 66, 38 is a large sherd from the slack shoulder of an Early or Middle Bronze Age urn of indeterminate type. The form is clearly biconical, but the decoration, which appears to consist

of shallow, fingertip impressions below the shoulder, is not typical of true Biconical Urns.

The fabric is extremely unusual, in that it contains fragments of a probably ferruginous sandstone, a type of inclusion not represented elsewhere on the By-pass (the only comparable fabric known to the writer from the Dorchester region is a single piece of Ebbsfleet Ware from Maiden Castle (Wheeler 1943, fig. 34; 118), for which the source of the sandstone is also unknown). Sandstone containing iron can be found in the Bagshot Beds, which outcrop near Dorchester providing a possible source (archive, Group 6).

The small fingernail decorated sherd (Fig. 66, 39) is similarly in a rare fabric, in which only one other sherd occurs (Fig. 66, 41), from the linear boundary ditch at Middle Farm, discussed below. The large grit shows some resemblance to Peterborough Ware and the decoration could also be accommodated within this tradition, but the use of quartz rather than flint is not paralleled by Peterborough Ware in the local area. However, the contexts of both the sherds strongly indicate a Bronze Age date, and herringbone (Fig. 66, 41) certainly occurs in the Early Bronze Age and, occasionally, later (eg. over the body of a large urn from Bishops Cannings Down (Tomalin 1992).

Infilling of northern limb of 03050: The base and lower body of a thick-walled, grog-tempered vessel (Fig. 66, 40), almost certainly of Early or Middle Bronze Age date, was recovered. A thick carbonised residue adheres to the interior surface of the lower body wall.

Post-hole 03268 and pits 03157 and 03162: A small number of featureless, grog-tempered, sherds probably of Bronze Age date were found in these features (Table 5).

Linear Boundary 03051: The primary chalk rubble fills produced one sherd (Fig. 66, 41; fabric Q1) which is clearly related to the anomalous sherd (Fig. 66, 39) from the enclosure ditch *03050*. On the grounds of fabric, these could belong to the same vessel, although the decoration is different. Two other featured sherds (Fig. 66, 42, 43) are almost certainly of Early or Middle Bronze Age date, although both are slightly unusual. Figure 66, 43 is a sherd from a large thick-walled grog-tempered (G1) vessel, presumably a local form of Bucket Urn, decorated with grooves and fingertip impressions, and Figure 66, 42 is from a smaller, straight-walled or slightly ovoid vessel of similar fabric with a lug set immediately beneath the rim.

With the exception of one sherd in fabric F3/LP, which may be a later prehistoric fabric, all the featureless sherds from the fills are in fabric G1/BA (Table 5).

The featured sherd material from the secondary ditch fill is similar to that from the lower fills of the same ditch, discussed above, consisting mainly of Early or Middle Bronze Age material in fabric G1. Both straight-sided (Fig. 66, 44) and convex (Fig. 66, 47) body profiles are represented, although the forms are not clear. One sherd (Fig. 66, 45) exhibits an internal rim bevel reminiscent of Early Bronze Age Food Vessels or Collared Urns, but the vessel does not appear to belong to either of these groups *sensu stricto*.

The single cordoned vessel (Fig. 66, 49) is from these fills and is the only example of a Bronze Age fabric incorporating beef-type calcite (L2). The use of the beef calcite is not surprising, in view of its use in the Neolithic and its likely source *c.* 6 km to the south. A late date for this vessel might be suggested, on the basis of its position in the secondary filling of the boundary ditch, and the fact that fabrics with beef-type calcite figure largely in the Late Bronze Age assemblage from Coburg Road, Dorchester (Cleal 1992b), only 0.6 km to the east of Middle Farm.

Unphased spits in ditch 03051: Two featured sherds of Middle Bronze Age date cannot be fitted into the phasing sequence. One is a large sherd from a Bucket Urn with a row of single, plastic, fingernail impressions, applied directly to the body wall (Fig. 66, 53), and the other is a rim sherd from a Globular Urn (Fig. 66, 52) which is likely to be of Type II (Calkin 1964).

Ditch 03206: Only two featureless sherds in fabric G5 were recovered from this ditch, which is external to the enclosure ditch *03050*. Although no diagnostic material occurs in this fabric, it shows some similarity to G1/BA and is likely to be of Bronze Age date.

Final infilling of linear boundary 03051: The only featured sherd from this fill, and perhaps an indication of its late date, is a rim sherd from a small bowl or jar with a sharply defined shoulder (Fig. 66, 51), in a hard flint-tempered fabric (F3). Although there are no close parallels for this vessel in the Dorchester area, a date in the Late Bronze Age would not seem unlikely, on the grounds of its form and fabric.

Unstratified material: The base and lower body of an Early or Middle Bronze Age vessel, almost certainly a Bucket Urn, was recovered from Middle Farm. The vessel is grog-tempered (fabric G1) and clearly belongs to the same use of the site as the other pottery in this fabric. A single, sharply shouldered sherd in fabric F3 (not illustrated) hints at some use of the site later in the Bronze Age, and is perhaps contemporary with Figure 63, 51.

Trench B

Post-holes 03047, 050850, and 05085: Three post-holes, *03047*, *50850*, and *50855*, produced 30 sherds, of which 19 are featured Beaker sherds probably representing no more than five Beakers (Table 5). Conjoins between sherds of one of these vessels (Fig. 65, 35) indicates that features *50850* and *50855* may be contemporaneous, and sherds which almost certainly belong to Figure 65, 34 were also found in *03047*, although there are no conjoins. Only one vessel (Fig. 65, 34) is represented by more than one or two sherds, and the condition of all the sherds is poor: all are worn to some degree, and the wear is severe enough to obscure the decoration over small areas.

Linear ditch 03001: Two sherds were recovered from this feature. Both are featureless, but are likely to be Bronze Age in date on the basis of their fabric (ie G1/BA).

The colluvial sequence: The majority of sherds from this sequence are small and featureless, and can only be assigned to stylistic groups on the unreliable grounds of fabric alone. The two sizeable featured sherds (Fig. 66, 55, 56) are in flint-tempered fabrics which are likely to be of late Early (possibly belonging to Biconical Urns) or Middle Bronze Age date, although they appear strikingly different to the predominantly grog-tempered assemblage of the enclosure, and the succeeding linear boundary ditch.

Bridport Road Ridge

Ditch 50823: Only two sherds were recovered, both of which are likely to belong to the same vessel (Fig. 66, 57, 58). The fabric is hard, sandy and densely tempered with fine grog. The sherds resemble Globular Urn in both fabric and decoration, but the fabric is harder and more sandy than is usual. The decorative motif is unclear, but includes multiple horizontal lines beneath the rim, and multiple curvilinear lines on the vessel body. A later date than Middle Bronze Age would seem to be indicated on the grounds of fabric, but the decoration of the sherds does not readily fit into any of the later local ceramic traditions.

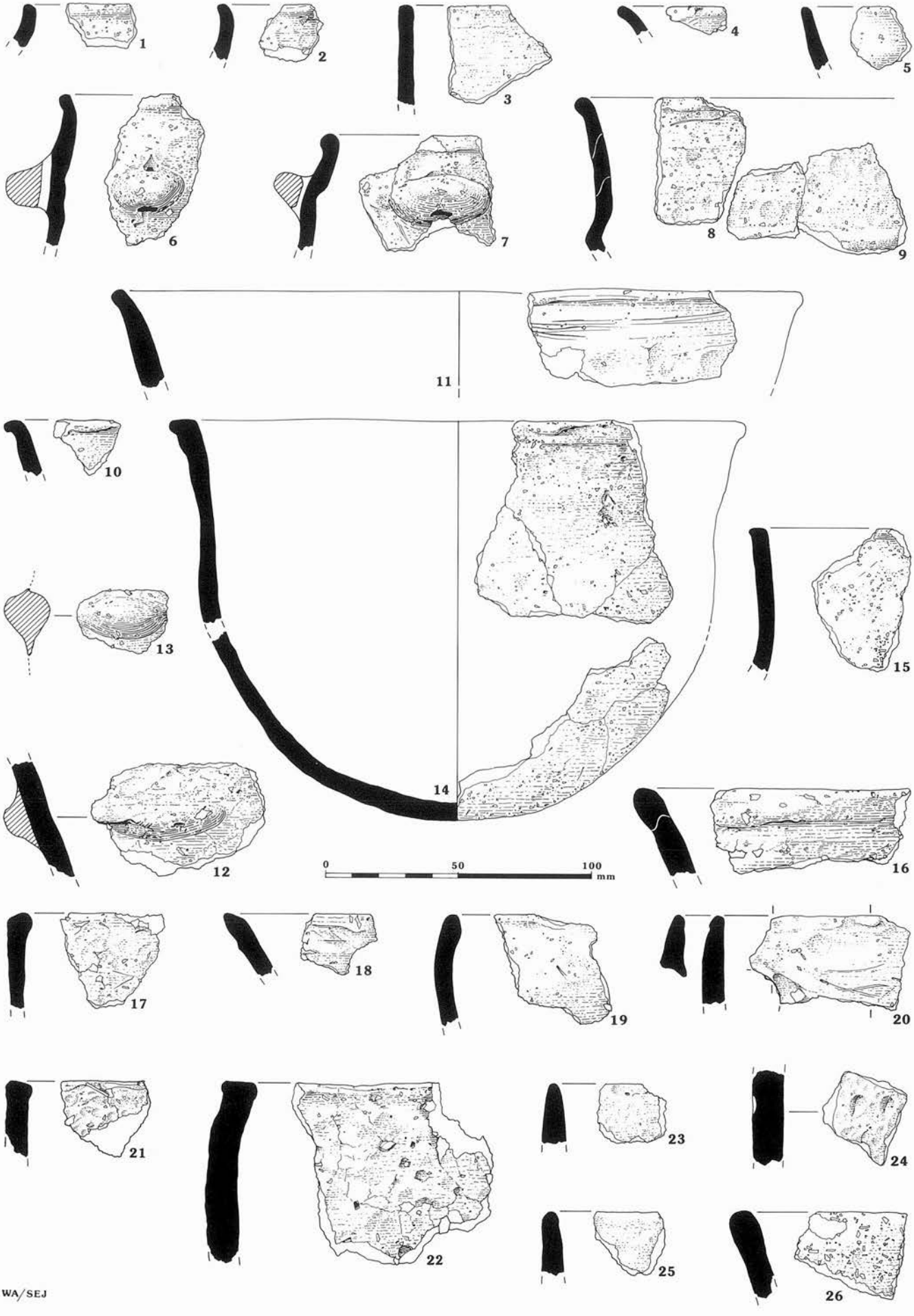


Figure 64 Earlier prehistoric pottery: St Georges Road (1); Flagstones (2–26). Scale 1:2

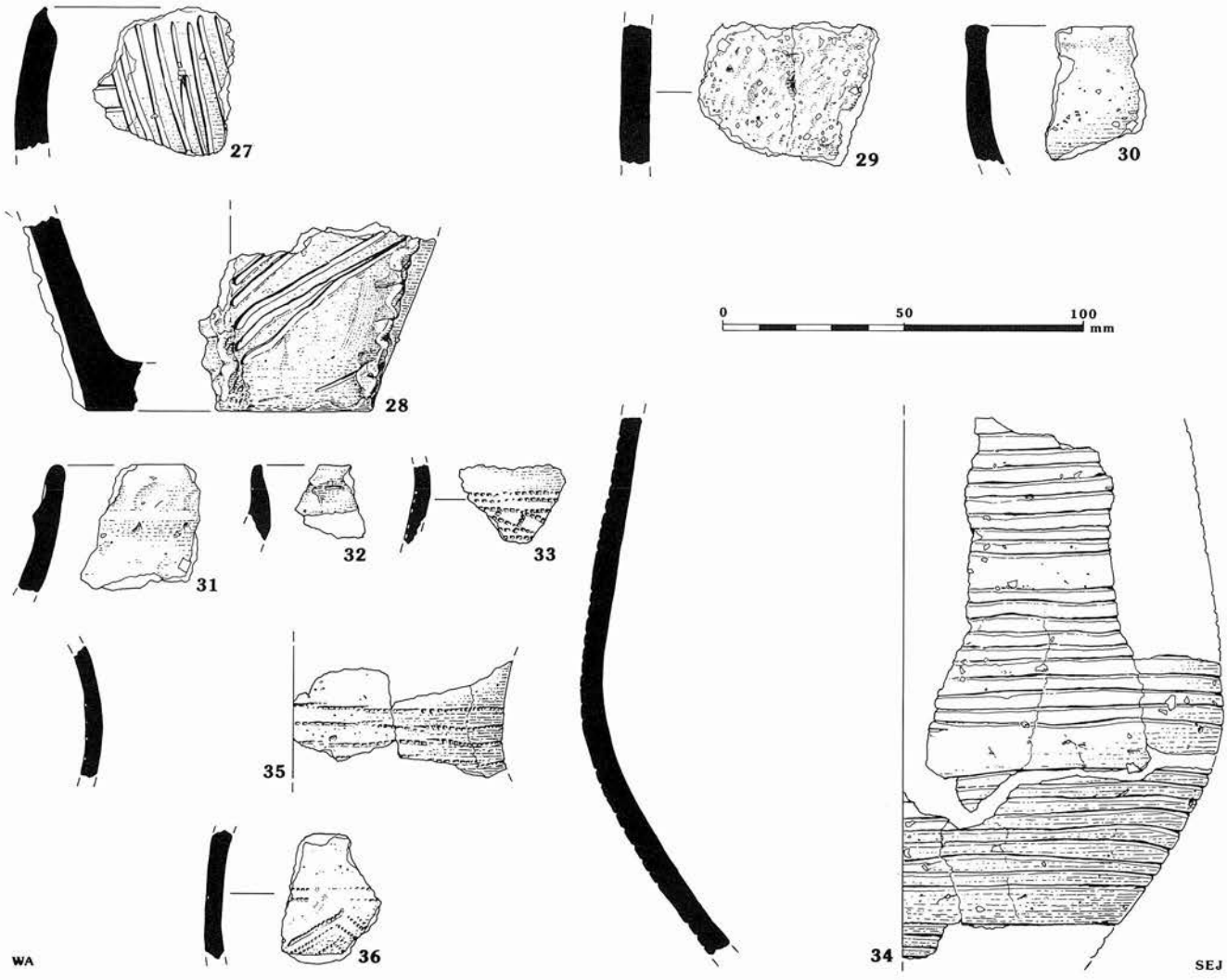


Figure 65 Earlier prehistoric pottery: Conygar Hill (27, 28); Maiden Castle Road (29, 30); Middle Farm trench B (31–6). Scale 1:2

Illustrated prehistoric pottery

(PRN - pottery record number)

Fig. 64

St Georges Road

1. Rim; fabric F3/LP; PRN85044, 01104, Period 4B.

Flagstones

2. Rim; fabric F1/Neo; PRN85025, 00273, Period 1A.
3. Rim; fabric F1/Neo; PRN85027, 00273, Period 1A.
4. Rim; fabric F1/Neo; PRN85023, 00273, Period 1A.
5. Rim; fabric F1/Neo; PRN85022, 00273, Period 1A.
6. Rim with vertically-pierced, horizontal lug; possibly same vessel as P7 below; fabric S2/Neo; PRN85143, 00273, Period 1A.
7. Rim with vertically-pierced, horizontal lug; possibly same vessel as P6 above; fabric S2/Neo; PRN85018, 00273, Period 1A.
8–9. Rim and carination sherds; fabric S2/Neo; almost certainly same vessel as P11, and probably same vessel as P15; PRN85030/PRN85398–85399, 00273, Period 1A.
10. Rim; fabric S3/Neo; PRN85026, 00273, Period 1A.
11. Rim; fabric S2/Neo; almost certainly belongs to the same vessel as P8; 00273, Period 1A.
12. Horizontal lug; fabric S3/Neo; PRN85144, 00273, Period 1A.
13. Horizontal lug; fabric F1/Neo; PRN85340, 00273, Period 1A.
14. Rim and base sherds, almost certainly same vessel; fabric S2/Neo; PRN85029, 85394–85397, 00259, Period 1A.
15. Rim; fabric S2/Neo; may belong to same vessel as P8/P11; PRN85402, 00259, Period 1A.
16. Rim; fabric F1/Neo; PRN85003, 00259, Period 1A.
17. Rim; fabric F1/Neo; PRN85004, 00539, Period 1B.
18. Rim; fabric L1/Neo; PRN85006, 00058, Period 1/2.
19. Rim; fabric F1/Neo; PRN85031, 00204, Period 1/2.
20. Rim with large, pre-firing perforation; fabric F1/Neo; PRN 85034, 00206, Period 1/2.
21. Rim; fabric L1/Neo; PRN85033, 00208, Period 1/2.
22. Rim; fabric F1/Neo; PRN85002, 00216, Period 1/2.
23. Rim; fabric G99/Indet; PRN85032, 00194, Period 2.
24. Body sherd, decorated with fingertip impressions; fabric G1/BA; PRN85473, 00158, Period 2.
25. Rim; fabric G2/?BA; PRN85035, 00169, Period 2.
26. Rim; fabric L1/Neo; PRN85005, 00560, Period 6.

Fig.65

Conygar Hill

27. Rim, decorated with oblique, grooved lines; fabric S1/GW; almost certainly same vessel as P28; PRN85005, 52151, Period 1.

28. Base, decorated with vertical, applied, wavy cordons and oblique, grooved lines; fabric S1/GW; almost certainly same vessel as P27; PRN85101, 52151, Period 1.

Maiden Castle Road

29. Body sherd, possibly decorated with fingertip impression; fabric F6/Indet; PRN85041, 02295, Period 1/2.
30. Rim; fabric F1/Neo; PRN85045, 02258, Period 1/2.

Middle Farm

31. Rim; fabric F4/Bkr; PRN85038, 50851, Period 2.
32. Rim, fabric G4/Bkr; PRN85039, 50851, Period 2.
33. Body sherd, decorated with comb impressions; fabric G4/Bkr; PRN85516, 50851, Period 2.
34. Body sherds, decorated with parallel incised lines; fabric Q2/Bkr; PRN85046, 50851, Period 2.
35. Body sherds, decorated with comb impressions; fabric G3/Bkr; PRN85508/PRN85020, 50851 and 50856, Period 2.
36. Body sherd, decorated with comb impressions; fabric G4/Bkr; PRN85505, 50856, Period 2.

Fig. 66

37. Body sherd, decorated with incised lines; fabric G2/BA; PRN85124, 03107, Period 2.
38. Shoulder sherd, decorated with row of fingertip impressions; fabric R2/BA; PRN85042, 50720, Period 2.
39. Body sherd, decorated with oblique, fingernail impressions; fabric Q1/LNBA; PRN85017, 50720, Period 2.
40. Base; fabric G1/BA; PRN85670–85682, 50732, Period 2.
41. Body sherd, decorated with herringbone pattern of cord impressions; fabric Q1/LNBA; PRN85016, 03308, Period 2.
42. Rim with lug; fabric G1/BA; PRN85015, 03308, Period 2. Body sherd, decorated with horizontal, parallel, grooves and fingernail impressions; fabric G1/BA; PRN85106, 03175, Period 2.
44. Rim; fabric G1/BA; PRN85013, 03128, Period 2.
45. Rim, decorated with fingernail impressions on inner rim edge and on exterior below rim edge; fabric G1/BA; PRN 85014, 03128, Period 2
46. Body sherd, decorated with fingernail impressions; fabric G1/BA; PRN85109, 03182, Period 2.
47. Body sherd; fabric G1/BA; PRN85597, 03182, Period 2.
48. Rim; fabric G1/BA; PRN85011, 03182, Period 2.
49. Body sherd with applied thick cordon; fabric L2/BA; PRN 85007, 03184, Period 2.
50. Rim; fabric G1/BA; PRN85012, 03116, Period 2.
51. Rim; fabric F3/LP; PRN85047, 50722, Period 2.
52. Rim, decorated with incised curvilinear lines; fabric F2/BA; PRN85008, 03145, Period 2.
53. Body sherd, decorated with row of fingernail impressions; fabric G1/BA; PRN85009, 03147, Period 2.
54. Base; fabric G1/BA; PRN85657-85661, unstratified, Site 8.
55. Rim, decorated with fingertip impressions on top edge; fabric F7/BA; PRN850433, 50806, Site 8 (colluvial sequence).
56. Body sherd, bearing deeply 'slashed' gash on exterior wall; fabric F7/BA; PRN85545, 50818, Site 8 (colluvial sequence).

Bridport Road Ridge

57. Rim, decorated with parallel, incised lines; fabric G2/BA; PRN85010, 50824, Period 2.
58. Body sherd, decorated with parallel, incised lines and curvilinear lines; fabric G2/BA; PRN85108, 50824, Period 2.

Discussion

Earlier Neolithic

With the exception of the few small sherds from Conygar Hill and Maiden Castle Road, the only earlier Neolithic pottery from the By-pass is the assemblage from Flagstones. This may be divided into two groups: pottery from the pre-enclosure pits, which is clearly contemporaneous and may be treated as a single group, and that from the pit segments of the enclosure. Because at least one of the segments cuts one of the pre-enclosure pits, and because the ditch segments are likely to have been cut through a ground surface containing pottery from the earlier use of the site, the pottery from these ditches may include, or be entirely composed of, a redeposited element. Indeed, as the radiocarbon dates OxA–2322 (4450±90 BP) and HAR–8578 (4030±100 BP), which appear to date the construction of the monument, are later than would be normally expected for the pottery, it is possible that either all the Neolithic pottery in the ditches is derived from an earlier episode of use or that there is a slightly later use of the location prior to the construction of the monument and this is the material in the secondary infilling; this is discussed further below.

Stylistic relationships

The assemblage from the pre-enclosure pits belongs unequivocally to the South Western regional style, and can be paralleled by other local assemblages of that style from Maiden Castle (Wheeler 1943; Cleal 1991a) and Rowden (Davies *et al.* 1991). Carination is a rare feature at Maiden Castle, constituting *c.* 16% of the possible 58 vessels estimated to be present in the 1985–1986 assemblage. Of a probable total of nine carinated vessels (ie., including sherds from the Wheeler excavations), four are in gabbroic ware, three in shell-tempered fabrics, one in a fabric with round voids, and one in an unknown fabric. At Flagstones, the shell-tempered fabric vessel (Fig. 64, 8, 9, and 11) from the pre-enclosure pits, which is relatively well finished in comparison with some of the other vessels, is a close parallel for the carinated forms at Maiden Castle (Cleal 1991a, fig. 141, 1).

Figure 64, 14 is a neutral vessel with a very slight shoulder, rather than a true carination, which is very reminiscent of a vessel in a fabric with sand and flint from Rowden (Davies, *et al.* 1991, fig. 52, 3). There are no parallels at Rowden, however, for the neutral or closed form of Figure 64, 6 and 7. Neutral, uncarinated forms are common at Maiden Castle, where they constitute 52% of the assemblage, and closed forms also occur, with and without lugs (eg., Wheeler 1943, fig. 29, 47 and 61). Lugs also occur close beneath the rim on some vessels at Maiden Castle (eg., Wheeler 1943, fig. 36, 136). The oval, perforated and unperforated, horizontally applied lugs found on Figure 64, 6 and 7, Figure 64, 12 and 13 are also common in the Maiden Castle assemblage (Wheeler 1943; Cleal 1991a).

In contrast to the assemblage from the pits, that from the ditch segments of the enclosure lacks carination, though this may be a function of sherd size. However it does include gabbroic ware and a beef calcite fabric,

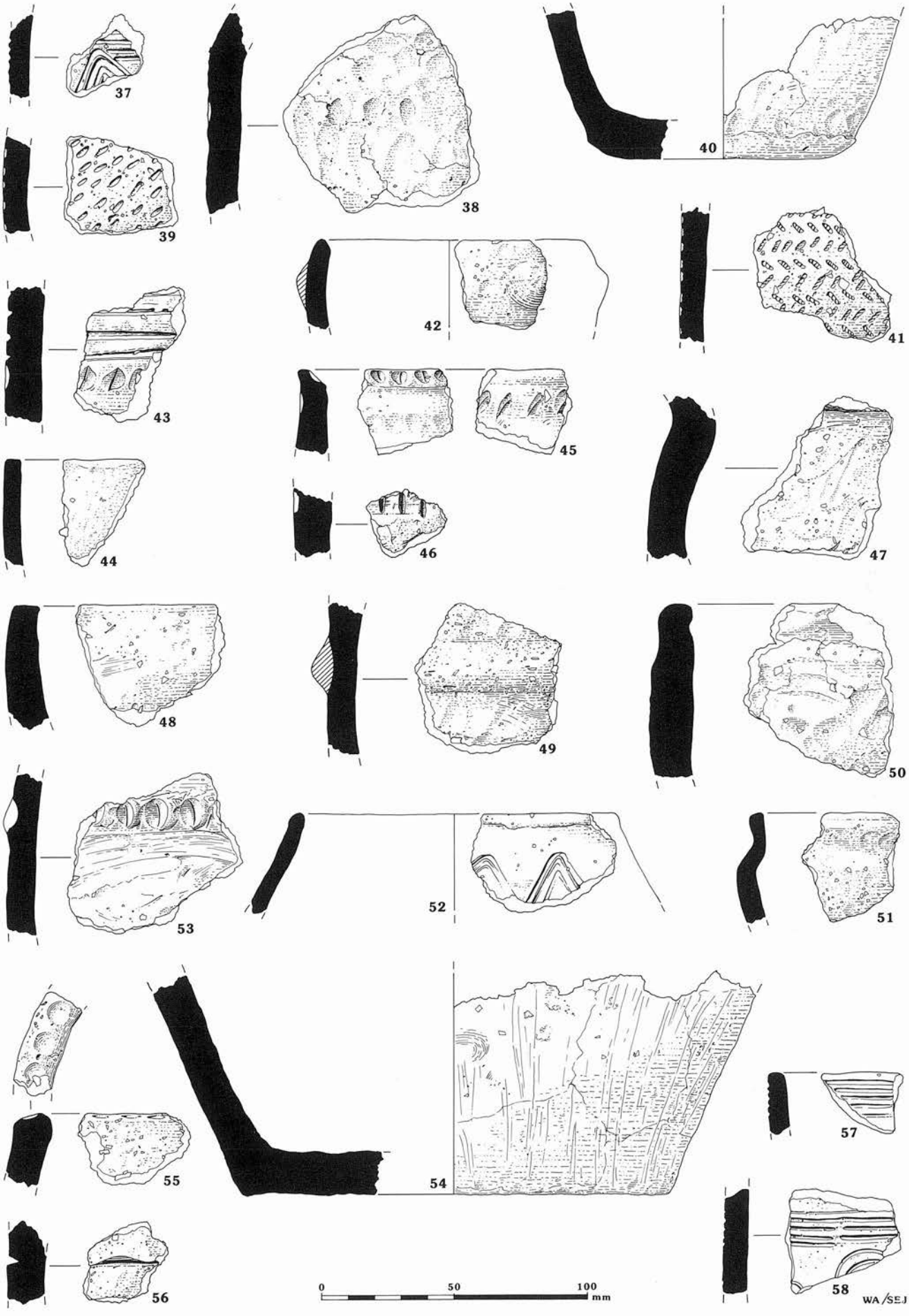


Figure 66 Earlier prehistoric pottery: Middle Farm trench A (37–54); Middle Farm trench B colluvial deposits (55, 56); Bridport Road Ridge (57, 58). Scale 1:2

Table 6 Flagstones: earlier Neolithic pottery fabric types from the enclosure and pre-enclosure pits

	Calcite (L1)		*Flint (F1)*		*Gabbroic (E1)*		*Shell (S2; S3)*		*Other (L5)*		*Total*	
	No.	*Wt (g)*	*No.*	*Wt (g)*	*No.*	*Wt (g)*	*No.*	*Wt (g)*	*No.*	*Wt (g)*	*No.*	*Wt (g)*
Pits	–	–	126 (50.0)	907 (44.8)	–	–	126 (50.0)	1119 (55.2)	–	–	252	2026
Enclosure												
Primary fill	1 (12.5)	7 (7.6)	6 (75.0)	56 (60.9)	–	–	1 (12.5)	29 (31.5)	–	–	8	92
secondary/ tertiary fills	10 (16.1)	62 (11.8)	37 (59.7)	336 (63.8)	2 (3.2)	51 (9.7)	12 (19.4)	68 (12.9)	1 (1.6)	10 (1.9)	62	527
Total	11 (3.4)	69 (2.6)	169 (52.5)	1299 (49.1)	2 (0.6)	51 (1.9)	139 (43.2)	1216 (46.0)	1 (0.3)	10 (0.4)	322	2645

Percentages given in brackets

which are absent from the pits. There are parallels for some of this material in the Maiden Castle assemblage. Figure 64, 22, for instance (Wheeler 1943, fig. 27, 9 and 19), are almost certainly part of the same shell-tempered vessel. However, this sherd, which is the largest (86 g) from the segments, should almost certainly be considered as part of the pre-enclosure pit assemblage, as it is the only sherd from this segment and was recovered from the final silting of the segment (*36*) which just cut the edge of pre-enclosure pit *00221* (Fig. 18). The occurrence of a fabric with beef-type calcite inclusions is also paralleled at Maiden Castle, where it is a minority fabric (<1.0%; Cleal 1991a).

Table 7 Flagstones: sherd weight

	Pre-enclosure pits		*Enclosure*	
Wt (g)	*No.*	*%*	*No.*	*%*
<5	147	58.3	41	51.9
5–10	48	19.0	22	27.9
10–15	25	9.9	9	11.4
15–20	8	3.2	3	3.8
20–25	9	3.6	–	–
25–30	6	2.4	2	2.5
30–35	1	0.4	2	2.5
35–40	2	0.8	–	–
40–45	3	1.2	–	–
45–50	1	0.4	–	–
50–55	1	0.4	–	–
55–60	–	–	–	–
60–65	1	0.4	–	–
65–70	–	–	–	–
70–75	–	–	–	–
75–80	–	–	–	–
80–85	–	–	–	–
85–90	–	–	1*	–

* The single large sherd from segment 36 of the enclosure ditch has been excluded from the count and calculation of percentages as it is almost certainly derived from pit *00221*, the pre-enclosure pit cut by that segment

Relationships within the Flagstones earlier Neolithic assemblage

There are two major problems relating to the earlier Neolithic pottery from Flagstones: the relationship between the pre-enclosure pits assemblage and the pottery from the enclosure segments; and the relationship of the latter to the monument itself. The radiocarbon dates, which indicate a date early in the later Neolithic for the monument's construction, do not clarify the position, as it is possible that the round-based bowl traditions of the earlier Neolithic were still current in the area at the time (ie., around the end of the 4th millennium cal. BC).

To help elucidate this problem, sherd weights and fabrics were compared for the two assemblages (Fig. 67; Tables 6 and 7), and the distribution of all Neolithic pottery in the enclosure segments was established (Fig. 68). The percentages of sherd weight are similar for both assemblages, which seems to contradict the theory that the pottery in the enclosure segments was residual, as smaller sherd sizes would be expected, although as the sherd numbers are small, especially for the segments, this similarity may not be significant. The spatial distribution of the sherds, however, does show a concentration around that part of the monument closest to the pre-enclosure pits (Fig. 68) which seems to support the theory that the sherds in the segments may have been derived from an episode of activity associated with the pits and redeposited in the segments.

With this evidence in mind, there appear to be several possible relationships between the two groups of material, and between them and the monument, which may be summarised as follows:

a) the pottery from the pit groups and that from the enclosure segments belong to the same original assemblage, the pottery in the segments reaching the contexts in which it was found through erosion from the ditch sides or from spoil;

b) the pottery from the pit groups and the enclosure segments belong to separate episodes of use of the site, the latter pottery being either (i) contem-

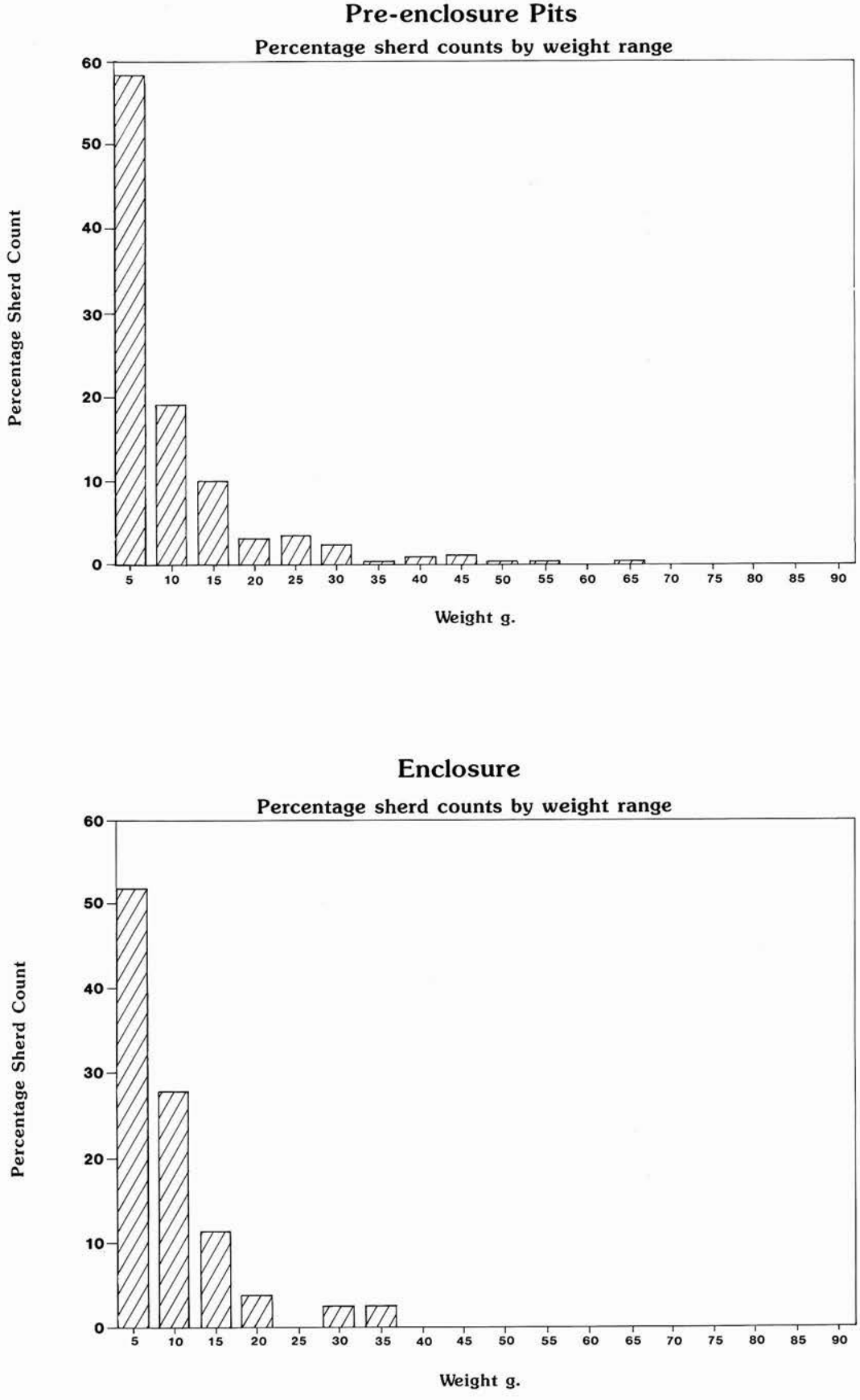


Figure 67 Earlier prehistoric pottery: percentage sherd counts by weight range for earlier Neolithic pottery from (top) pre-enclosure pits and (bottom) the enclosure ditch at Flagstones

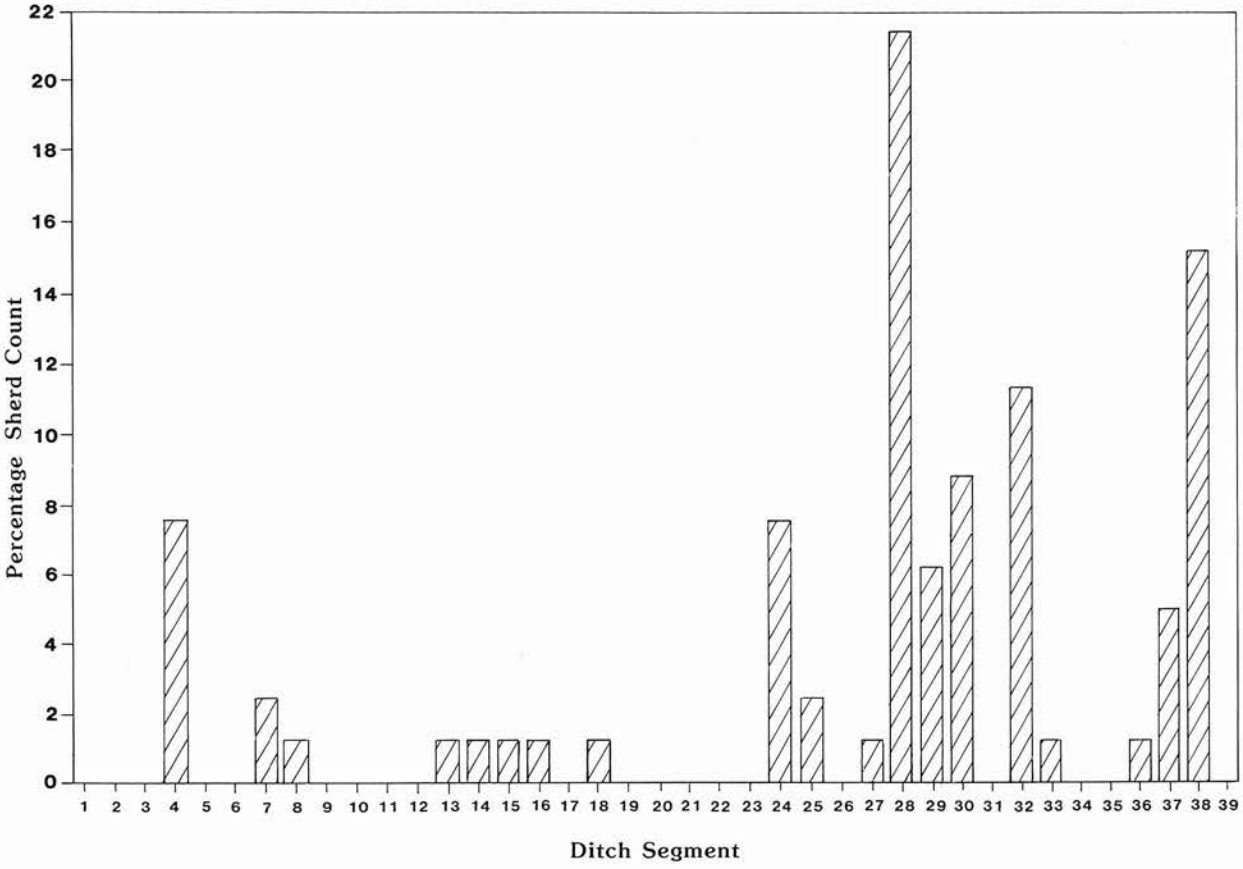


Figure 68 Earlier prehistoric pottery: percentage sherd count of earlier Neolithic pottery by enclosure ditch segment at Flagstones

porary with the use of the monument, or (ii) not. The option b(i) is possible since the range of pottery fabrics for the Neolithic bowl material in the segments is wider than that for the pre-enclosure pits despite the smaller number of sherds in the segments assemblage. For option b(ii), the earlier Neolithic pottery may have been incorporated into the segment deposits from previous use of ceramics at the site prior to the creation of the monument but later than the activity associated with the pits. If it was derived from activity associated with the pre-enclosure pits, then it is truly curious that so many fabric types found in the segments are not found in the pits;

c) There is a difference between the origins of the primary and secondary fill ceramics. The pottery from the primary infilling of the segments is concentrated near the pits and is basically the same assemblage. The pottery from the secondary infilling of segments with its much wider range of fabric types and wider distribution amongst the segments away from the pits suggests that the Neolithic pottery is from a different episode of earlier Neolithic activity.

Overall, although none of these possible interpretations is inherently unreasonable, the likeliest would seem to be that both the pottery from the pit groups and that from the enclosure belong to the same episode of use of the site, and that the occurrence of earlier Neolithic pottery in the enclosure segments is the result of erosion from the sides or from spoil adjacent to them. The concentration of pottery in segments close to the pits could well be all that survives of a scatter of occupation material formerly resting on the ground surface and disturbed by the monument, and the few sherds occurring on the far side of the monument simply the remains of the edges of the same scatter. The difference between the assemblages could be merely coincidence, or the result of deliberate selection of material for incorporation in the pits, or the result of different activities within the same occupation area.

Grooved Ware

This ceramic tradition is represented only in the pit-ring at Conygar Hill. Grooved ware is a common ceramic in association with later Neolithic monuments, and is well-represented in the Dorchester area.

Stylistic relationships

Figure 65, 27 and 28 belong to the Durrington Walls sub-style of the Grooved Ware tradition. This is represented at Mount Pleasant (Longworth 1979), and possibly at Poundbury (Smith 1987). Wavy cordons are a rare variant, but occur at the type site (Wainwright

and Longworth 1971, P58), and in the small assemblage from the pits at Down Farm, in Cranborne Chase, 40 km to the north-east (Cleal 1991b). A date of around the middle of the 3rd millennium cal. BC would be expected for this ceramic type.

Beaker

Beakers occur only at Middle Farm, in the post-holes of Trench B. This group seems to represent a single episode of use, although the poor condition of the sherds may be an indication that there was a considerable delay between their initial discard and their incorporation in the fills of the post-holes. However, the fact that at least one of the vessels is represented by several sherds would seem to indicate that they had not been dispersed far from their original location.

Stylistic relationships

There is certainly an element identifiable as belonging to Case's Middle Style (Case 1977), and Figure 65, 34 at least is likely to be a Wessex/Middle Rhine (W/MR) Beaker in Clarke's terms (Clarke 1970). Few W/MR Beakers are recorded by Clarke from Dorset (ibid., 532), but at least one (1970, fig. 187), from Barrow 5 at the Masonic Hall, Dorchester, is a close parallel for Figure 65, 34, although in that case the zones of horizontal parallel lines are executed in comb rather than incision.

The assemblage of Beakers from Mount Pleasant includes a large number of Middle Style vessels, including several of W/MR type and some of N/MR type (Longworth 1979). These occur mainly in the secondary silts of the Site IV ditch (ie., the ring-ditch around the post-hole rings) and in the palisade; some sherds occur in the tertiary silts of the Site IV ditch. The secondary silts are dated to 3630±60 BP (BM–668; 2200–1820 cal. BC; ibid., 90). None of the vessels from Mount Pleasant bears a cordon beneath the rim, but cordoned Beakers do occur in Clarke's W/MR group (Clarke 1970, 436). They also occur in close association with W/MR Beakers in a pit at Dean Bottom, on the Marlborough Downs, Wiltshire, in an assemblage which also includes plain and fingernail decorated vessels (Cleal 1992a).

If, as Clarke suggests (op. cit., 36) cordons are primarily functional devices to secure covers, their presence may not have been required in every context: this might explain their absence from the large assemblage at Mount Pleasant, which may well have been intended for some specialised and restricted purposes. The small group from Middle Farm includes incised, comb-decorated, and fingernail decorated vessels, as well as the apparently plain cordoned sherds; it may have more in common with the Dean Bottom assemblage, which includes cordons and a similar range of decoration, and which seems more likely to be representative of domestic occupation, than with the rich assemblage from Mount Pleasant, or vessels from funerary contexts.

Early–Middle Bronze Age

The considerable assemblage from Middle Farm is one of a small number in the Dorchester area which are associated with settlement features and are datable to the late Early or Middle Bronze Age. Sites which fall into this category include Poundbury (Green 1987), Cowleaze and Rowden on the Dorset Ridgeway (Woodward 1991), and Mount Pleasant (Wainwright 1979a), although the status of the latter site is uncertain.

Stylistic relationships

The assemblage from both ditches contains a very small 'fineware' element in the form of Globular Urns (Fig. 66, 37 and 52). As few as two vessels may be represented; both contain grog, but one is in a distinctive fabric with dense flint and dense grog inclusions. In neither case is the form and decoration of the vessel certain, although both would appear to carry swags in light grooving.

The remainder of the assemblage from both ditches would appear to be classifiable as 'every-day' or 'heavy duty' ware, and to be composed largely of bucket-shaped urns. At least one base (Fig. 66, 54), of a large, straight-sided vessel was recovered, but is unstratified. The base of a smaller urn with a slightly more rounded body was recovered from the construction phase of the northern limb of the enclosure ditch (Fig. 66, 40). The only sherd which clearly belongs to a typical Bucket Urn with single plastic fingernail impressions around the body is Figure 66, 53, which is also unstratified. Figure 66, 42, although not a classic Bucket Urn, is a type found at Knighton Heath (Petersen 1981, fig. 23, urn 15).

In the primary and secondary fills of the enclosure ditch *03050*, the only diagnostic material is the Globular Urn and the lower part of the urn with a slightly rounded body (Fig. 66, 37 and 40). Figure 66, 38 from the tertiary fill could be taken from a Biconical Urn, but the fabric is unusual, and the change in angle slight. Figure 66, 39 is of unknown ceramic style and could belong to a Peterborough Ware vessel, although a Bronze Age date is indicated by context. Both sherds are very worn and may have been exposed for a long period before incorporation in the fills of the ditches. If not actually from the same vessel, then the sherds are clearly related, providing a link between the tertiary fill of the enclosure ditch *03050* and the primary fill of the linear boundary ditch *03051*.

The material in the secondary fills of the boundary ditch *03051* clearly belongs to the same ceramic tradition as that in the enclosure ditch, as the assemblage, like that from *03050*, is dominated by fabric G1. In addition, although unphased, are Figure 66, 52 and 53, which belong unequivocally to a Globular Urn and Bucket Urn respectively. This implies a Middle Bronze Age date for at least part of the fill.

In the assemblage as a whole the vessels most closely paralleled elsewhere are vessels Figure 66, 44, 48, and 50, which belong to plain straight-sided or slightly convex urns comparable to vessels at Poundbury (Smith 1987, fig. 82, 23 and fig. 83, 41). Figure 66, 43, although obviously from a thick-walled, bucket-shaped urn, carries a combination of decoration unusual for the tradition, and which is not represented at either Poundbury, Rowden, or Shearplace Hill (Rahtz and ApSimon 1962). Figure 66, 45 and 47 are both even more at variance with the usual repertoire; as Figure 66, 47 is markedly convex and the interior rim bevel and decoration of Figure 66, 45 are more reminiscent of Early Bronze Age Food Vessels than of Middle Bronze Age ceramic styles, although there are rims at Poundbury with some similarity to Figure 66, 45 (Smith 1987, fig. 82, 18 and fig. 83, 44).

A notable feature of the assemblage, and one which emphasises its difference from, rather than its similarity to, other assemblages of similar date in southern Wessex, is the rarity of cordons. Only one vessel, Figure 66, 49, from the secondary fills of the ditch *03051*, possesses a cordon, and this vessel is strikingly different from the rest of the assemblage in that it is in a fabric containing beef-type calcite (L2/BA).

In terms of geographical proximity the Middle Bronze Age occupation at Poundbury provides the closest parallel for the settlement at Middle Farm, but the ceramic parallels are not strikingly close stylistically. There are, however, some features of both assemblages which suggest that they belong to the same general ceramic tradition. Smith notes the predominance of soft, grog-tempered fabrics at Poundbury: these have not been examined by the writer, but from Smith's description it appears that fabric G1 from Middle Farm falls within the range of fabric A at Poundbury (Smith 1987, 114 and microfiche).

Globular Urns are also present at Poundbury, where a minimum of 17 vessels may be represented. This, from an overall assemblage of 400 sherds (including earlier pottery) is substantially more of a presence than is suggested by the possible two vessels in an assemblage of 211 sherds from Middle Farm. As at Middle Farm, the Poundbury assemblage includes the use of fingernail decoration directly onto the body, and the use of lugs (Smith 1987, eg., fig. 82, nos 15, 16, 18; *see also* fig. 83).

However, the most striking difference between the Poundbury assemblage and that from Middle Farm is the lack, with one exception, of applied or worked-up cordons at the latter as mentioned above. At Site A at Rowden there were no large Bucket Urns with finger decorated cordons suggesting that this is a reflection of the residential rather than storage function of the hut at that site (Davies *et al.* 1991, 101).

The difference in fabric and form between Figure 66, 49 and the rest of the Middle Farm assemblage may also be due to a difference in function, though it may be chronological. As the Middle Farm enclosure (ie., ditch *03050*) does not have associated radiocarbon dates it is not possible to place it with confidence in the local chronology, although the date from the ditch *03051* which supersedes the enclosure of 3200±90 BP (HAR–9160; 1690–1270 cal. BC) suggests that the enclosure went out of use probably no later than around the middle of the 2nd millennium cal. BC, and (*see* Woodward 1991, 170–1 and fig 65 for a comparison of the Poundbury, Shearplace Hill, and Middle Farm dates).

On the basis of these dates it would seem reasonable to suggest that the pottery from the Middle Farm occupation of the enclosure pre-dates that at Poundbury, at least, but in fact this is not clear-cut because of the likelihood that some of the pottery at Poundbury is residual in the dated contexts (Smith 1987, 114), and the local pottery chronology in the middle to late 2nd millennium cal. BC must remain unrefined.

Later prehistoric

A single sherd (Fig. 66, 51) from the final infilling of ditch *03051* at Middle Farm is likely to be of Late Bronze Age date, and a single small rim (Fig. 64, 1) from St Georges Road may be Iron Age but, apart from these two, there are only a few stray body sherds and fragments of briquetage which are likely to be later prehistoric (Table 5). In the case of the briquetage, a Romano-British date cannot be entirely dismissed.

2 Late Iron Age and Roman Pottery, by Rachael Seager Smith, with J.M.Mills, M. Corney, and B. Dickinson

A total of 6668 sherds (78.176 kg) of Late Iron Age and Roman pottery was recovered from all sites with the exception of Stinsford Hill. The assemblage spans a date range from the 1st century BC/AD until the 4th century and is dominated by the products of the Black Burnished ware industry. The remainder of the assemblage consists of a small range of other local products as well as regional and continental imports.

The total numbers and weight of sherds recovered by Period by site are shown in Table 8. Of the total quantity of Late Iron Age and Roman pottery recovered, 84 sherds could not be assigned to a particular site and have been recorded as unstratified, while a further 69 sherds were derived from the colluvial sequence at Middle Farm. Sherds were recovered both by manual excavation and from sieved samples. Although the quantity of material, its condition, and the type of context in which the sherds were found varied considerably from site to site, in general its condition was poor, the majority of sherds being small and highly abraded.

Aims of the Analysis

Given the highly varied nature of the assemblage, the analysis was undertaken with two specific objectives in mind. The first of these was to provide a general assessment of the chronology, quantity, and quality of the Late Iron Age and Roman pottery from each site, leading to the selection of specific groups for more detailed consideration. The large, well-stratified group of material from the Late Iron Age–early Roman pits at Flagstones was one such focus of attention while the assemblage from Maiden Castle Road was also considered in an attempt to further elucidate site chronology, and the nature and range of activities carried out there. A detailed, computer-generated summary of the material recovered from each site, by archive phase unit, can be found in the archive.

Secondly, the analysis was undertaken with the intention of incorporating the material into a larger, comparative data base being compiled for the *Durnovaria* area, examining the social and economic status of the town and its relationship with its hinterland during the Roman period as well as more general considerations of pottery production and distribution, especially of the local Black Burnished ware industry.

Method

The assemblage was recorded using the standard Wessex Archaeology pottery recording system and

Table 8 total quantity (No. and weight of sherds) of Late Iron Age and Roman pottery by site and period

	Period	*No.*	*Wt (g)*	*Mean wt (g)*
St Georges Rd	4	30	132	4.4
	6	12	35	2.9
	7	5	150	30.0
Total		47	317	6.7
Flagstones	1/2	230	1521	6.6
	3	2769	40608	14.6
	6	22	305	13.8
	7	94	769	8.1
	Unph.	5	23	4.6
Total		3120	43226	13.8
Conygar Hill	1/2	2	5	2.5
	6	6	36	6.0
Total		8	41	5.1
Maiden Castle Farm	3	29	66	2.3
Maiden Castle Rd	1/2	10	38	3.8
	4	2892	30691	10.6
	6	8	32	4.0
	7	271	2404	8.9
	u/s	117	828	7.0
Total		3298	33993	10.3
Fordington Field	4	3	6	2.0
	6	1	1	1.0
Total		4	7	1.7
Middle Farm				
Trench A	2	3	14	4.7
	7	1	3	3.0
	u/s	4	15	3.7
Trench B colluvial sequence		69	208	3.0
Total		77	240	3.1
Bridport Rd Ridge	7	1	2	2.0
Unstratified		84	284	3.4
Total		6668	78176	11.7

terminology (Morris 1992). The reference numbers describing vessel form and decoration are part of the regional type series for the Dorchester area (Seager Smith and Davies 1993; Seager Smith 1993a; b). Fabrics, vessel forms, and decoration types occurring among the material are listed below. The Dorchester type series comprises a continuous number sequence, hence the gaps within the numerical sequence of this report. Where fabrics, forms, or decoration types new to this series have been identified, brief descriptions are provided in microfiche (Mf 11). The New Forest and Oxfordshire wares were recorded using the schemes presented by Fulford (1975a) and Young (1977), respectively. The assemblage was recorded by context within the archive phase units defined by the excavators and described in the stratigraphic report, and the data processed by computer. Initially it was hoped to distinguish between the manually excavated assemblage and that recovered from sieved samples to assess recovery bias by a comparison of mean sherd weight both within and between sites. However, although the sieved samples contained many small sherds, they lacked any of the large sherds which, from the examination of the bulk finds, were clearly present in the context (these larger sherds presumably having been picked out as the sample was collected). Consequently, for quantification purposes, it was decided to amalgamate the data recovered from the manually excavated and sieved samples. It should also be noted that although the sherds recovered from the colluvial sequence at Middle Farm were recorded in the same manner as the rest of the assemblage, and were entered onto the computer data base, these sherds are not included in any of the computerised quantification exercises undertaken. The basic quantification of these sherds is presented in Tables 8 and 9.

Fabric, form, and decoration codes

Fabrics

E101	Wareham/Poole Harbour Black Burnished ware
E102	'Variant' Black Burnished ware fabrics
E103	Corfe Mullen ware
E110	*Terra Nigra*
E120	Rhenish ware
E121	North Gaulish colour-coated ware
E161	New Forest red-slipped ware
E162	New Forest colour-coated ware
E170	Oxfordshire red colour-coated ware
E171	Oxfordshire white colour-coated ware
E180	Southern British micaceous greyware
E181	Dense, iron-rich sandy fabric
E200	All imported mortaria fabrics
E250	All amphora fabrics
E300	All samian fabrics
F101	Flint tempered coarseware
I101	Iron-rich coarseware
M101	Red micaceous fineware (unassigned)
M102	Leathery brown fineware (unassigned)
Q102	Very coarse Black Burnished ware (Wareham/ Poole Harbour)
Q103	Very fine Black Burnished ware (without slip)
Q105	Miscellaneous orange/buff wares
Q106	Very coarse, sandy fabric with large chalk inclusions
Q107	Coarse Black Burnished ware with visible clay pellets/shale fragments

Vessel Forms

Black Burnished ware types:

2001	Upright or slightly everted rim jar
2002	Bowl, lid or jar with expanded, grooved rim

2003 Variant of Type 2006
2004 Slightly shouldered jar with undifferentiated rim
2005 Large jar with thickened, inturned rim
2006 Large jar with an inturned flattened, triangular rim
2007 Bead rim jar or bowl
2008 Developed or 'pulled' bead rim jar/bowl
2009 Bowl/dish with internally grooved rim
2010 Variant of 2008; short, squat neck
2011 Bowl with pedestal base and wedge-shaped rim
2013 Round-bodied open bowls; various profiles
2014 Round-bodied open bowl; bead rim, low pedestal foot-ring or wedge-shaped base
2016 High-shouldered bowl with bead rim and a flat base
2026 Lids; all forms

1 Upright rim jar
2 Everted rim jar
3 Everted rim jar; diam. of rim = to or greater than max. diam. of body
975 Everted rim jar but insufficient preserved to specify whether 2 or 3
5 Jar; plain, slightly flaring rim
6 Large jar with an inturned, flattened, triangular rim
7 Bead rim jar or bowl
8 Developed or 'pulled' bead rim jars/bowls
9 Small jar/beaker, bead rim, one or more 'ear-shaped' handles
10 Beaker; variety of profiles
12 Large jar; rolled or everted 'pie-crust' rim
13 Round-bodied open bowls; various profiles
15 Carinated open bowl, plain or beaded rim, foot-ring or low pedestal base
20 Shallow, straight-sided dish (or ?lid); 'dog-dish'
22 Straight-sided, flanged bowl/dish
23 Straight-sided, flanged bowl/dish with chamfered base
24 Straight-sided, incipient dropped flanged bowl/dish
25 Straight-sided bowl/dish with a dropped flange
26 Lids; all forms
29 Flagons; all forms
36 Open, carinated bowl; imitations of Gallo-Belgic or samian forms
38 Straight-sided, wide-mouthed jar with bead rim
41 Globular jar with narrow mouth and lid-seating groove, upright or everted rim
47 Small, sloping-sided jar with vertical rim and short neck.
49 Large, low-waisted jar, narrow mouth, everted rim with a shallow lid-seat
53 Large, high-shouldered storage jar with a thickened and crudely beaded rim.
59 Round-bodied, open bowl with a slightly down-turned, flanged rim
62 Globular jar with a narrow neck, everted rim and a pronounced lid-seating groove
67 Small, straight-sided jar with an everted rim; no neck.

Other Fabric Types

Orange/buff wares:
417 Flagon with pulley-wheel rim.

Greywares:
617 Bead rim bowl/dish; straight sided, possibly carinated forms
619 Bead rimmed bowl with slightly sloping sides and an incised groove defining neck

Mortaria:
309 Vessel with slightly in-turned bead rim; angle of flange varies but is large, out-curving, with a rounded terminal; Gillam type 238

New Forest wares:
3019 Greyware; 'dog-dish': Fulford 1975, 96, type 19
5063 Red-slipped ware; dropped flange bowl: Fulford 1975, 64, type 63.
5073 Red-slipped ware; carinated bowl, bead rim and stamped decoration: Fulford 1975, 66, type 73.

Oxfordshire Wares:
4007 White colour-coated ware; mortaria with upstanding rim and squat flange: Young 1977, 122, type WC7.
4045 Red colour-coated ware; shallow bowl: Young 1977, 158, type C45.

Decorations (all burnished unless otherwise stated)

1 Acute-angled lattice
2 Obtuse-angled lattice
4 Differential acute-angled lattice — multiple, grouped lines on one axis
5 Diamond lattice
6 Open-diamond lattice, (ie. a horizontal row of Xs)
7 Multiple-line, diamond lattice
8 Short, diagonal lines: top left to lower right; angles vary
9 Short, diagonal lines: top right to lower left, angles vary
10 Grouped, diagonal lines; angles varied
13 Vertically-banded diagonals, within multiple lines
14 Two-line chevrons, normally confined within horizontal lines top and bottom
15 Narrow wavy line, usually around neck of vessel
17 Overlapping, open 'hoops'
21 Random scrolling
23 Simple cross
27 Grouped, parallel, squiggly lines
28 Multiple-line chevrons, occasionally cross-hatched
29 Vertical ridges of applied clay, surrounded by arrangements of stabbed dots.
30 Wide panel, usually around the middle of the body, of heavily burnished, vertical lines, defined above and below by at least two horizontal, incised grooves.
35 Incised grooves or very heavily burnished lines; one or more.
40 Short, diagonal incised lines, possibly made with a finger-nail.

Table 9 number/ weight (g) of sherds of each fabric type recovered by site

	Site									
Fabric	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*U/S*	*Total*
Black Burnished wares										
E101	24/106	1886/26791	7/37	21/50	2125/21100	3/6	62/197	–	69/241	4197/48528
E102	1/16	178/1837	–	6/14	472/4436	–	–	–	–	657/6303
Q102	–	81/943	–	–	3/39	–	1/5	–	1/5	86/992
Q103	10/40	937/13426	1/4	1/1	302/1808	–	12/31	1/2	13/34	1277/15346
Q106	–	10/82	–	–	–	–	–	–	–	10/82
Q107	–	–	–	–	258/4019	–	–	–	–	258/4019
Orange/buff wares										
Q105	2/2	2/3	–	–	9/58	–	–	–	–	13/63
I101	–	1/11	–	–	–	–	–	–	–	1/11
E181	–	–	–	–	2/39	–	–	–	–	2/39
Greywares										
F101	–	1/6	–	–	–	–	–	–	–	1/6
E180	–	–	–	–	11/72	–	–	–	–	11/72
Mortaria										
E200	–	–	–	–	16/208	–	–	–	–	16/208
Amphora										
E250	1/116	1/7	–	–	13/1254	–	1/4	–	1/4	17/1385
Samian										
E300	7/12	12/68	–	1/1	40/312	1/1	1/3	–	–	62/397
Imported and British finewares										
M101	–	2/15	–	–	–	–	–	–	–	2/15
M102	–	1/1	–	–	–	–	–	–	–	1/1
E103	–	–	–	–	12/141	–	–	–	–	12/141
E110	–	3/11	–	–	–	–	–	–	–	3/11
E120	–	–	–	–	3/151	–	–	–	–	3/151
E121	–	–	–	–	3/23	–	–	–	–	3/23
New Forest and Oxfordshire wares										
E161	–	4/17	–	–	24/180	–	–	–	–	28/197
E162	–	–	–	–	2/91	–	–	–	–	2/91
E163	–	–	–	–	1/27	–	–	–	–	1/27
E170	1/4	1/8	–	–	2/35	–	–	–	–	4/47
E171	1/21	–	–	–	–	–	–	–	–	1/21
Total	47/317	3120/43226	8/41	29/66	3298/33993	4/7	77/240	1/2	84/284	6668/78176

41 Wide shallow arch, 'eye-brow' motif; burnished or finger-tipped.

47 Scribbling, no definite pattern

60 Short, vertical lines, arranged in groups

68 Multiple, large hoops intersecting to form an obtuse-angled lattice

79 'Star'-shaped decoration made by pinching clay between the thumb and forefinger and then again, at right-angles to the first

80 Groups of diagonal, burnished lines forming a zig-zag, sometimes bordered by horizontal grooves

81 'Eye and eyebrow' motif, Decoration Type 41 with the clay of the vessel wall pushed out from the inside to form a raised 'eye' beneath the eyebrow; singly or in horizontal rows

82 Similar to Type 81 but central part of 'eye' has been pushed out for a second time; singly or in horizontal rows

83 Tooled wavy line forming broad arcs with curvilinear burnished line decoration above

84 Combination of tooled 'eyebrow' motifs (Type 41), and vertical thumb smears in a horizontal row

Imported and British Finewares

This group of fabrics includes samian and other imported finewares, Corfe Mullen, New Forest, and Oxfordshire wares as well as sherds of unassigned, but probably British fineware fabrics. The fineware fabrics represent less than 2% (121 sherds) of the total number of sherds within the collection, and are quantified by fabric type and site in Table 10.

Table 10 quantity of samian by fabric and site

Fabric / *Site*	*S. Gaulish* *No. / wt (g)*	*C. Gaulish* *No. / wt (g)*	*Total* *No. / wt (g)*
St Georges Rd	5/9	2/3	7/12
Flagstones	10/66	2/2	12/68
Maiden Castle Fm	1/1	–	1/1
Maiden Castle Rd	19/130	21/182	40/312
Fordington Field	–	1/1	1/1
Middle Farm	–	1/3	1/3
Total	35/206	27/191	62/397

Samian, by J.M. Mills with M. Corney

A total of 62 sherds of samian was recovered from six sites (Tables 10–11). With the exception of a few sherds from Flagstones and the majority of that from Maiden Castle Road, all the samian was very abraded and of small mean sherd size. All sherds are catalogued in archive.

Fabrics

The samian fabrics, Southern Gaulish and Central Gaulish, are approximately equally represented (Table 10). More Southern than Central Gaulish samian was recovered at St Georges Road and Flagstones, suggesting greater activity in the 1st century AD. However, with such a small assemblage it is doubtful that this observation is valid. At Maiden Castle Road, there are approximately equal numbers of sherds of each fabric. Samian of immediately post-Conquest through to mid–late 2nd century AD date is present, the earliest being two pre-Flavian sherds, one Drag. 15/17 and one Drag. 29 (Cat. no. 2). The presence of two late 1st/early 2nd century AD sherds, one Drag. 35/36 from Southern Gaul and a Drag. 37 sherd (Cat. no. 7) dated to the early part of the 2nd century on decorative style, suggests that samian continued to be imported throughout the period.

Forms

A total of 35 vessels is represented from the 45 sherds which were identified to form. These are summarised in Table 11 by site and fabric. The range of forms includes plain ware platters, cups, dishes, and bowls. Three sherds from an unusual bowl of Central Gaulish fabric came from linear scoop *02391* at Maiden Castle Road (Fig. 69, 4). The closest parallel for the form is a rouletted Ludowici Type SSa bowl (Oswald and Price 1920, pl. lxxv, 9); however, as this example is not rouletted it is probably best described as a hybrid between Walters 79 and Drag. 31. It is likely to be Antonine in date, probably after AD 150/160.

Decorated forms Drag. 29 and 37 are present, ten of the 35 identified vessels are decorated types.

Samian potters' stamps, by Brenda Dickinson and J.M. Mills

Three samian potters' stamps were recovered. The first line of each entry gives potter (i, ii, etc, where homonyms are involved), die number, reading of the stamp, form, and pottery of origin, while (b) indicates that the potter, but not the particular stamp, is attested at the pottery

Table 11 summary of samian vessels (all Dragendorf types)

Site	*St Georges Rd*		*Flagstones*		*Maiden Castle Road*		*Middle Farm*		*Total*	
Form *Fabric*	*SG*	*CG*	*SG*	*CG*	*SG*	*CG*	*SG*	*CG*	*SG*	*CG*
15/17	–	–	–	–	1	–	–	–	1	–
18	–	–	2	–	–	–	–	–	2	–
18 or 18/31	–	1	–	–	3	1	–	–	3	2
18/31 or 31	–	–	–	–	–	1	–	–	–	1
18/31R or 31R	–	–	–	–	–	1	–	–	–	1
31/79 (hybrid)	–	–	–	–	–	1	–	–	–	1
27	2	–	2	–	2	–	–	–	6	–
27g	–	–	1	–	–	–	–	–	1	–
33	1	–	–	–	1	1	–	–	2	1
29	–	–	–	–	1	–	–	–	1	–
29 or 37	–	–	–	–	1	–	–	–	1	–
37	–	1	–	–	2	4	–	1	2	6
35 or 36	–	1	–	–	1	1	–	–	1	2
36	–	–	–	–	–	1	–	–	–	1
Total	3	3	5	–	12	11	–	1	20	15

SC = Southern Gaulish; CG = Central Gaulish

in question. The excavation reference is given in brackets at the end of each entry in the following order: Special Find No. [SF], context, period.

(Fig. 69)

1. (Probably) Tittius 4c, TIT[TIVS], Drag. 33, Lezoux (b). Occurs on both plain ware (Drag. 18/31) and decorated bowls (Drag. 37). One, which also has a cursive signature of the Hadrianic–Antonine potter, Cassius i, is in a pit dated to c. AD 150–160. Date: c. AD 130–160; 02216, Site 6, grave *02215*, Period 4C.
2. Vitalis ii 27d, VIT[AL], Drag. 27g, La Graufesenque (b). Always on cups, either form Drag. 27 or 33a. Examples known from York, Chester, and Nijmegen fortress. Date: c. AD 70–95. SF30, 50042, Site 3, ditch *00052*, Period 4B.
3. Illegible, S[or]S, Southern Gaulish. Abraded fragment. Date: 1st century AD. 50002, Site 2, clearance, Period 7.

Other illustrated sherds

(Fig. 69)

4 Hybrid form Walters 79/Drag. 31, CG, Site 6, linear scoop 02391, Period 4B.
5 Drag. 37, SG, Cat. no. 1, Site 3, topsoil, Period 7.
6 Drag. 29, SG, Cat. no. 2, Site 6, ditch 02243, Period 4A.
7 Drag. 37, SG, Cat. no. 6, Site 6, grave 02205, Period 4C.
8 Drag. 37, CG, Cat. no. 4, Site 6, quarry scoop 02308, Period 4B.
9 Drag. 37, CG, Cat. no. 7, Site 6, storage shaft 02387, Period 4C.
10 Drag. 37, CG, Cat. no. 9, Site 8, topsoil, Period 7.

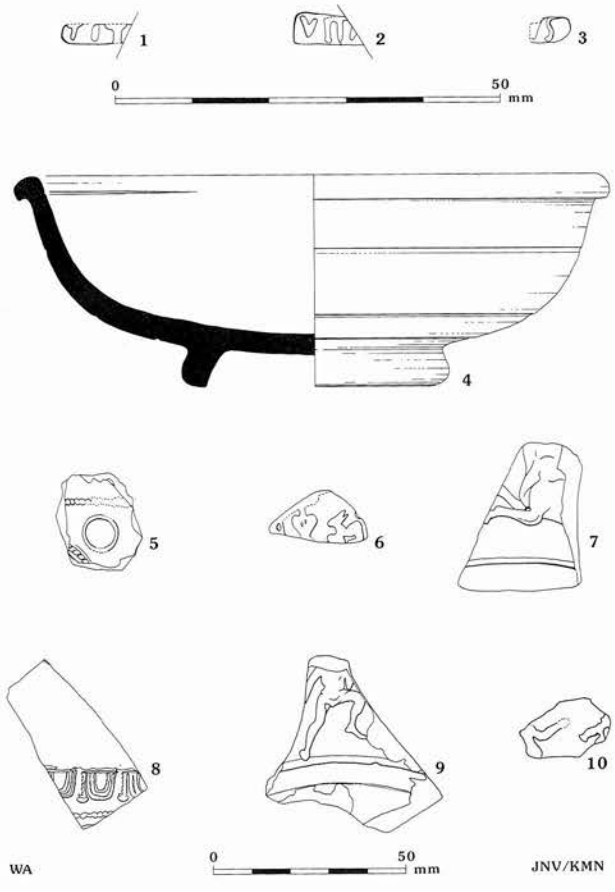


Figure 69 Roman pottery: samian. Scale 1:2, stamps 1:1

Terra Nigra

Three small, plain body sherds of *Terra Nigra* (Rigby 1973, 13), probably from the same vessel, were recovered from the primary and upper filling of ditch *00011* at Flagstones. *Terra Nigra* was imported into Britain during the period c. AD 10–85 but the dating of these sherds cannot be pinpointed any more precisely.

Rhenish ware

Sherds of Rhenish Ware (Greene 1978, 18) were recovered from Maiden Castle Road; rouletted and barbotine decorated sherds from the soil infilling of structure *02310* and a plain sherd from the upper fill of grave *02318*. All are derived from closed vessels. The importation of this fabric dates from c. AD 150–200, perhaps continuing into the 3rd century.

North Gaulish Colour-Coated ware

Three sherds from a small colour-coated beaker (Fig. 72, 39), derived from the soil infilling of structure *02310* at Maiden Castle Road, have been identified tentatively as being of a North Gaulish colour-coated fabric of c. AD 80–135 (Anderson 1980, 28, fabric 1). However, no exact parallels have yet been found for either the fabric or form of this vessel and although it is almost certainly imported and of 2nd century date, it may have been produced outside north Gaul (J. Timby, pers. comm.).

Finewares of uncertain origin

Three small sherds of two unassigned fineware fabrics (Fabric M101 and M102) were found amongst the assemblage recovered from Flagstones. As both of these fabrics represent additions to the Dorchester type series, they are described in fiche (Mf 11). All three sherds are too small for the vessel form to be identified.

Corfe Mullen ware

Twelve plain body sherds of Corfe Mullen ware were recovered from Maiden Castle Road. They are probably derived from flagons, the most commonly produced vessel form in this fabric. This fabric type is generally dated to the third quarter of the 1st century AD (Calkin 1935, 54; Bidwell 1979, 194; Seager Smith and Davies 1993, fabric 5).

New Forest wares

New Forest wares were identified at Flagstones and Maiden Castle Road in Fulford's fabric categories 1a–c (1975a, 24–6), the fine, colour-coated stoneware and the red-slipped ware fabrics. In addition, one sherd of New Forest coarse greyware (ibid., 84) was identified. In contrast to other sites in the Dorchester area (Seager Smith and Davies 1993, fabrics 20 and 21; Seager Smith 1993a; b), the red-slipped wares rather than the colour-coated stonewares, are the predominant fabric type recovered. All the New Forest sherds, including an unidentifiable rim fragment, recovered from Flagstones in the medieval linear boundary ditches, topsoil and clearance layers, are of this fabric type.

At Maiden Castle Road, red-slipped ware body sherds were recovered from the linear scoop feature *02391*, while grave *02350* produced abraded fragments of a Fulford type 63 flanged bowl as well as sherds from an almost complete Fulford type 73 bowl with stamped decoration (Fig. 72, 44). Another sherd from this vessel was found in the fill of grave *02320*. The type 73 vessel, by virtue of its stamped decoration, is dated to c. AD 345–380 (Fulford 1975a, 68) while the type 63 vessels were produced throughout the life of the New Forest industry. Sherds of New Forest colour-coated ware, mostly derived from beaker forms, were recovered from the soil infilling of pit *02387* and from ploughsoil and clearance layers while a fragment of a greyware 'dog-dish' (ibid., 96, type 19), a type also produced

throughout the life of the industry, was found in the soil infilling of structure *02406*.

Oxfordshire wares

Only five sherds in two fabrics were recognised as being from the Oxfordshire kilns (Seager Smith and Davies 1993, fabric 18; Mf 11). Red-slipped ware is represented by a base sherd from the curvilinear enclosure ditch across the centre of St Georges Road, a flange fragment from the topsoil at Flagstones, a Young type C45 rim, produced *c.* AD 270–400+ (Young 1977, 158) from grave *02205*, and a plain body sherd from ditch *02243* at Maiden Castle Road. The Oxfordshire white-slipped red ware fabric (ibid., 117) is represented by a Young type WC7 mortarium rim (ibid., 122) from the Period 4B enclosure ditch *01055* at St Georges Road.

Imported and Romano-British Coarsewares

This group forms the bulk of the assemblage and, although massively dominated by the products of the Durotrigian and Black Burnished ware industry, also includes a small range of amphora, mortaria, orange, and grey coarseware fabrics. The number and weight of sherds in these fabrics occurring at each of the sites are shown in Table 9.

Amphora

Seventeen plain body sherds were recovered from St Georges Road, Flagstones, Maiden Castle Road, and Middle Farm. The majority are from Dressel 20 vessels (Peacock and Williams 1986, classes 24 and 25), produced in Southern Spain from the Augustan period up to the late 3rd century. The predominance of this type of amphora has also been noted at other sites in the Dorchester area (Williams 1993a; b; forthcoming; Seager Smith and Davies 1993, fabric 36). The remaining sherds are unassigned and represent the products of several different production centres.

Mortaria

Sherds of only one type of imported mortaria were found only at Maiden Castle Road. This is one of the most common mortaria fabrics at other sites within and around Dorchester (Seager Smith and Davies 1993, fabric 420; Seager Smith 1993a; b), and corresponds to one of the fabrics used for Hartley's Groups 1 and 2 (1977, 11). Present evidence suggests that these vessels were produced either in Kent or imported from north-eastern France to Richborough from where they were redistributed over much of southern Britain during the period *c.* AD 60–150 (ibid.). Only one rim sherd was identified, from a Type 309 vessel (Seager Smith and Davies 1993) found in the fill of grave *02367*, although two flange fragments, one from the linear feature *02391*, the other from clearance levels were also recovered. The remaining three sherds are all featureless body sherds and were found in the linear feature *02391*, quarry pit *02308* and topsoil clearance.

Orange/buff coarsewares

Sixteen sherds, mostly plain body sherds in a variety of fabrics, were recovered from St Georges Road, Flagstones, and Maiden Castle Road. Two other body sherds from the upper fill of quarry pit *02308* are of a fabric type also occurring within the Roman town of *Durnovaria* (Seager Smith 1993a, fabric E181). The majority are probably derived from flagons. Only two rim sherds are present; a small fragment of a flat flanged bowl/dish (fabric I101), from the final silting of pit segment *29* of the Flagstones enclosure and a 'pulley wheel' flagon rim (Seager Smith and Davies 1993, fabric Q105, Type 417), from quarry pit *02308*.

Greywares

In addition to the sherd of New Forest greyware (fabric E163) recovered from Maiden Castle Road, 12 other greyware sherds were found. These include one sherd in a flint-tempered fabric (fabric F101; Mf 11) from the final silting of pit segment *11* of the Flagstones enclosure, while the remaining sherds, all from Maiden Castle Road, are of southern British micaceous greyware (fabric E180), dated to the 1st–2nd centuries AD and possibly continuing into the 3rd century and common at other sites in the *Durnovaria* area (Seager Smith and Davies 1993, fabric 38F; Seager Smith 1993a; b). Vessel forms include a Type 617 rim from pit *02391* and a Type 619 rim from quarry pit *02308*, (Fig. 72, 38). This latter form is an addition to the Dorchester Type Series and is described in microfiche. Sherds decorated with rouletted bands were recovered from the fill of the linear feature *02391* and post-hole *02434* of structure *02406* while unidentified rim fragments and plain body sherds were also found in the fill of the linear feature *02391*. All these sherds represent the finer end of the range of Roman grey coarseware fabrics and probably functioned rather as 'fineware' elements within the assemblage as a whole.

Late Iron Age and Romano-British Black Burnished Ware

Fabrics

Sherds of Black Burnished ware category 1 formed 97% of the assemblage. Traditionally Black Burnished ware was seen as a homogeneous sandy fabric (Gillam 1976; Farrar 1977), but more recent work in the Dorchester area (Davies and Hawkes 1987; Andrews in prep.; Seager Smith and Davies 1993) and elsewhere (Bidwell 1979; Woodward 1987; Sunter 1987) has indicated not only considerable variability within the products of the Wareham/Poole Harbour kilns (fabric E101), but also the existence of variant Black Burnished ware fabrics (fabric E102). Both of these fabric groups occur within the assemblage (descriptions in Seager Smith and Davies 1993). Distinctive subdivisions within these fabric groups were also noticed (Q102, Q103, Q106, and Q107); these are described in microfiche (Mf 11)

Although the Black Burnished ware fabrics present are clearly encompassed by the known variability within this ceramic tradition, the opportunity to examine the fabrics of the earliest, Durotrigian Black Burnished ware (Flagstones), as well as very late Roman material (Maiden Castle Road), existed within the By-pass collection. Consequently, textural variability and differences of surface treatment were used to identify fabric sub-types, in order to clarify the range of variability within Black Burnished ware and in an attempt to isolate the introduction of the variant fabrics (especially fabrics E102 and Q107), to the Dorchester area.

The total quantity of each of the Black Burnished ware fabrics recovered by site is shown in Table 9 while the implications of the various Black Burnished ware sub-types are more fully discussed as part of the general assessment of the Flagstones and Maiden Castle Road assemblages. However, some generalised observations about the fabric composition of the assemblages recovered can be made.

As expected, the typical Wareham/Poole Harbour Black Burnished ware fabric dominates all the assem-

Table 12 Black Burnished ware vessel forms by site and fabric type

Date range	*Form*	*Occurs at sites*	*Fabric: No. examples* E101	E102	Q102	Q103	Q107	*Total*
Durotrigian	2001	3	39	2	–	7	–	48
	2002	3	1	–	–	1	–	2
	2003	3	1	–	–	–	–	1
	2004	3	1	–	–	–	–	1
	2005	3	5	–	–	–	–	5
	2006	3	21	–	–	2	–	23
	2007	3	37	1	–	25	–	63
	2008	3	8	4	–	5	–	17
	2009	3	1	–	–	–	–	1
	2010	3	2	–	–	–	–	2
	2011	3	2	–	–	–	–	2
	2013	3	1	2	–	2	–	5
	2014	3	2	–	–	5	–	7
	2016	3	2	–	–	4	–	6
	2026	3	1	–	–	1	–	2
1st–early 2nd century AD	1	6	25	6	–	3	–	34
	6	4, 6	1	–	–	–	–	1
	7	6, 8	4	2	–	–	–	6
	8	6	6	1	–	–	–	7
	13	6	3	2	–	1	–	6
	15	6	1	–	–	–	–	1
	36	6	–	2	–	–	–	2
Late 1st–early 3rd century AD	2	6	18	5	–	–	2	25
	5	6	1	–	–	–	–	1
	9	6	1	–	–	–	–	1
	10	6	–	1	–	–	–	1
	20	3, 5, 6	24	14	–	2	–	40
	22	3, 6, 8	8	5	–	3	–	16
	23	6	3	3	–	1	–	7
	24	6	8	2	–	4	–	14
	26	6	5	5	–	–	–	10
	29	6	2	–	–	1	–	3
	38	6	–	1	–	–	–	1
	41	6	1	–	–	–	–	1
	47	6	2	–	–	2	–	4
	49	3	1	–	–	–	–	1
	53	3	–	–	1	–	–	1
	59	6	3	–	–	–	–	3
	62	3	1	–	–	–	–	1
	67	6	–	2	–	–	–	2
	975	6	15	2	–	2	–	19
3rd–4th century AD+	3	6	2	–	–	–	–	2
	12	6	2	–	–	–	–	2
	25	3, 6	3	5	–	–	–	8
Total sherds			4197	657	86	1277	258	6475

blages (Table 9), while the remaining fabrics occurred in far smaller quantities, together representing 35% of the sherds present. Assemblages from the sites producing only small quantities of material (St Georges Road, Conygar Hill, Maiden Castle Farm, Fordington Field, Middle Farm, and Bridport Road Ridge) clearly reflect this pattern. The presence of the variant fabrics (fabric E102) characterised by the use of a slip, amongst the material from the Late Iron Age pits at Flagstones (eg., Fig. 70, 8), is however, interesting to note. Previously, the earliest occurrences of this fabric type in the Dorchester region had been dated to around the middle of the 1st century AD (Seager Smith and Davies 1993; Seager Smith 1993a; b) but its presence in these contexts indicates its production prior to this, in the late 1st century BC–early 1st century AD. The scale of production, or at least its use in the Dorchester area, at this time is more difficult to assess. Fabric E102 represents 6% of the sherds from Flagstones, but as evidence for the slip, characteristic of this fabric type, may have been destroyed or masked by the abraded condition of the material and the presence of surface deposits, sherds of this fabric may well have been assigned to fabric Q103. Nevertheless, the range of fabrics present at Flagstones offers little support for the idea of a single distinctive 'Durotrigian' Black Burnished ware fabric as noted by Brailsford (1958, 102).

The most interesting feature of the Black Burnished ware assemblage from Maiden Castle Road is the presence of the coarse, roughly-made, predominantly oxidised fabric (fabric Q107) amongst the material from the soil infilling of the late Roman structures. For reasons more fully discussed below, while certainly of late Roman date, this fabric may continue on into the late 4th–5th centuries, perhaps representing the degeneration of the Black Burnished ware industry. It may even be possible to see the development of this coarser fabric as mirroring the development of the grog-tempered fabrics at the expense of the finer, sandy wares seen at sites further east in Hampshire during the late 3rd–4th centuries (Fulford 1975b). (Fabric Q107 becomes established as E107 in the Western Link report which follows in this volume).

Vessel forms

In total, 44 Black Burnished ware vessel forms were identified. Of these, 15 are clearly part of the native, pre-Roman, Durotrigian ceramic tradition, described by Brailsford (1958), and are probably of later 1st century BC–early 1st century AD date, while the remainder represent a typical Romano-British assemblage, spanning the later 1st–4th centuries AD. The Black Burnished ware vessel forms were recorded according to the type series already established for the Dorchester area (Seager Smith and Davies 1993).

Forms representing each of the four major vessel categories were present:

Jars: Types 2001 (Fig. 70, 8, 9, 19, 20; Fig. 71, 26, 28, 31; Fig. 72, 40), 2002 (Fig. 70, 1), 2003 (Fig. 70, 2), 2004 (Fig. 72, 33), 2005 (Fig. 70, 4), 2006 (Fig. 70, 12; Fig. 71, 27; Fig. 72, 36, 37), 2007 (Fig. 70, 10, 15–18; Fig. 71, 21 Fig. 72, 34), 2008, 2010 (Fig. 70, 6), 1, 2 (Fig. 72, 41, 42), 3 (Fig, 72, 40), 5–9, 12, 38, 41, 47, 49, 53, 62, 67.

Round-bodied open bowls: Types 2009 (Fig. 70, 5), 2011 (Fig. 71, 23), 2013, 2014 (Fig. 70, 14; Fig. 71, 22, 25, 29), 2016 (Fig. 70, 11; Fig. 71, 30), 13, 15, 36 (Fig. 72, 45).

Straight-sided bowls / dishes: Types 20, 22–5.

Miscellaneous group consisting of a wide range of the less common forms, including beakers, jugs, flagons and lids: Types 2026 (Fig. 70, 7, 13), 10 (Fig. 72, 43), 26, 29, 59.

Summary descriptions of the vessel forms encompassed by this type series and present among the material are listed above; where new additions to the type series have been identified these are described in microfiche (Mf 11). Although many of the native Late Iron Age vessel forms of the Dorchester area continued to be produced well into the Romano-British period, a separate type series, denoted by the 2000 numbers, was constructed for this time period to investigate the possibility of specific fabric and decorations correlating with these forms. Where possible the reference number used to denote vessel type corresponds with that used in the Dorchester type series for the Romano-British period (cf, Types 2001, 2006, 2013, 2014, 2016, etc) while handle and base type reference numbers remain the same. A generalised correlation of the Black Burnished ware fabrics and vessel forms present by site is presented in Table 12.

Jar forms are represented by the widest range of types, the other major vessel categories containing a range of common and rarer forms typical of the Dorchester region. In general these vessels conform to the size and proportions indicated elsewhere (Gillam 1976; Davies and Hawkes 1987, M3), with those in the variant Black Burnished ware fabrics tending to be slightly smaller than their Wareham/Poole Harbour counterparts (Seager Smith 1993b). All the vessel forms present were hand-made.

Surface treatments and decoration

Techniques used in finishing the Black Burnished ware vessels, burnishing, wiping, smoothing, and slipping, follow the generalised rules described elsewhere (Farrar 1973, 76; Williams 1977, 172; Seager Smith and Davies 1993), with a combination of these techniques often occurring on a single vessel or sherd. Although not quantified here, details of the surface finishes were recorded and this information can be found in the archive. The decoration also follows the principles set out by Farrar (1973, 77–8) and Gillam (1976). Burnished line motifs, especially the various forms of wavy line and lattice motifs, were most common although occasionally incised motifs were used, while a wide range of tooled designs were noted on the Durotrigian forms from Flagstones. The decoration was recorded according to the Dorchester type series; detailed descriptions of the new decoration types, mostly relating to the Durotrigian vessel forms, are also provided in microfiche (Mf 11). A generalised impression of the association between decorative type and vessel form can be found in Table 13 and the illustrations (Figs 70–2), with further details in archive.

Table 13 generalised correlation between Black Burnished ware vessel form and decorative motif

Vessel form	*Decorative motif*															
	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*13*	*14*	*15*	*17*	*21*	*23*
2001	*	–	–	–	–	–	*	–	–	*	–	–	*	–	–	–
2006	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
2007	*	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
2008	–	–	–	–	–	–	–	–	*	–	–	–	*	–	–	–
2010	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
2013	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
2014	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
2016	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
1	*	–	*	–	–	*	–	–	–	–	–	–	*	–	–	–
36	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
2	*	*	–	*	–	–	–	–	–	–	–	–	*	–	–	–
20	*	–	–	–	*	–	–	–	–	–	–	–	–	*	*	–
22	*	–	–	–	–	–	–	*	–	–	–	–	–	–	*	–
23	*	–	–	–	–	–	–	–	–	–	–	–	–	*	*	–
24	*	–	–	–	–	–	–	–	–	–	–	–	–	*	–	–
26	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
67	–	–	–	*	–	–	–	–	–	–	–	–	–	–	–	–
3	–	*	–	–	–	–	–	–	–	–	–	–	–	–	–	–
25	–	–	–	–	–	*	–	–	–	–	–	–	–	*	–	–
Dec. bodies	*	*	–	–	–	–	*	–	–	*	–	–	–	–	–	–
Other shd types only	–	–	–	–	–	*	–	–	–	–	*	*	–	–	–	*

Vessel form	*Decorative motif*															
	27	*28*	*29*	*30*	*35*	*40*	*41*	*47*	*60*	*68*	*79*	*80*	*81*	*82*	*83*	*84*
2001	–	–	–	–	–	–	*	–	–	–	–	–	–	–	–	*
2006	–	*	–	–	–	–	*	–	–	–	*	–	*	–	–	–
2007	–	*	–	–	–	–	*	*	*	–	–	*	–	*	*	–
2008	–	–	–	–	*	–	–	–	*	–	–	–	–	–	–	–
2010	–	–	–	–	–	–	*	–	–	–	–	–	–	–	–	–
2013	–	–	–	–	*	–	–	–	–	–	–	–	–	–	–	–
2014	–	–	–	*	*	–	–	–	–	–	–	*	–	–	–	–
2016	–	–	–	–	–	–	*	–	–	–	–	–	–	–	–	–
1	–	*	–	–	–	–	–	–	–	–	–	–	–	–	–	–
36	–	–	–	*	*	–	–	–	–	–	–	–	–	–	–	–
2	–	–	–	–	*	–	–	–	–	–	–	–	–	–	–	–
20	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
22	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
23	–	–	–	–	–	–	–	–	–	*	–	–	–	–	–	–
24	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
26	*	–	–	–	*	–	–	–	–	–	–	–	–	–	–	–
67	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
3	–	–	–	–	*	–	–	–	–	–	–	–	–	–	–	–
25	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Dec. bodies	–	*	*	*	*	–	–	*	–	–	*	–	*	*	–	*
Other shd types only	–	*	*	–	–	*	–	–	–	–	–	–	–	–	–	–

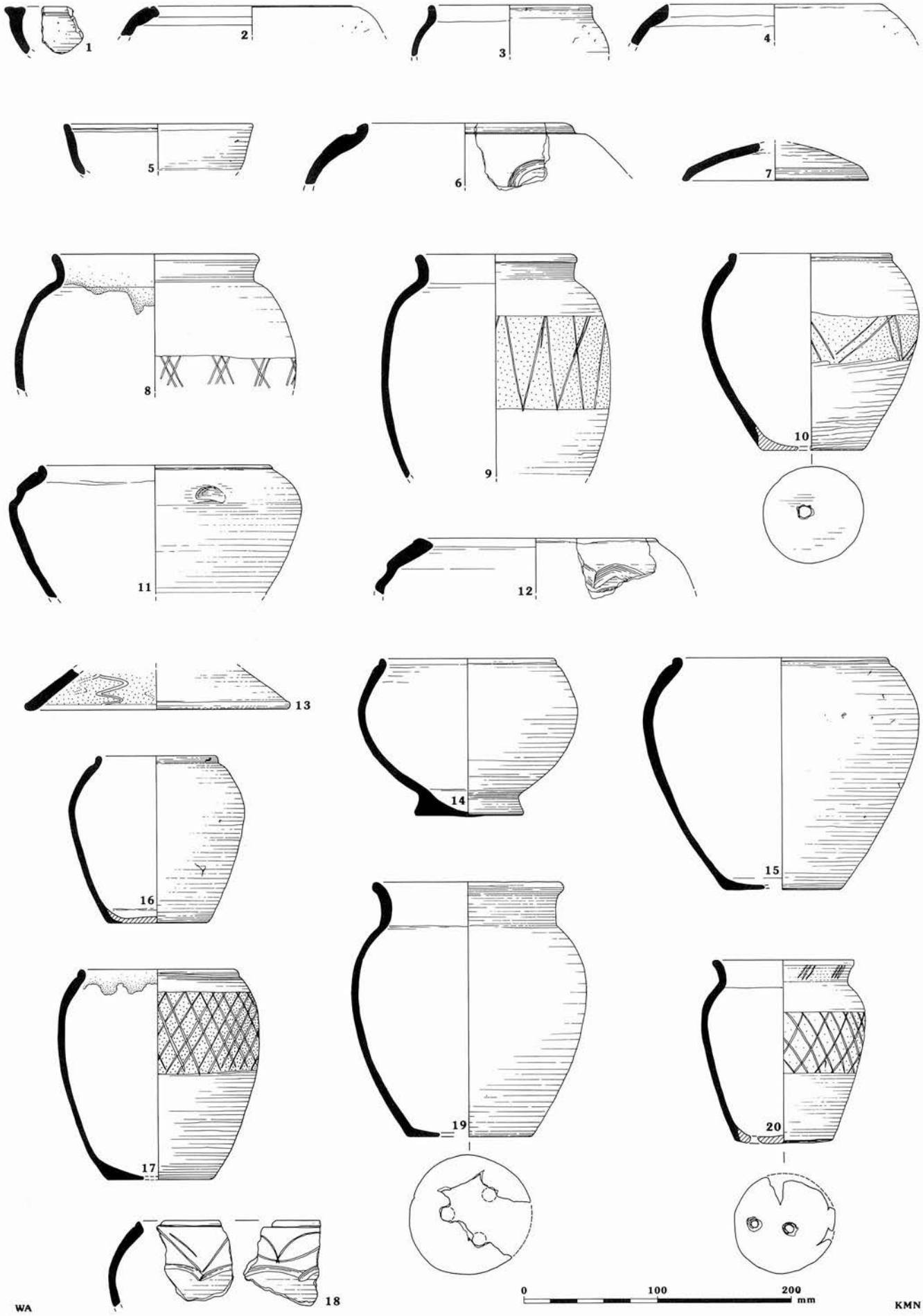


Figure 70 Late Iron Age and Roman pottery: Flagstones (1–20). Scale 1:4

Evidence for use

The presence of surface deposits, such as soot and limescale, and other aspects perhaps indicative of the use of the vessel (internal surface abrasion or pitting, for example and the presence of post-firing perforations) were recorded. Full details can be found in the archive while the implications of such 'use-wear' evidence are discussed by Hally (1983). The bulk of the evidence of this nature was noted among the Durotrigian vessels from the Late Iron Age features at Flagstones and will be discussed in more detail below. Many of these vessels showed combinations of these elements, such as sooting around the neck of the vessel with a pitted, abraded internal surface or thick limescale deposits on the interior associated with post-firing perforations in the base of the vessel.

Some of the vessels from the pits had also been badly damaged by severe post-firing heating or burning episodes, causing lamination and flaking of the fabric, which were probably the reason for these pots being thrown away. The rim of at least one vessel (Fig. 71, 23) appears to have been trimmed to its present form, possibly associated with a change in the use of the vessel. A small number of sherds from Period 4 contexts at Maiden Castle Road also showed traces of sooting on the external surfaces, especially around the rim, while internal abrasion perhaps caused by stirring the contents of the vessel during cooking (Hally 1983), was also noted on a small number of sherds, mainly of jar forms.

General assessment of the material recovered by site

Small quantities of highly abraded sherds were recovered from St Georges Road, Conygar Hill, Maiden Castle Farm, Fordington Field, Middle Farm, and Bridport Road Ridge (Table 8), and will be discussed briefly below where significant. These sherds represent little more than 'background noise', resulting from the intensive agricultural activity in a landscape which contains the Roman town of *Durnovaria* as well as a variety of smaller, rural farmsteads like that identified nearby at Alington Avenue (Davies *et al.* forthcoming), and at Maiden Castle Road.

St Georges Road

The majority of sherds were derived from features forming or closely associated with the rectangular enclosure system. The paucity and small size of any datable sherds mean that only one sherd, from an Oxfordshire white colour-coated mortarium (fabric E170), dated to c. AD 240–400, might be used to indicate a *terminus post quem* for the filling of the enclosure ditches. However, the possibility of a post-Roman date for the enclosure cannot be excluded on the basis of the material recovered.

Flagstones

Periods 1 and 2. Neolithic and Bronze Age: Features assigned to a Neolithic or Bronze Age date produced 230 sherds of Late Iron Age/Romano-British pottery, mostly plain body sherds of the various Black Burnished ware fabrics. The majority are from the final silting of these features especially those physically closest to the Late Iron Age features in the south-eastern corner of the excavation and to the south of Flagstones House.

Period 3. Late Iron Age: 2769 sherds were recovered from the Late Iron Age pits, ditches, and other features. With the exception of four sherds (three of *Terra Nigra* and one of fabric M101), all the material belonged to the Black Burnished ware fabric group. The assemblage is characterised by bead (Fig. 70, 10, 15–18; Fig. 71, 21; Fig. 72, 34) and upright rimmed (Fig. 70, 8, 9, 19, 20; Fig. 71, 26, 28, 31; Fig. 72, 40) jars (Table 12), both with and without countersunk handles, high-shouldered, bead rimmed jar/bowl forms (Fig. 70, 11, 14; Fig. 71, 22, 25, 29, 30), lids (Fig. 70, 7 and 13), and large jars with flat, inturned, triangular-shaped rims (Fig. 70, 12; Fig. 71, 27; Fig. 72, 36, 37). The majority of vessels have been well-finished and are either burnished, wiped or have a 'tooled' appearance, as on larger jars (Fig. 72, 41 and 45). The use of slip as a form of surface treatment characteristic of the variant Black Burnished wares, fabric E102, was also noted on a small number of vessels (eg., Fig. 70, 16). No examples of the 'haematite-coating' noted at Maiden Castle (Wheeler 1943) or Rope Lake Hole (Davies 1987a, 155) were encountered. Decoration consists of burnished wavy and parallel lines, chevrons and lattice zones, usually against a matt background, and a variety of 'eyebrow' and other finger or thumb impressed or moulded motifs.

The Flagstones assemblage, therefore, fits into the ceramic tradition of Brailsford's Durotrigian culture (1958, 116–9, pl. 1) and resembles a number of published assemblages from a wide range of Late Iron Age (*c.* 1st century BC/AD) sites in the area including Hengistbury Head (Brown 1987, key groups 10–14), Tollard Royal (Wainwright 1968), Gussage All Saints (Wainwright 1979b), Maiden Castle (Wheeler 1943; Brown 1991), and Hod Hill (Richmond 1968). It is difficult to establish the precise chronological range of the material present due to the lack of any immediate impact of the Roman Conquest on the native, pre-Roman Iron Age ceramic tradition of the Dorchester area, where the Late Iron Age forms continued to be used alongside the new, 'romanised' forms at least until the end of the 1st century AD. The presence of burnished lattice decoration may be taken as indicating a post-Conquest date for, at Maiden Castle, Brown (1991), notes that this decoration type occurs '... almost exclusively on sherds from post conquest deposits'. However, as lattice also occurs among earlier groups at sites like Hengistbury Head (Brown 1987, illus. 210), Tollard Royal (Wainwright 1968, fig. 16, 30; fig. 17, 54, 56, 57; fig. 19, 79, 82; fig. 21, 131), and Marnhull (Williams 1951, fig. 17, 139, 140), the presence/absence of this decoration type cannot be seen as a reliable chronological indicator. Given the classic Durotrigian nature of, and the absence of virtually all 'romanised' influences on, the Flagstones assemblage a date somewhere in the later 1st century BC–earlier 1st century AD seems most likely.

The Flagstones assemblage is heavily dominated by jar and jar/bowl forms, but lacks the 'fineware' elements of Brailsford's type series (1958, classes 1, 3, 8, 10 and 12). The imported finewares, amphora, and wheel-thrown copies of imported forms seen at sites like Hengistbury Head (Brown 1987, 319) are also virtually absent at Flagstones where only three sherds of *Terra Nigra* were recovered from the fills of ditch *00011*, while the possible flagon sherds (including Fig. 72, 32), found

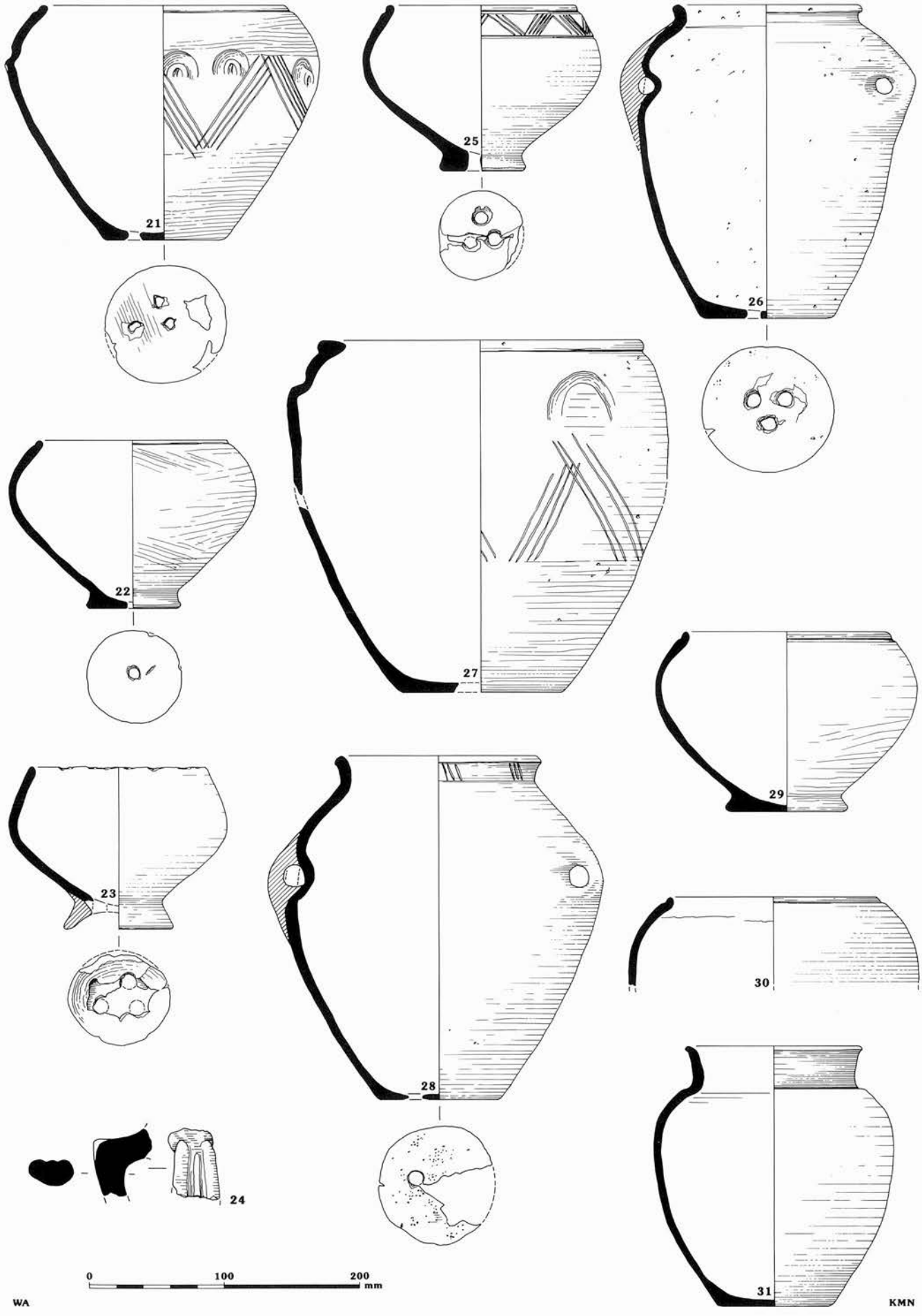


Figure 71 Late Iron Age and Roman pottery: Flagstones (21–31). Scale 1:4

in the fill of pit *00018*, are the only Continental imitations present.

Although the quantity of imported finewares, amphora and local copies of imported forms recovered from Hengistbury Head may well be exceptional due to its role as an emporium, small quantities of such 'exotics' do occur in conjunction with Durotrigian forms at inland sites like Maiden Castle (Wheeler 1943; Brown 1991) and Gussage All Saints (Wainwright 1979b), indicating the existence of wide, if not intensively used, trading contacts at both hillfort and settlement sites. Such vessels might therefore have been expected to occur at Flagstones. Of the missing Brailsford types, classes 3, 8, 10, and 12 are comparatively infrequent occurrences anyway and their absence at Flagstones may be explained by factors like sample size.

The absence (except perhaps as very fragmentary examples), of Brailsford's class 1 vessels, shallow open bowls with a bead rim, rounded or carinated sides and a footring base, traditionally known as 'Maiden Castle Ware Cemetery Bowls', is much more unusual especially as these vessels have already been found on the Alington Ridge, occurring in the Durotrigian burials at Alington Avenue (Seager Smith forthcoming), Max Gate, and Came View (RCHM(E), 1970, 577–8). Brailsford's class 1 vessels are perhaps the most common and distinctive Durotrigian form, occurring in a wide variety of urban (Leach 1982, fig. 77, 423–34; Bidwell 1979, fig. 64, 118, 122; Seager Smith and Davies 1993) and rural (Wheeler 1943, fig. 72; Williams 1951, 50; Davies 1987a, fig. 81, 59; Davies and Hawkes 1987) contexts well into the late 1st or even early 2nd century AD.

A more detailed examination of the occurrences of these vessels indicates that they are absent or at least comparatively uncommon on a variety of other sites where one would expect them to be present. Such vessels are absent at Bradford Down (Field 1982), occur only in small numbers at Rope Lake Hole (Davies 1987a, 152) and are represented only by base sherds at Tollard Royal (Wainwright 1968, 124, fig. 19, 94, fig. 20, 98 and 99).

Although far from being an exclusively funerary type, such vessels are very commonly found accompanying crouched inhumation burials of the Durotrigian type, while jar forms (Brailsford's classes 4, 5, and 6), on the other hand, although widely represented in occupational contexts, are rarely found in graves (Whimster 1981, 53–5, fig. 21).

It may be possible then, to see Brailsford's class 1 vessels as an item of 'personal property' preferentially selected for burial as grave goods and thus less likely to be incorporated among the general domestic refuse unless accidentally broken, hence the absence of this form at Flagstones.

Similarly, it may be possible to view the material deposited in the late Iron Age pits and features as being a 'specialised' section of the available Durotrigian assemblage. The majority of vessels present appear to be concerned with the preparation and storage of food, while the sections of the total assemblage concerned with food presentation, ie., the open bowl and other 'fineware' forms, are missing. Such a limited, 'kitchen' or 'domestic' role may be further attested by the well-used nature of these vessels and the frequent occurrence of limescale deposits, sooting, and evidence of even more dramatic post-firing burning episodes apparent on many of these vessels.

Holes drilled through the bases of vessels after their initial firing also occur (Fig. 70, 19, 20; Fig. 71, 21–3, 25, 26). Although their purpose remains completely obscure, such perforations appear to be comparatively common among Durotrigian assemblages, occurring both through the base and vessel walls (Wainwright 1968, figs 15–23; 1979, figs 63–7). The creation of such perforations presumably indicates some intentional change in the function of the vessel, probably after an initial period of use for some other purpose. From the Flagstones material, it seems that the surface deposits often relate to the use of the vessel once the perforations had been made. It is therefore possible that the use of these particular vessels in such a role may account for the absence of certain other vessel types.

Periods 6 and 7. Medieval, post-medieval and modern features: All the material from this phase was recovered from the medieval field boundary ditches, and a wide range of fabrics and form types were present among the material from the surface clearance and topsoil layers.

Conygar Hill

Eight sherds of Romano-British pottery were recovered from this primarily earlier prehistoric site. One is derived from the soil infilling of pit *52186* of pit-ring *52100* and one from the upper soil fills of a possible Bronze Age ditch *52138*.

Maiden Castle Farm

Twenty-nine sherds of Romano-British pottery were recovered; two from the secondary fill of ring-ditch *52034* and the remainder from the tertiary fill of ring-ditch *02027*.

Maiden Castle Road

Period 1/2. Neolithic and Bronze Age features: Ten small sherds of Black Burnished ware were recovered from the fills of the earlier prehistoric features; the low mean sherd weight (3.8 g), indicates the intrusive nature of this material.

Period 4. Romano-British features: In total 2892 sherds of pottery were recovered from this period, representing a very wide range of fabrics and vessel forms spanning the entire Roman period (Fig. 72, 38–45). The average sherd weight is comparatively high (Table 8), due to the presence of two whole pots and substantial parts of other vessels as well as the greatest number of amphora sherds recovered from the By-pass route, but the assemblage was generally in fairly poor condition and very abraded. Despite this, the wide range of fabrics and forms present, including amphorae and mortaria, clearly indicates the 'domestic settlement' nature of the assemblage. Comparatively few features produced sufficient chronologically diagnostic material to be reliably indicative of date. It is likely that much of the assemblage is redeposited from other areas of the extended settlement as a result of shifts in the focus of settlement and subsequent agricultural activity on the Lanceborough ridge. However, in general terms the assemblage can be divided into two broad chronological groups.

Romano-British settlement features: The first of these consists of a group of 1247 sherds from the settling fills of the probable

Bronze Age quarrying features to the south of the site, the ditched trackway, quarrying features to the north of the site, and the isolated quarry features and pits and curvilinear gullies in the central area. The ditched trackway is perhaps the earliest Romano-British feature producing mainly 1st–2nd century AD forms. The remaining material is predominantly 2nd–3rd century in date although both earlier and later forms are also present in small amounts. The condition of the material, fairly small abraded sherds with few diagnostic pieces recovered from any one feature, indicates its redeposited nature, probably resulting from the gradual accumulation of sediments in pre-existing features. It is likely then, that the features listed above belong to an 'earlier' Roman (ie., predating the 3rd century) phase of activity.

Also tentatively assigned to this phase of activity are structure *02310* and the storage shaft *02387*. Only six undiagnostic sherds were recovered from the construction and usage of structure *02310* although the material from its soil infilling is predominantly 2nd–3rd century in date. Very little dating evidence was recovered from pit *02387* although the presence of a complete Type 3 everted rim jar (Fig. 72, 40), dated from the late 3rd–4th century onwards, and sherds of New Forest colour-coated ware in the soil infilling of the feature suggest that its construction and primary usage may pre-date these sherds.

The second group consists of material predominantly dated from the late 3rd–4th century onwards, indicating a phase of late, or possibly even post-Roman activity in this area. Of the 23 graves or possible graves of the inhumation cemetery at Maiden Castle Road, 19 produced Romano-British pottery. With the exception of two burials (graves *02228* and *02350*), accompanied by ceramic grave goods (Fig. 72, 43 and 44 respectively), all the sherds were found within the grave fill, implying the casual incorporation of sherds already discarded at the time the grave was cut and filled. The Maiden Castle Road inhumations date generally to the late 3rd–4th centuries, but at least two definitely belong to the late 4th century or later, graves *02350* and *02320* which contain sherds of the same New Forest vessel dated AD 345–380. Unfortunately, no independent dating evidence was recovered from the square enclosure or central burial *02252*, only six un diagnostic sherds of Black Burnished ware being found in the upper fill of its ditch.

Structures: Very few sherds were recovered from the construction and usage of structures *02309*, *02357*, and *02406*, although some pre-3rd century forms were included amongst the material from structure *02406*. A complete, but very well-worn Type 2 jar (Fig. 72, 41) was, however, found in a hole exactly the right size for it within structure *02357*, presumably being intended for storage or as a foundation deposit. Vessels closely associated with buildings have been noted previously in period 6 (c. AD 75–100) contexts at Greyhound Yard (Seager Smith and Davies 1993), while two such vessels were found within 3rd–4th century (phase 7) structures at Ower (Woodward 1987a, 58, pl. 20, fig. 44, 62 and 64). Type 2 jars date from the 2nd century onwards, but the context of the Maiden Castle Road example suggests that a later, 3rd–4th century, date would be more appropriate for this vessel.

Larger quantities of material, including late Black Burnished ware vessel forms (Types 20 and 25), as well as New Forest fabrics, were recovered from the rubble and soil infill layers of these structures. Thirty-seven per cent of the Black Burnished ware sherds from these contexts were of the coarse fabric Q107, almost exclusively derived from large, Type 2 jar forms (Fig. 72, 42). These vessels were hand-made and appear to have been rather carelessly produced and may well be later than normally expected for this vessel form. The fabric is predominantly oxidised although irregularly fired examples also occur. The variability in the fabric used even for a single vessel (which are frequently very coarse and full of shale/clay pellets around the base while the fabric of rim and shoulder is almost indistinguishable from that of fabric E101), shows the lack of refinement of the clay, while the coil joins are poorly blended and the angle of the burnished line lattice decoration is highly varied and the pattern carelessly executed.

Surface treatment is confined to very heavy, rough wiping or smearing and may be found on either or both surfaces of the vessel. The fabric and finish of these vessels can also be found among the large, Type 12 storage jars with 'pie-crust' rims of the 4th century onwards. Sherds from large jar forms in similar fabrics have also been noted amongst groups of predominantly 3rd–4th century material associated with the demolition of late Roman structures in Dorchester itself (Seager Smith 1993b).

At Alington Avenue, large numbers of such sherds, some assignable to Type 12 jars (Seager Smith forthcoming), occurred in a post-Roman, possibly medieval, deposit sealing a Roman pit/well complex. This fabric was not noted among the 4th–5th century material from the Dorchester Bath House (Andrews in prep.), although as large jar forms were very poorly represented amongst this material, this may be due to the function of the assemblage rather than chronology.

On the basis of this evidence, it seems probable that large storage jars did not undergo the same typological development as the equivalent cooking-pot forms, leading to the extremely everted, overhanging rims of the late 3rd–4th century Type 3 jars, but continued to be produced alongside these vessels and other late 3rd–4th century forms (ie, Types 12, 20 and 25), well into the late Roman period and possibly even beyond. Likewise, at present it is not possible to define the date range of fabric Q107 any more precisely than the late 3rd–4th century onwards. All the examples of this fabric type found to date occur as large sherds, together with late 3rd–4th century fabrics and forms, in soil or rubble layers associated with the demise of late Roman structures or features. Consequently, although it may be possible to see this fabric type as a degeneration of the Wareham/Poole Harbour Black Burnished ware industry, for the present, it remains a matter for conjecture and future research.

Period 6. Medieval field boundaries: Eight sherds were recovered from this period; plain body sherds of Black Burnished ware from the linear boundary ditches *02404* and *02282*, running across the central area of the site.

Period 7. Topsoil and clearance: A large quantity of Romano-British pottery was recovered from the modern ploughsoils and clearance levels above this settlement.

Fordington Field

Three undiagnostic sherds of the Wareham/Poole Harbour Black Burnished ware fabric were recovered from the fill of corndrier *50664*, in addition to a single sherd of samian.

Middle Farm. Trench A

Eight chronologically undiagnostic sherds of Romano-British pottery were recovered; one from Bronze Age pit *03157* and three from the final infilling of linear ditch *03051*, while the remainder were recovered from the topsoil or were unstratified.

Middle Farm. Trench B

A further 69 sherds of Romano-British pottery were recovered from the colluvial sequence and one sherd of samian from the topsoil of this trench (Mills and Dickinson above). Forty-eight sherds were 3-dimensionally recorded within the colluvial sequence; their position is shown in Figure 62. The remaining sherds can be apportioned to a stratigraphic layer and all were recovered from no lower than 50895 within the sequence (Fig.

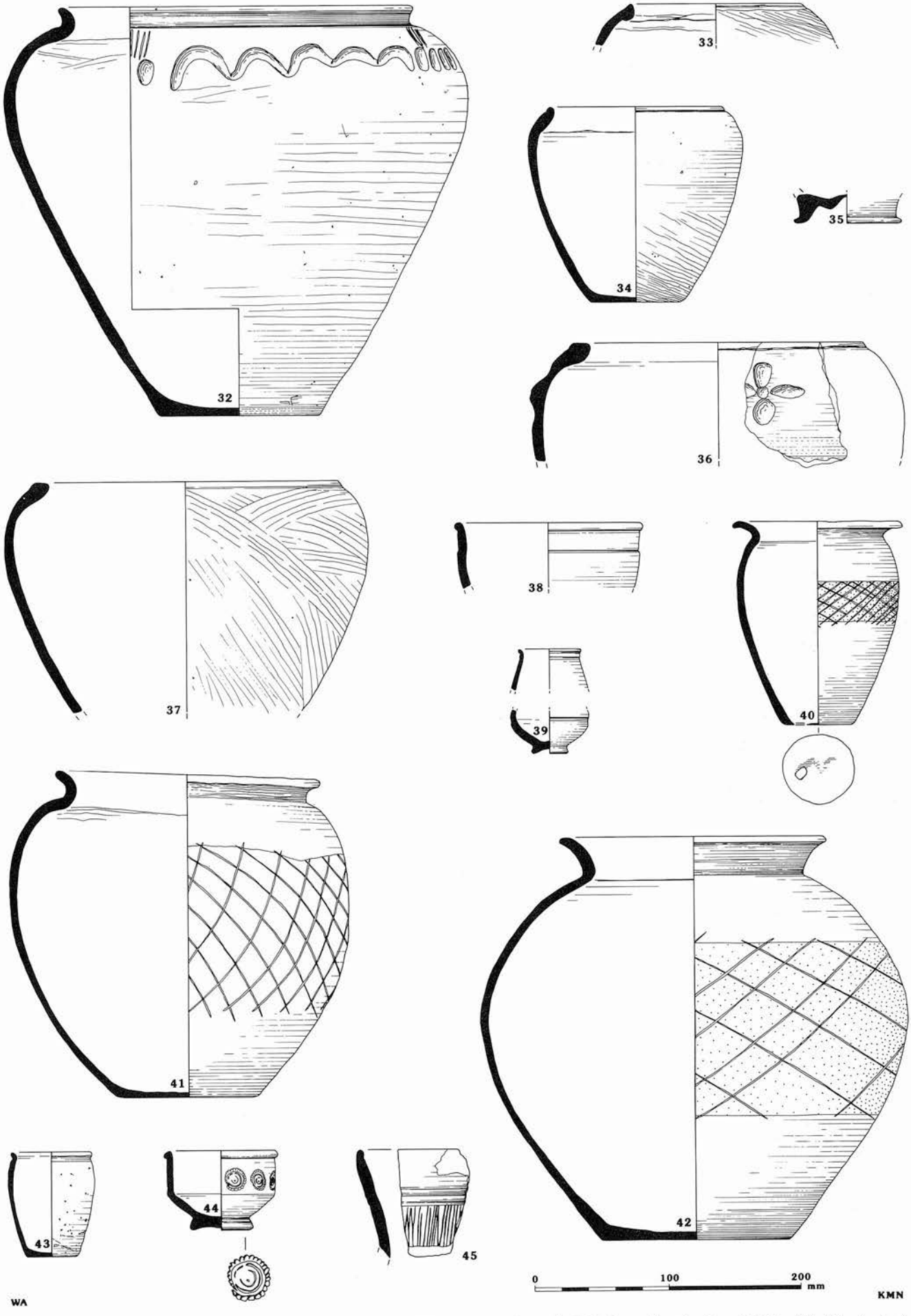


Figure 72 *Late Iron Age and Roman pottery: Flagstones (32–7); Maiden Castle Road (38–45). Scale 1:4*

62). With the exception of one sherd (SF10, unlocated within the sequence), of Dressel 20 amphora, all the sherds are of the various Black Burnished ware fabrics. Only two rim sherds were present; a Type 7 rim, (SF302) in fabric E101, a form with a wide date range from the 1st century AD until the 3rd century and a Type 22 rim (SF132) dated to the 2nd century. Consequently, no date can be assigned to this material.

Bridport Road Ridge

One sherd of Romano-British pottery was recovered from the modern ploughsoil.

List of illustrated sherds

The entries are presented in the following format: Figure number, PRN, Context, Period, fabric, form, decoration; motif.

Fig. 70
Flagstones
1 PRN 80072, 00322, 1B/2, Q103, 2002, —
2 PRN 80105, 00050, 3, E101, 2003, —
3 PRN 80167, 00003, 3, E101, 2004, —
4 PRN 80168, 00003, 3, E101, 2005, —
5 PRN 80186, 00003, 3, E101, 2009, —
6 PRN 80187, 00003, 3, E101, 2010, —
7 PRN 80335, 00008, 3, E101, 2026, —
8 PRN 80318, 00025, 3, E102, 2001, burnished; 1
9 PRN 80314, 00025, 3, Q102, 2001, burnished; 7
10 PRN 80294, 00034, 3, Q103, 2007, —
11 PRN 80299, 00034, 3, Q103, 2016, tooled; 41
12 PRN 80284, 00034, 3, E101, 2006, —
13 PRN 80300, 00034, 3, E101, 2026, burnished; 27
14 PRN 80298, 00034, 3, Q103, 2014, —
15 PRN 80295, 00034, 3, Q103, 2007, —
16 PRN 80293;80315, 00025; 00034, 3, Q103, 2007, —
17 PRN 80296;80309, 3, 00025; 00034, Q103, 2007, burnished; 1
18 PRN 80269, 00036, 3, Q103, 2007, burnished; 83
19 PRN 80264, 00036, 3, Q103, 2001, —
20 PRN 80245, 00036, 3, E101, 2001, burnished; 1, 10

Fig. 71
Flagstones
21 PRN 80252, 00036, 3, E101, 2007, burnished; 28, tooled; 82
22 PRN 80271, 00036, 3, Q103 2014, —
23 PRN 80285;80254, 00034;00036, 3, E101, 2011, —
24 PRN 80231, 00048, 3, E101, 210, —
25 PRN 80253;80230, 00036;00048, 3, E101, 2014, burnished; 80, incised; 35
26 PRN 80236;80265, 00036;00048, 3, Q103, 2001, —
27 PRN 80237;80270, 00036;00048, 3, Q103, 2006, burnished; 28, tooled; 81
28 PRN 80251;80234, 00036;00048, 3, E101, 2001, burnished; 10
29 PRN 80273;80360, 00036;00044 3, Q103, 2014, —
30 PRN 80361, 00044, 3, Q103, 2016, —
31 PRN 80357;80228; 80229;80246, 00048;00036;00044, 3, E101, 2001, —

Fig. 72
Flagstones
32 PRN 80376, 00337, 3, E101, 2001, tooled; 84
33 PRN 80388, 00306, 3, E101, 2005, —
34 PRN 80387;80383, 00305;00306, 3, E101, 2007, —
35 PRN 80441, 00220, 3, Q103, 119, —
36 PRN 80430, 00304, 3, E101, 2006, —
37 PRN 80477, 00219, 2, E101, 2006, —

Maiden Castle Road
38 PRN 80696, 02312, 4B, E180, 619, —
39 PRN 80865, 02311, 4B, E121, beaker, —
40 PRN 80996, 02388, 4C, E101, 3, burnished; 2
41 PRN 82019, 02467, 4C, E101, 2, burnished; 2
42 PRN 82023, 02373, 4C, Q107, 2, burnished; 2
43 PRN 80949, 02229, 4C, E102, 10, —
44 PRN 80927, 02351, 4C, E161, Fulford 73, stamped
45 PRN 80937, 02233, 4C, E102, 36, burnished; 30, incised; 35

3 Medieval and Post-Medieval Pottery, by J. Draper, with Rachael Seager Smith

A total of 1065 sherds of medieval and post-medieval pottery was recovered. The material spans a date range from the Saxo-Norman period until the 19th/20th century. In general, the condition of the medieval and post-medieval pottery was comparatively poor. Few featured sherds were recovered, the majority being small, abraded body fragments. It seems probable that much of this material was derived from agricultural activities such as manuring with domestic refuse, or has, at least, been heavily disturbed by the plough. Detailed information concerning the precise dating of the sherds present within individual contexts and phase units is available in archive but the number of sherds recovered from each site is summarised by period in Table 14.

St Georges Road and Flagstones produced the bulk of the assemblage, representing 19% and 63% respectively of the total number of post-Roman sherds recovered. The proximity of these sites to Dorchester itself may be one reason for this although the footings of a later medieval/post-medieval agricultural building were identified at St Georges Road, while a sequence of linear field boundaries at Flagstones indicates agricultural activity at least in this vicinity during these periods. The small numbers and abraded condition of the sherds recovered from Conygar Hill, Maiden Castle Farm, Maiden Castle Road, Fordington Field, Middle Farm, and the Bridport Road Ridge are what one would expect from a landscape intensively used for agricultural activities throughout the medieval and post-medieval periods.

In general terms, the range of medieval and post-medieval fabrics closely resembles those recovered from other sites within Dorchester itself (Draper 1993), while the abraded condition of the material is also reflected at other rural sites in the vicinity (Seager Smith and Draper forthcoming). The bulk of the assemblage dates from the 17th–19th centuries in a range of coarse and finewares typical of the Dorchester region.

One unusual fabric type was noted amongst the early medieval material from St Georges Road. A small group of sherds, probably from a single vessel, in pit *01413* occurred in a dull grey–brown, coarse, handmade fabric, predominantly tempered with large (< 2 mm across) limestone inclusions and sparse amounts of quartz sand. Sadly, only undiagnostic body sherds were recovered, lacking any associations with other datable ceramics or other material types, so the date range of the 12th–13th century suggested for these sherds is based on fabric alone, and the vessel may well be earlier.

4 Roman Coins, by John A. Davies

The small collection of five coins comprises a cohesive group of late Roman issues which were all struck within a 50 year period, between AD 326 and 378. None are

Table 14 number of medieval and post-medieval sherds by period and site

Period	*Early medieval*	*Medieval*	*Late medieval*	*Post-medieval*	*Modern*	*Uncertain*	*Total*
St Georges Road							
4	–	1	3	2	–	–	6
6	12	56	14	10	–	–	92
7	–	10	23	66	–	1	100
Flagstones							
1/2	8	18	13	16	–	–	55
3	4	1	–	1	–	–	6
7	4	18	77	510	–	–	609
Unphased	–	1	–	–	–	–	1
Conygar Hill							
1/2	–	2	–	–	–	–	2
7	–	–	1	5	–	–	6
Maiden Castle Farm							
Unphased	–	–	–	1	–	–	1
Maiden Castle Road							
1/2	–	–	–	1	–	–	1
4	3	7	–	–	–	–	10
7	–	–	5	24	–	–	29
Fordington Field							
7	–	1	3	2	–	–	6
Middle Farm							
Trench A							
3	–	–	–	3	–	–	3
7	–	–	1	6	–	–	7
Trench B	–	–	1	5	–	3	9
Bridport Road Ridge							
7	–	–	–	43	–	–	43
Unstrat/Unphased	16	10	29	23	1	–	79
Total	47	125	170	718	1	4	1065

rare or unusual issues. They belong to years of heavy coin circulation in Britain and issues of the same years are also prominent in the larger Dorchester coin assemblages, as well as in collections from sites elsewhere in the province.

Mint marks are visible and betray the sources of production in all cases, despite the particularly heavy wear encountered on two examples, a *follis* of Constantius II/Constans and an *AE3* of Valentinian I/Valens (Cat. nos 4 and 5). They reflect the dominance of the Trier mint as a supplier to Britain from AD 326 (the date of the the closure of the London Mint) until the mid 4th century and also the importance of the Arles mint during the Valentinianic period (AD 364–378).

5 Objects of Copper Alloy, by J.M. Mills

Thirteen copper alloy objects and two fragments of sheet or scrap were recovered including one Bronze Age rivet; two brooches, three bracelets, and two finger rings of Roman date; one pin, a lace tag, and a buckle of medieval or later date. These were cleaned and stabilised by M. Brooks (English Heritage conservator at the Wiltshire Library and Museum Conservation laboratory). X-ray fluorescence analysis of Cat. nos 2 and 6 was undertaken by J. Bayley, and of Cat. no. 7 by M. Heyworth of the Ancient Monuments Laboratory. Dr Martin Henig examined and commented upon Cat. nos 1, 2, 5–5, 10,

Table 15 copper alloy objects by type and site

	Object	*Cat. / Fig. no.*
St Georges Road		
Period 6C ditch *01105*	pin	Cat. no. 12
Flagstones		
Period 1B final silting, enc. ditch segment *24*	sheet	Cat. no. 4
Period 2 central grave *00430*	rivet	Fig. 73, 1
	lace tag	Cat. no. 2
Period 1/2 gully *00020*	sheet	Cat. no. 3
Clearance	buckle	Cat. no. 13
Maiden Castle Road		
Period 4C		
Grave *02318*	ring	Fig. 73, 5
	bracelet	Fig. 73, 6
Grave *02389*	brooch	Fig. 73, 2
Grave *02220*	bracelet	Fig. 73, 7
	bracelet	Fig. 73, 8
Grave *02202*	ring	Fig. 73, 4
Grave *02207*	brooch	Fig. 73, 3
Middle Farm		
Trench A Period 2		
Final infilling ditch *03051*	sheet	Cat. no. 14
Trench B colluvial sequence		
Context *50895*	unident.	Cat. no. 15

and 11. The provenance of the objects is summarised in Table 15 and a catalogue of all the objects is in archive.

St Georges Road

The small, incomplete pin (Cat. no. 12) and the buckle fragment (Cat. no. 13) are probably both of a medieval or post-medieval date.

Flagstones

The bronze rivet (Fig. 73, 1) from the central burial is of a type current from the Early Bronze Age. Although used for hafting daggers, a single occurrence does not imply the presence of a dagger; given that the Flagstones rivet survives in good condition, it would seem reasonable to assume that, had it been deposited with a dagger, that too would have survived.

Two sheet metal fragments (Cat. nos 3 and 4) are probably scrap and may date from the later Bronze Age or any subsequent period. The lace-tag (Cat. no. 1) is of medieval or post-medieval date.

Maiden Castle Road

Seven objects were found in the graves of the Romano-British cemetery. The two rings (Fig. 73, 4, 5) and three bracelets (Fig. 73, 6–8) were all found with skeletons; the negative skin impressions noted in the surface corrosion imply that these items were worn next to the skin at burial. The date suggested for these objects is the 3rd and/or 4th centuries AD. Two brooches, a strip brooch (Fig. 73, 3) and a Hod Hill type (Fig. 73, 2), were found in graves fills. The 1st century AD date for these brooches is incongruous with the dating for the other finds from graves of the cemetery. Both brooches are incomplete and although it is possible that they were regarded as heirlooms and deliberately deposited as grave goods, it must be equally possible that they were redeposited inclusions in the grave fill and had no direct relationship to the burials.

Middle Farm

A small fragment of scrap sheet (Cat. no. 14) was found in the tertiary fill of the ditch *03051*. This may be of later Bronze Age date. A very small indeterminate fragment was found at a fairly high level in the colluvial sequence (Cat. no. 15).

Fig. 73

1. Small bronze rivet, complete; Cat. no. 2, SF82, Flagstones, 00442, Period 2.
2. Brass Hod Hill type brooch, incomplete; Cat. no. 7, SF129, Maiden Castle Road, 02359, Period 4C.
3. Strip brooch, incomplete; Cat. no. 11, SF17, Maiden Castle Road, 02208, Period 4C.
4. Ring with overlapping terminals, complete; Cat. no. 10, SF21, Maiden Castle Road, 02204, Period 4C.
5. Ring with Romano-British imitation intaglio, complete; Cat. no. 6, SF94, Maiden Castle Road, 02324, Period 4C.
6. Annular bracelet, complete; Cat. no. 5, SF93, Maiden Castle Road, 02324, Period 4C.
7. Annular bracelet, complete; Cat. no. 8, SF29, Maiden Castle Road, 02221, Period 4C.
8. Annular bracelet with grooved terminals, complete; mineral preserved skin within corrosion; Cat. no. 9, SF30, Maiden Castle Road, 02221, Period 4C.

6 Objects of Lead, by Rosamund M.J. Cleal

Three lead objects were recovered. A possible washer and a fragment of window came were recovered from the topsoil at Flagstones and are likely to be of medieval or post-medieval date (Cat. nos 1 and 3). The only object from a Romano-British context is a thick, broken ring of unknown function from the fill of pit *02298* at Maiden Castle Road (Cat. no. 2).

7 Objects of Iron, by J. M. Mills

A total of 48 objects and fragments and 1036 nails was found, including 516 hobnails and 405 coffin nails. Mineral-preserved wood was noted on many of the coffin nails, coffin fittings, and other nails and is recorded in the archive, but the wood was not identified to species. All of the objects have been catalogued (archive), and W. Manning (University of Wales, Cardiff) kindly commented on one of these (Fig. 74, 7). Conservation work was carried out by M. Brooks.

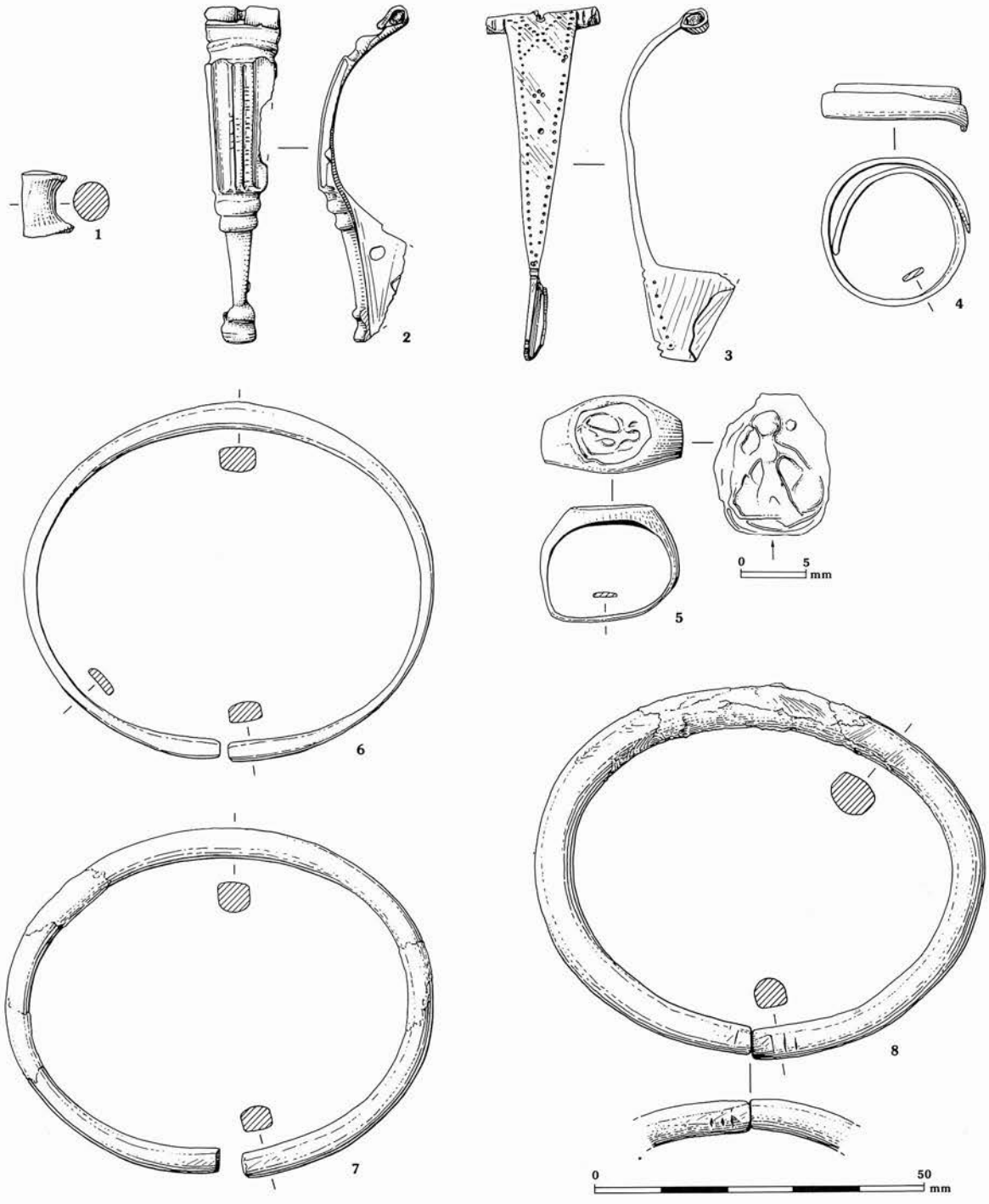


Figure 73 Copper alloy objects. Scale 1:1. Impression of ring (No. 5) scale 2:1

Objects from Non-Funerary Contexts

Nineteen objects and fragments other than nails were recovered from excavated contexts other than graves (Table 16). These were found on three sites: St Georges Road (Period 6), Flagstones (Periods 2 and 3), and Maiden Castle Road (Period 4). The details of the objects from pre-Roman, Romano-British, and medieval phases are presented in catalogue form in the archive where the 14 strip fragments, lumps, rods, and sheet fragments are listed, as are the 13 objects recovered from the topsoil and ploughsoil contexts. These latter include a small, round spoon bowl, a broken knife blade with whittle tang, a tool with a leaf-shaped blade and twisted handle and a variety of srips and sheet fragments. None of these is obviously Romano-British or medieval in date.

St Georges Road

A rod and a slide key (Fig. 74, 4) were recovered from the fillings of ditches *01069* and *01422* respectively. The slide key is of a Romano-British type.

Flagstones

A small strip, recovered from the primary fill of pit segment *6* at Flagstones, provides evidence of disturbance of these layers. The unidentified object (Fig. 74, 7) from the upper fill of the

Table 16 iron objects from stratified contexts by type and site

	Object	*Cat. / Fig. no.*
St Georges Road		
Period 6B ditch *01422*	slide key	Fig. 74, 4
Flagstones		
Period 2 central burial *00430*	Unident.	Fig. 74, 7
Period 3 LIA pit *00018*	gouge	Fig. 74, 1
Maiden Castle Road		
Period 4B		
Quarry *02391*	knife	Fig. 74, 2
	penannular brooch	Fig. 74, 8
Quarry *02308*	?socketed tool	Cat. no. 3
	key	Fig. 74, 3
	unident. ?broken or unfinished	Fig. 74, 6
Period 4C		
Ditch *02277*	unident.	Fig. 74, 5
Pit *02387*	unident.	Cat. no. 9
Grave *02250*	2 x coffin fitting strip	Fig. 74, 11, 12
Grave *02318*	double spiked loop	Cat. no. 13
	bun-headed pin	Fig. 74, 15
Grave *02331*	coffin fitting plate	Fig. 74, 13
Grave *02232*	coffin fitting plate	Fig. 74, 14
Grave *02220*	oval buckle loop	Fig. 74, 17
Grave *02207*	coffin fitting plates	Cat. no. 16
Grave *02202*	unident.	Fig. 74, 16

central burial *00430* may be Romano-British in date and may have been deposited during the final infilling of the feature. The wood-working gouge (Fig. 74, 1) from a Late Iron Age pit *00018* is the only other ferrous object from Flagstones; similar objects are known from sites in Dorset, such as Hod Hill and Woodcutts (Manning 1985, 25, pl. 11, B48).

Maiden Castle Road

By far the greatest quantity of iron objects (16 objects and miscellaneous pieces) was recovered from Maiden Castle Road (Table 16). These are not closely datable within the Romano-British period, but are indicative of general domestic, as opposed to specifically agricultural, activity. The quantity of ironwork recovered is small with few tools, personal items, or fittings which may suggest that occupation was either shortlived or that ironwork was removed at or after the duration of occupation.

Nails From Non-Funerary Contexts

A total of 81 nails and nail fragments was recovered from stratified contexts other than graves (Table 17). In addition, 35 nails were recovered from the topsoil and plough-soil contexts, these have not been classified. The nails from stratified contexts were classified according to Mills (1993a) and nails of medieval and later date according to Mills (forthcoming).

An additional type of Romano-British nail, type V, has been identified in this assemblage. The nail has a tapering square-sectioned shank which is splayed at the head end and usually bent over at *c.* 90° (Fig. 74, 9). On one example the head is not bent over and, therefore, it may have been unused. Similar objects have been found at Portchester (Webster 1975, fig. 131, no. 259) and Baldock (Manning and Scott 1986, fig. 69, no. 596). This type of nail could be used as a clip-type fastening to hold in place flat plate-like objects, such as decorative plaques. One example was found nailed through an iron coffin plate from the Maiden Castle Road cemetery (Fig. 74, 14).

Coffin Nails from Maiden Castle Road

A total of 405 nails and nail fragments (excluding hobnails) was found in 20 graves from Maiden Castle Road. These were counted, measured, and sorted by type according to the classifications used for the coffin nails from the Romano-British cemetery at Poundbury, Dorset (types Ia–Ig) and the occupation at County Hall, Dorchester (type Ih) (Mills 1993a; b). The level of site data available is not adequate for detailed analysis of coffin construction, nor is it sufficient, in some cases, to make a positive identification of the presence of a coffin within a grave. The number of nails and fragments in each grave varies considerably from 1 (grave *02205*) to 61 (grave *02215*) with an average of 20. Unspecified flat headed nails are most frequent (39.5%) and, of the remainder, type Ia (30.1%) is the most common, occurring in 16 of the 20 graves with 1–20 examples in each. It is unlikely that the observed difference in head shape between nail types Ia–Id, and types Ie, If, Ig, and Ih is significant. The different shapes are likely to be a result of the hand-made manufacturing technique rather than a specific design factor. The difference between small-headed nails (types Ia–Id) and large-headed nails (types Ie–Ih) is more significant. Those with larger heads and, usually, longer shanks would require more iron and would thus be more expensive to manufacture. The heads of these larger nails may have served a decorative function as well as being used to join more substantial timbers than the shorter, smaller headed nails.

In addition, three nails from grave *02318* were a slightly unusual form of type Ia. These are like small tacks, the lengths being 18 and 22 mm. The heads are flat, approximately circular, and are turned down towards the shank at the edge (Fig. 74, 10).

Although the sample size here is small and therefore, cannot be compared statistically with the coffined burials from the Poundbury or Alington Avenue Romano-British cemeteries (998 and 90 burials with nails respectively; Mills 1993a; Walker forthcoming b), it is possible to make some observations regarding the types of nail used in coffin construction. Type II (diamond-headed) are absent from Maiden Castle Road and Alington Avenue. Nails with large flat heads were recognised at all three sites, only one nail of this type was present at Alington Avenue. The absolute frequency of types Ie–Ig was not calculated for Poundbury; however, coffins were constructed using these types alone as well as in conjunction with other nail types at Poundbury,

which is not the case at Maiden Castle Road or Alington Avenue. Finally, at both Alington Avenue and Maiden Castle Road small tack-like nails have been identified, in association with the coffins but their function is uncertain.

Coffin Fittings from Maiden Castle Road

Four of the burials from the Maiden Castle Road cemetery, *02318*, *02232*, *02231*, and *02207*, were associated with non-nail ironwork which could be related to a coffin or burial container. The two strips from grave *02250* within the square enclosure (Fig. 74, 11 and 12) are not associated with nails which would otherwise indicate the presence of a coffin, although both have traces of mineral-preserved wood in the corrosion layers; neither are they perforated for attachment by nails or rivets. A similar strip from Ilchester (Leach 1982, fig. 125, no. 55) is described as a binding. How these strips might have acted as bindings and to what these were attached is not known.

A single double-spiked loop from grave *02318* (Cat. no. 13) and two plates, one from each of graves *02331* and *02232* (Fig. 74, 13, 14) were recovered. The association of double-spiked loops and plates with coffins is well attested although the function is uncertain. Double-spiked loops may be used to form simple hinges and for various attachments such as drop handles. The decorated plate from grave *02232* (Fig. 74, 14) is more elaborate than those from Poundbury or Alington Avenue, but is unlikely to be a lock plate. The possibility that these fittings may represent reuse of timber should not be ignored. The strips (Fig. 74, 11 and 12) and timber dogs (Cat. no. 16) may also be associated with timber reuse rather than being deliberate additions to a coffin or container.

Grave Goods from Maiden Castle Road

Eight burials from Maiden Castle Road were accompanied by iron grave goods, hobnails, or both (Table 2). The occurrence of hobnails is shown in Table 2. Hobnails were found at the feet of seven of the burials suggesting that shoes accompanied the burial. The minimum number of hobnails per grave was calculated by counting the number of nail heads present. The hobnails were not individually measured, however, visual appraisal suggested that they fell within the size range of 9–*c.* 25 mm recorded at the Lankhills cemetery, Winchester (Clarke 1979, 322). No boot or shoe shapes were preserved, and no cleats were found in association with hobnails. The number of burials with hobnails is not great enough to attempt to show any numerical patterning between sets of hobnails. In addition, one example was found in grave *02218*, one in *02235*, and two in grave *02202*. These are unlikely to represent the presence of shoes within a grave, but probably represent casual loss.

Three burials were associated with iron objects that are considered to have been deliberately deposited within those graves. The unusual large copper alloy-headed nail or pin (Fig. 74, 15) from grave *02318* is of indeterminate function. Both the 'leaf-shaped' object and the buckle (Fig. 74, 16, 17) are assumed to be associated with their respective burials; the buckle was found *c.* 0.3 m above the grave base, and the leaf-shaped object was found above the skull of the upper burial in grave *02202*; it is possible, although not considered likely, that neither object was deliberately deposited. No date ranges are available for any of these objects as no parallels have been found.

Table 17 summary of nails and shank/rod fragments from non-funerary contexts by site

	Nails	*Shank/ rod frags*	*Total*
St Georges Road			
Period 4B rectangular enclosure			
Ditch *01269*	–	1	1
Pit *01282*	1	–	1
Post-hole *01167*	–	1	1
Period 6A ditch *01069*	–	1	1
Period 6B pit *01413*	1	–	1
Period 6C ditch *01306*	–	1	1
Topsoil	6	–	6
Flagstones			
Period 1B			
Primary fills segments *6, 10, 38*	2	2	4
Final silting segments *7, 10, 19, 37*	3	1	4
Topsoil	19	–	19
Unstratified	2	–	2
Maiden Castle Road			
Period 4A trackway	1	–	1
Period 4B			
Quarries *02390, 02391*	8	–	8
Quarries *02308, 02255*	11	7	18
Structure *02310*	2	–	2
Period 4C			
Ditch *02277*	–	1	1
Pit *02387*	7	7	14
Structure *02309*	4	4	8
Structure *02357*	1	2	3
Structure *02406*	3	5	8
Topsoil	6	–	6
Middle Farm			
Period 2 final infilling ditch *03051*	2	1	3
Bridport Road Ridge			
topsoil	2	–	2
Total	81	34	115

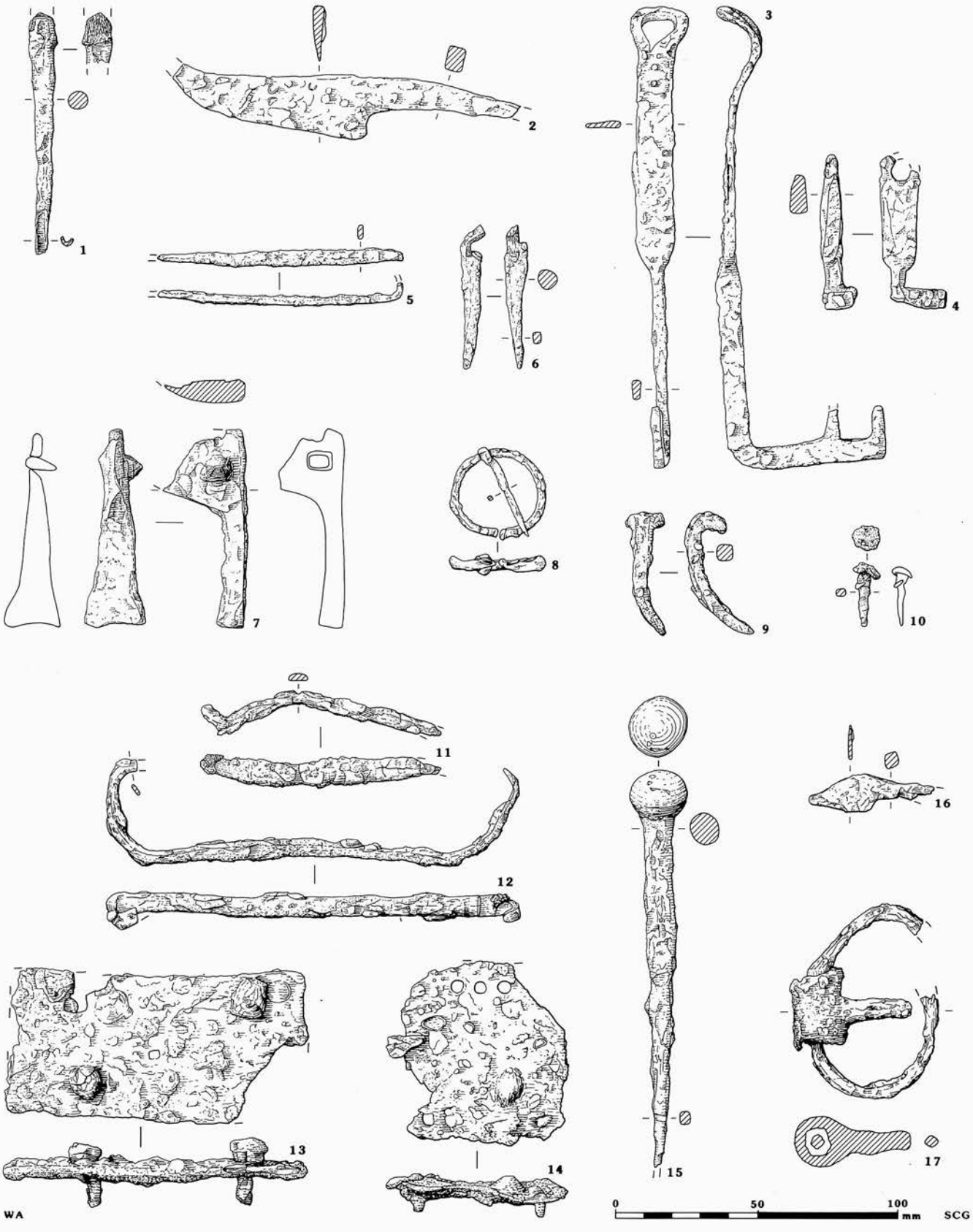


Figure 74 Iron objects. Scale 1:2

Fig. 74
1 Gouge with tapering solid stem, incomplete; traces of horn preserved on tang; Cat. no. 1, SF215, Flagstones, 00048, Period 3.
2 Knife, blade tip and end of tang broken; Cat. no. 2, SF132, Maiden Castle Road, 02380, Period 4B.
3 L-shaped lift key with two teeth; stem is shaped and ends in welded circular bow; Cat. no. 4, SF63, Maiden Castle Road, 02301, Period 4B.
4 Slide key with damaged loop and teeth, incomplete; Cat. no. 5, SF25, St Georges Road, 01423, Period 6C.
5 Unidentified strip object with incomplete loop terminal; Cat. no. 8, SF45, Maiden Castle Road, 02278, Period 4C.
6 Unidentified broken or unfinished object; Cat. no. 7, SF128, Maiden Castle Road, 02301, Period 4B.
7 Unidentified object with bar welded through blade-like end; Cat. no. 6, SF216, Flagstones, 00431, Period 2.
8 Penannular brooch with Fowler type D terminals, complete; Cat. no. 10, SF130, Maiden Castle Road, 02380, Period 4B.
9 Type V nail; Maiden Castle Road, 02380, Period 4B.
10 Small type Ia nail with edge of head turned down; SF105, Maiden Castle Road, 02324, grave *02318*, Period 4C.
11 Strip, incomplete; Cat. no. 11, SF32, Maiden Castle Road, grave *02250*, found behind head, Period 4B.
12 Curved strip, incomplete; Cat. no. 12, SF33, Maiden Castle Road, 02266, grave *02250*, found at feet, Period 4B.
13 Slightly tapering rectangular plate with two type I nails *in situ*; Cat. no. 14, SF96, Maiden Castle Road, 02332, grave *02331*, to right of skeleton, Period 4C.
14 Approximately square plate, three circular holes punched along one edge, one type V splayed-headed nail *in situ*, incomplete; Cat. no. 15, SF39, Maiden Castle Road, 02233, grave *02232*, at left of head, Period 4C.
15 A large square-sectioned, 'bun-headed' nail or pin with head covered with sheet copper alloy; Cat. no. 17, SF95, Maiden Castle Road, 02324, grave *02318*, beside left hip, Period 4C.
16 Unidentified leaf-shaped object, incomplete; Cat. no. 18, SF15, Maiden Castle Road, 02204, grave *02202*, on or above skull, Period 4C.
17 Oval buckle loop with pin, incomplete; Cat. no. 19, SF24, Maiden Castle Road, 02221, grave *02220*, Period 4C.

8 Glass, by H.E.M. Cool

Roman Glass

Sixteen pieces of Roman glass were identified, 15 of vessel and one of window glass (Table 18), and six pieces of post-Roman. There is little amongst this collection which can be closely dated and there is no evidence of any 4th century material. Detailed reference to similar types found in the Greyhound Yard collection (Cool and Price 1993) is included in the archive.

Table 18 summary of Roman glass fragments by site (all from vessels unless stated otherwise)

	Description	*Date range (centuries AD)*
St Georges Road		
Clearance	rim, b/g jar/bottle (1)	late 1st–early 3rd
Flagstones		
Topsoil	2 x b/g (2a, b)	late 1st– early 3rd
Maiden Castle Road		
Period 4A		
Trackway *02241*	b/g pris. (5a)	late 1st–early 3rd
Quarry *02391*	b/g window (6)	1st–3rd
Quarry *02308*	deep blue (3) b/g (4b)	1st 1st–3rd
Period 4C		
Pit *02387*	rim b/g jar (?) 2 x b/g (4a, d)	1st–3rd 1st–3rd
Structure *02309*	2 x b/g pris. (5c, d)	later 1st–early 3rd
Grave *02202*	b/g pris. (5b)	late 1st–early 3rd
Grave *02230*	b/g (4c)	1st–3rd
Clearance	b/g pris. (5e)	late 1st–early 3rd
Middle Farm		
Colluvial sequence		
Context *50802*	rim, tubular rimmed bowl (7)	1st

b/ g = blue/green; pris. = prismatic bottle
Cat. no. in brackets

St Georges Road

One complete pin beater (Fig. 75, 10) was recovered from the Period 4B rectangular enclosure ditch *01269*. It is of a variety commonly found from Roman–early medieval contexts (MacGregor 1985, 188). The pin beater was used in weaving on warp-weighted looms, to beat the weft into place, being inserted between individual warp threads at right angles to the weft (ibid., 188). This example does not show the transverse grooves caused by friction which are sometimes present although it does

9 Objects of Worked Bone, by L. Stacey and K.E. Walker

Fifteen pieces of worked bone were recovered, 11 from prehistoric contexts, 3 from Romano-British contexts, and 1 from the topsoil. The distribution of these objects is summarised in Table 19. The bones were identified to species by Clive Gamble (University of Southampton) and then classified into seven groups according to morphology and assumed function: points, gouges, needle, pin beater, centrally pierced long-bones, longitudinally bored bones, and button. Some deliberate selection of specific bones for particular tools is indicated. Precise function of many of the different tool types is still not known, although they are believed to represent activities related to textile manufacture, and possibly leather or woodworking.

Table 19 worked bone objects by site

	Point	*Gouge*	*Needle*	*Pierced long-bone*	*Bored long-bone*	*Pin beater*	*Button*
St Georges Road							
Period 4B							
Rectangular enclosure ditch	–	–	–	–	–	1(Fig. 75, 10)	–
Flagstones							
Period 3							
Ditch *00011*	–	1(Fig. 75, 5)	–	–	–	–	–
Pit *00018*	–	–	–	–	1(Cat. no. 13)	–	–
Pit *00019*	–	–	–	1(Cat. no. 11)	–	–	–
Pit *00302*	–	1(Cat. no. 6)	–	–	–	–	–
Pit *00305*	–	2(Fig. 75, 6; Cat. no. 8)	–	–	–	–	–
Topsoil	–	–	–	–	–	–	1(Cat. no. 15)
Maiden Castle Road							
Period 4C							
Grave *02389*	–	–	–	1(Fig. 75, 9)	1(Fig. 75, 8)	–	–
Middle Farm							
Period 2							
Primary fill ditch *03051*	–	1(Fig. 75, 4)	–	–	–	–	–
Secondary fills	2(Fig. 75, 1, 3)	–	–	–	–	–	–
Final silting	1(Fig. 75, 2)	–	1(Fig. 75, 7)	–	–	–	–

show a patch of wear on one side. Examples from Roman contexts in Britain and from the Continent are cited by Wild (1970).

Flagstones

Six worked bone objects were recovered from Period 3 contexts. Close parallels for the gouges can be found at Danebury, Hampshire (Sellwood 1984, 382–5, figs 7.33, 7.34). Similar gouges were also found at Rope Lake Hole, Dorset (Woodward 1987b, 162–3, fig. 86). Again, a variety of possible functions, for example, textile, leather, and woodworking, has been suggested for these implements, and indeed some may have been multi-purpose tools.

Iron Age contexts at Glastonbury, Somerset (Bulleid and Gray 1917, 423–7), Maiden Castle (Laws 1991), and Danebury (Sellwood 1984, 389, fig 7.37) provide parallels for the long-bone implement (Cat. no. 11), with a centrally placed, transverse perforation. As at Danebury and Maiden Castle, examples are exclusively manufactured from sheep metacarpals. The function of these implements is not certain, although they may have been used as bobbins, with the end of the yarn being tied through the perforation (ibid., 392).

The object manufactured from a sheep metatarsal, with a longitudinal hole bored into the proximal end (Cat. no. 13) may also have been used as some form of bobbin, for the storage of spun yarn. It is debatable whether the boring represents a deliberate action to facilitate the implement's use, or merely the removal of the marrow. It, too, has parallels at Danebury (ibid., 389) although in those cases the bones were bored at the distal ends. Fifteen sheep metatarsals with bored heads were recovered from the recent excavations at Maiden Castle, and a possible function as handles has been suggested (Laws 1991). An example of this technique has been recovered from at the Ditches, Gloucestershire (Trow 1988, fig. 28, no. 4). However, this seems an unlikely explanation for the By-pass example in view of the roughly cut nature of the pulp cavity and lack of staining or wear from the insertion of a tang.

Maiden Castle Road

Two worked sheep metapodials were recovered from the fill of Period 4C grave *02389*: one centrally (Fig. 75, 9) and one longitudinally pierced (Fig. 75, 8). An exact parallel for the former was recovered from a Roman context at Skeleton Green, Hertfordshire (Partridge 1981, 72–3). The suggestion has been made that the object may be some kind of toggle is, as yet, uncertain. The recovery of these objects from the fill of a grave suggests that they may have been grave goods.

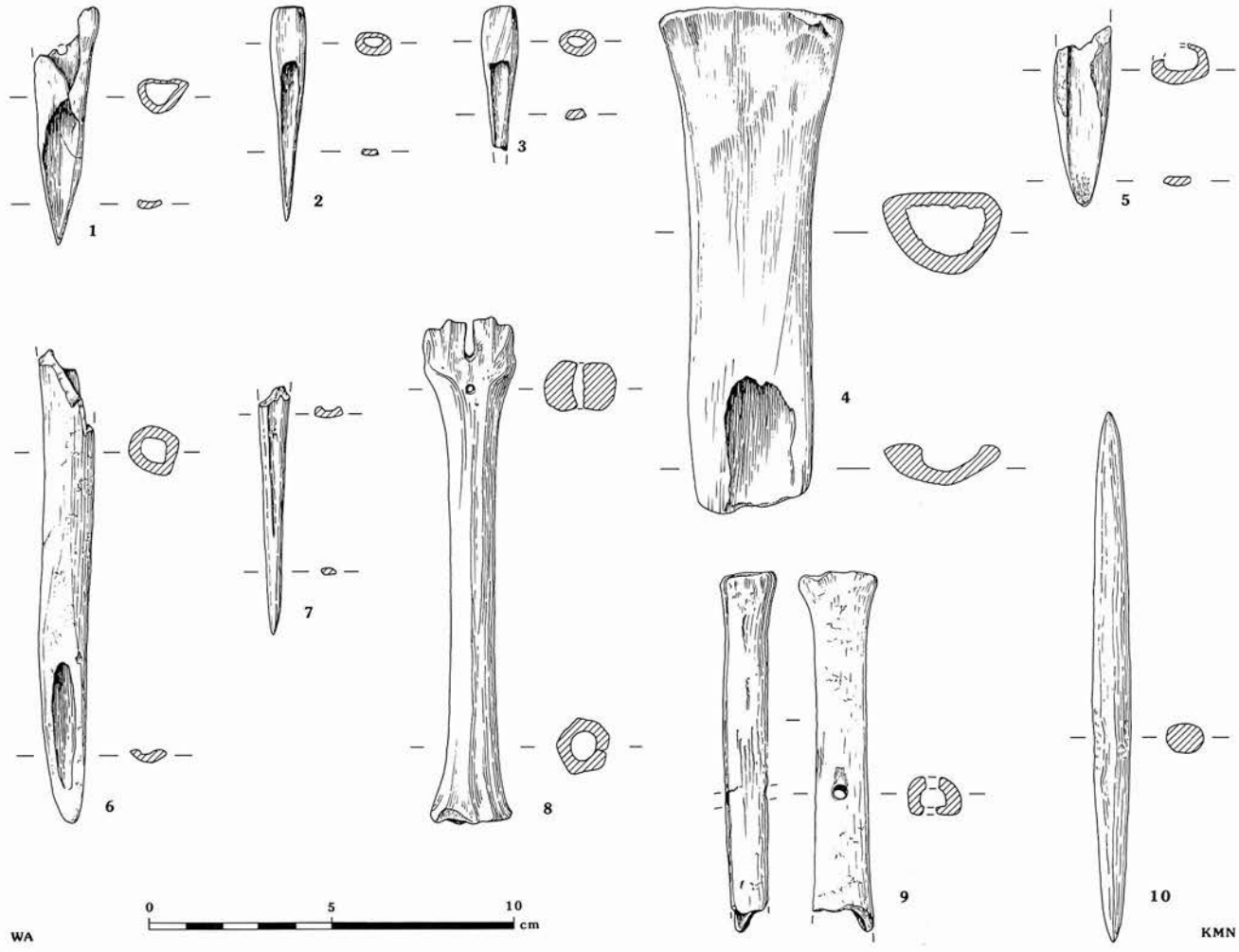


Figure 75 Worked bone objects. Scale 1:2

Middle Farm

Five worked bone objects were recovered from Period 2 contexts, in the primary to final fills of linear boundary ditch *03051*. Two points which closely parallel Figure 75, 2 and 3 were found at the Middle Bronze Age settlement on Itford Hill, Sussex (Burstow and Holleyman 1957, 205, fig. 29). Worked bone points were also recovered from Middle Bronze Age levels at Grimes Graves, Norfolk, where they were manufactured from sheep metacarpal bones (Mercer 1981a; 64–74, fig. 40), and from Late Bronze Age contexts at Eldon's Seat, Dorset (Cunliffe and Phillipson 1968, 225, pl. vb, nos 33–50). A variety of possible functions has been suggested for these types of implements such as piercing (awl-like) of leather and textile and use as modelling tools for pottery (Mercer 1981a, 69; Sellwood 1984, 389).

The gouge is unusual in that it is manufactured from a cow radius. It is broken at both ends and heavily polished from use. The possible needle is broken so that an eye is not clearly present, but the remaining part of the head shows a flat profile with a central groove. This implement is very pointed and has a high overall polish. Needles have been recovered from Bronze Age contexts, for example, from the Deverel-Rimbury settlement at Thorny Down (Stone 1941) and Bishops Cannings Down, both in Wiltshire (Gingell 1992).

Fig. 75

1 Point, incomplete; Cat. no. 1, SF2, Middle Farm, 50731, Period 2.

2 Point, complete; Cat. no. 3, SF104, Middle Farm, 03099, Period 2.

3 Point, incomplete; Cat. no. 4, SF105, Middle Farm, 03119, Period 2.

4 Gouge, incomplete; Cat. no. 2, SF13, Middle Farm, 03310, Period 2.

5 Gouge, incomplete; Cat. no. 5, SF3, Flagstones, 00003, Period 3.

6 Gouge, incomplete; Cat. no. 7, SF25, Flagstones, 00329, Period 3.

7 Possible needle, incomplete; Cat. no. 9, SF88, Middle Farm, 03099, Period 2.

8 Longitudinally bored long-bone, complete; Cat. no. 14, SF147, Maiden Castle Road, 02359, Period 4C.

9 Centrally pierced long-bone, incomplete; Cat. no. 12, SF148, Maiden Castle Road, 02359, Period 4C.

10 Pin beater, complete; Cat. no. 10, SF15, St Georges Road, 01270, Period 4B.

Table 20 summary of shale

	Category 1		*Category 2*		*Objects*
	No.	*Wt (g)*	*No.*	*Wt (g)*	
Flagstones					
Period 1/2					
Pit *00268*	–	–	–	–	1 (Fig. 56, 2)
Final filling enclosure ditch segment *30*	1	41	–	–	–
Period 3					
Ditch *00011*	1	162	–	–	–
Pit *00018*	3	16	5	285	–
Pit *51020*	2	655	–	–	–
Pit *00019*	6	12	–	–	–
Topsoil	4	6	–	–	–
Maiden Castle Road					
Period 4B					
Scoop *02255*	2	40	–	–	–
Quarry scoop *02308*	–	–	2	100	–
Period 4C					
Ditch *02277*	2	2	–	–	–
Grave *01208*	–	–	–	–	2 (Fig. 76, 3; Cat. no. 4)
Structure *02309*	6	6	–	–	–
Middle Farm					
Period 2C					
Secondary fill ditch *03051*	1	15	–	–	–
Tertiary fill ditch *03051*	–	–	–	–	2 (Fig. 76, 1)
Unphased					
Fill of ditch *03051*	1	121	–	–	–

10 **Kimmeridge Shale**, by L. Stacey and K. E. Walker

A total of 42 fragments of Kimmeridge shale (1543 g), was recovered from three sites: Flagstones, Maiden Castle Road, and Middle Farm (Table 20). The material was grouped according to Cox and Mills (1991) into the following categories: Category 1, unworked raw material; Category 2, undiagnostic, worked material; and objects (miscellaneous, bracelets, and trays).

The collection is small and the artefacts are, on the whole, fragmentary and undiagnostic. Thirty-seven broken pieces were found, the bulk of which, 29 fragments (1001 g), is apparently unworked (Category 1), most being recovered from Late Iron Age and Romano-British contexts at Flagstones. Eight fragments (506 g), however, showed some signs of having been worked (Category 2). These pieces are probably waste fragments from manufacture, but the working is not sufficiently specific to suggest product. Seven fragments had been burnt, probably following discard. Such a limited amount of worked shale suggests that the production of shale objects at these sites was not of any major importance.

Three objects were identified, two (Figs. 76, 2, and 3) represent types which are relatively common from Romano-British sites in Dorset, while the third (Fig. 76, 1) is more unusual and difficult to classify.

Flagstones

A fragment (Fig. 76, 2) of a shale armlet was recovered from the fill of a possibly prehistoric pit *00268*. The outer surface is undecorated and the inner surface has a slight ridge which may indicate the use of a lathe. Shale armlets were found in Late Bronze Age contexts at Eldon's Seat (Cunliffe and Phillipson 1968, 226) and in Iron Age or Romano-British contexts at Danebury, Rope Lake Hole, and Ower (Cunliffe 1984b, 396, fig. 7.41; Cox and Woodward 1987, 164, fig. 87; Woodward 1987d, 109, fig. 59). Romano-British lathe-turned, undecorated armlets were also found in the Roman town of *Durnovaria* (Calkin 1972, unillustrated, in text table; Adam in

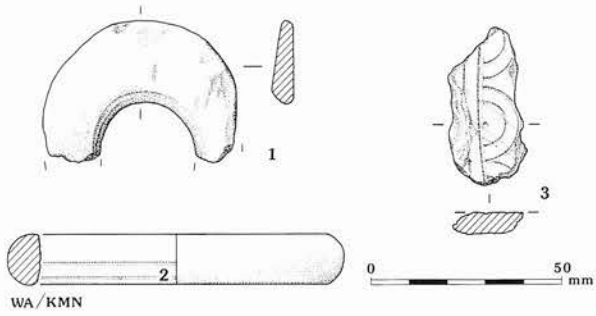


Figure 76 Kimmeridge shale objects. Scale 1:2

prep.) and at Maiden Castle (Wheeler 1943, fig 107, examples 27–37).

Maiden Castle Road

Two fragments (Fig. 76, 3) were also recovered from the fill of grave *02318*. Although not conjoining, these may be part of the same object probably a small circular tray. The design is a variant of a type frequently found on round and rectangular trays from the late 1st and early 2nd centuries AD (Lawson 1976, 265–7, fig 12). Similar objects have been recovered from assemblages at Poundbury (Cox and Davies 1987, fig 77) and from the Roman town of *Durnovaria*, (Adam in prep.).

Middle Farm

Two fragments of an object (Fig. 76, 1) were recovered from the tertiary fill of Bronze Age boundary ditch *03051*. These comprise *c.* 70% of a flat object, perhaps originally oval in form, whose function is uncertain. It may simply be the waste product from a manufacturing process, although no similar objects could be found from Bronze Age sites elsewhere.

Fig. 76
1 Miscellaneous, incomplete; Cat. no. 1, SF117, Middle Farm, 03095, Period 2.
2 Armlet, incomplete; Cat. no. 2, SF41, Flagstones, 00267, Period 1/2.
3 Tray, incomplete; Cat. no. 3, SF144, Maiden Castle Road, 02319, Period 4C.

11 **Worked Stone**, by C.K. Copson with F. Healy

The composition and incidence of the 22 recovered stone objects are summarised in Table 21. Petrological identifications were made by P.C. Ensom

St Georges Road

Two worked stone fragments were recovered. including a fragment of Cornish granite quern stone (Cat. no. 6) from a medieval ditch recorded in the base of the Elsan pit. The other object, a whetstone (Fig. 77, 2) from ditch *50020* of the east–west linear field system, is a water-worn pebble which, although originating in the south-west, could have been collected on the Dorset coast.

Flagstones

Pieces of worked stone were recovered from deposits of different period at Flagstones. Particular interest attaches to a chalk ball (Fig. 77, 9) found in the primary chalk rubble fill of segment *29* of the Neolithic enclosure. Chalk balls were found at Mount Pleasant, on the floor of the enclosure ditch and in the palisade trench, associated in the first case with a chalk phallus (Wainwright 1979a, 167), corresponding to the customary interpretation of chalk balls as relating to male fertility. Others were found at Maumbury Rings, as was a further phallus (Bradley 1976, 25, fig. 7; Bradley and Thomas 1984). The Late Neolithic–Early Bronze Age contexts of these local finds fall at one end of a longer national currency, which goes back into the earlier Neolithic (Wainwright and Longworth 1971, 203).

A rubber from a secondary, soil fill of the Flagstones enclosure (Cat. no. 18) is a pebble of Budleigh Salterton metaquartzite, which may have been collected from the Dorset coast rather than from its primary source. A hammerstone from an Iron Age pit at Flagstones is a further Budleigh Salterton pebble (Fig. 77, 8). Two irregular perforated chalk slabs or lumps were recovered (Fig. 77, 4–5) from Late Iron Age features.

A quern fragment of indeterminate form from medieval ditch *00239* is of local heathstone. An undated regularly shaped whetstone (Fig. 77, 1) from a solution feature is of silty mudstone from the Silurian beds of the Welsh borders.

Maiden Castle Road

Two irregular, perforated chalk slabs (Fig. 77, 6 and 7) were recovered from Romano-British deposits. Similar objects are common in contemporaneous and earlier contexts, but their function can only be guessed at. Irregularity might preclude use of the smaller ones as spindle-whorls, while Romano-British and Iron Age chalk loomweights seem to be of more regular, piriform or trapezoid shape and are larger, like those from Maiden Castle, which have a mean weight of *c.* 2.5 kg (Wheeler 1943, 297, fig. 100) or Poundbury (Davies *et al.* 1987, fig. 22).

Quern fragments from Maiden Castle Road include one of indeterminate form in Old Red Sandstone, from grave *02220* (Cat. no. 7), and three Greensand millstone fragments (Cat. nos 8–10) from structure *02357*, two of which join. These millstone fragments are likely to be from a pair. Greensand suitable for manufacture into millstones is obtainable in north and west Dorset. Examples of Old Red Sandstone querns, probably from a source in the Mendips, occur occasionally, as at Alington Avenue (Walker forthcoming a). A fragment of limestone roof tile, also from Maiden Castle Road (Cat. no. 15), corresponds to the presence of larger quantities within the town, especially in Late Romano-British contexts, as at Greyhound Yard (Bellamy 1993b) or County Hall (Copson and Healy 1993a).

Table 21 stone objects by site

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*
St Georges Road								
Period 6C								
Ditch to S. of site	1(Fig. 77, 2)	–	–	–	–	–	–	–
Period 6								
Ditch at base of elsan pit	–	1(Cat. no. 6)	–	–	–	–	–	–
Flagstones								
Period 0 natural features	1(Fig. 77, 1)	–	–	–	–	–	–	–
Period 1B enclosure ditch								
Primary fill segment *29*	–	–	–	–	–	–	1(Fig. 77, 9)	–
Initial soil fills segment *32*	–	–	–	1(cat. no. 18)	–	–	–	–
Period 3								
Ditch *00011*	–	–	1(Fig. 77, 4)	–	–	–	–	–
Pit *00018*	–	–	1(Fig. 77, 5)	–	–	–	–	–
Pit *00305*	–	–	–	–	1(Fig. 77, 8)	–	–	–
Period 6								
Ditch *00239*	–	1(Cat. no. 13)	–	–	–	–	–	–
Maiden Castle Road								
Period 4B								
Quarry *02391*	1(Cat. no. 2)	–	–	–	–	–	–	–
Period 4C								
Pit *02387*	–	–	–	–	–	1(Cat. no. 20)	–	–
Structure *02357*	–	2(3)(Cat. nos 8–10)	–	–	–	–	–	–
Structure *02406*	–	–	1(Fig. 77, 7)	–	–	–	–	–
Grave *02220*	–	1(Cat. no. 7)	–	–	–	–	–	–
Grave *02205*	–	–	1(Fig. 77, 6)	–	–	–	–	–
Middle Farm								
Period 2 ditch *03051*								
Primary rubble	–	1(Cat. no. 12)	–	–	–	–	–	–
Secondary fills	–	1(Cat. no. 11)	–	–	–	–	–	–
Uncertain	1(Cat. no. 3)	–	–	–	–	–	–	–
Bridport Road Ridge								
Period 2								
Ditch *50823*	1(Cat. no. 5)	–	–	–	–	–	–	–
Ploughsoil	–	–	–	–	–	–	–	1(Cat. no. 22)
Total	5	7(8)	4	1	1	1	1	1

1 = Whetstones; 2 = quern/millstone frags; 3 = perforated chalk slabs; 4 = ?rubber; 5 = hammerstone; 6 = tile frag.; 7 = chalk ball; 8 = slate pencil

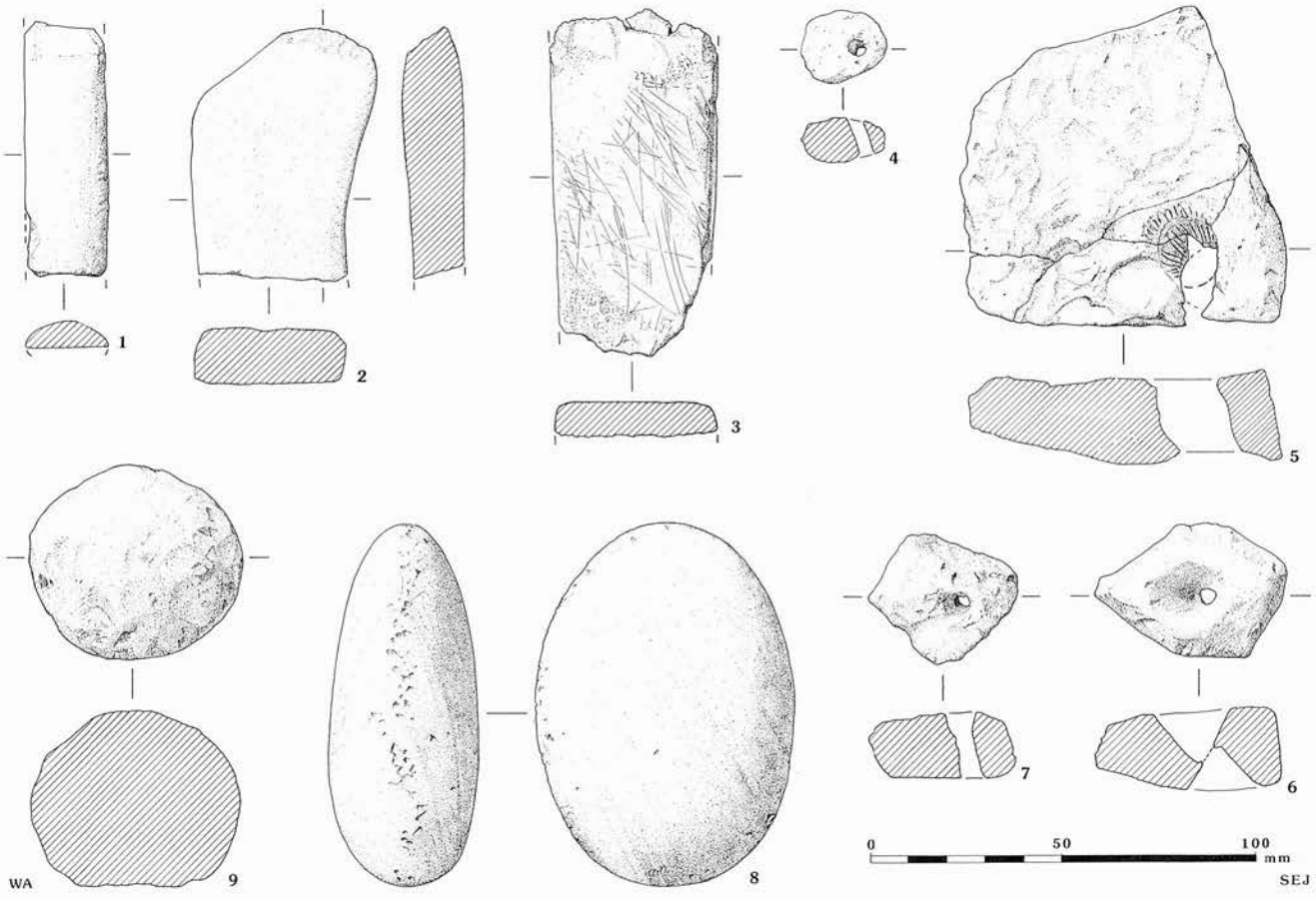


Figure 77 Stone objects. Scale 1:2

Middle Farm

Non-local, although unsourced, material is represented at Middle Farm in the Bronze Age linear boundary ditch *03051* by two saddle quern fragments of porphyritic rhyolite (Cat. nos 11 and 12), one from the primary and one from the subsequent silts. These are of a similar material to the fragmentary microgranite saddle quern from a Middle Bronze Age hut at Rowden (Ensom pers. comm.; Woodward 1991). Rotary querns of the same rock are known from Romano-British contexts in the Dorchester area (Bailey 1985, 80; Ensom pers. comm.). A whetstone from the same ditch at Middle Farm (Cat. no. 3) is of local heathstone.

Bridport Road Ridge

A whetstone (Fig. 77, 3) recovered from the Bronze Age ditch at Bridport Road Ridge is of phyllite from Devon. A fragment of slate 'pencil' or scriber from ploughsoil (Cat. no. 23) is of a type commonly used in the 19th century.

Fig. 77

1 Whetstone, incomplete; Cat. no. 1, SF2, Flagstones, 00106, Period 0.

2 Whetstone, incomplete; Cat. no. 4, SF19, St Georges Road, 50019, Period 6C.

3 Whetstone, incomplete; Cat. no. 5, SF600, Bridport Road Ridge, 50824, Period 2.

4 Perforated lump; Cat. no. 14, SF66, Flagstones, 00017, Period 3.

5 Perforated slab; Cat. no. 15, SF64, Flagstones, 00036, Period 3.

6 Perforated slab; Cat. no. 16, SF142, Maiden Castle Road, 02206, Period 4C.

7 Perforated slab; Cat. no. 17, SF159, Maiden Castle Road, 02435, Period 4C.

8 Hammerstone; Cat. no. 19, SF28, Flagstones, 00337, Period 3.

9 Carved ball; Cat. no. 21, SF846, Flagstones, 50180, Period 1B.

12 Ceramic Building Materials, by J.M. Mills

A total of 545 fragments (23,633 g) of ceramic building material was recovered from eight sites (Table 22). The small size of the fragments in the collection (mean weight 43 g) resulted in 47% (257 pieces) being unclassifiable and undatable (mean weight 10 g). No tiles or bricks were recovered with measurable dimensions other than thickness. The material was sorted into 13 categories on the basis of form and on general fabric texture and appearance (archive), and summarised in Table 22 by site.

Table 22 summary of ceramic building material by site

	Romano-British		*Medieval/post-medieval*		*Undated*		*Total*	
	No.	*Wt (g)*	*No.*	*Wt (g)*	*No.*	*Wt (g)*	*No.*	*Wt (g)*
St Georges Road	6	1268	13	1023	24	350	43	2641
Flagstones	7	276	134	5967	198	1919	339	8162
Conygar Hill	7	496	–	–	1	3	8	499
Maiden Castle Farm	1	34	–	–	2	10	3	44
Maiden Castle Road	77	10868	12	287	11	203	100	11358
Fordington Field	–	–	4	61	6	37	10	98
Middle Farm	–	–	9	307	9	53	18	360
Bridport Road Ridge	–	–	18	480	6	63	24	471
Total	98	12942	190	8125	257	2638	545	23633

The greatest concentration of Romano-British ceramic building material was at Maiden Castle Road. All the recovered *imbrices* and tiles with signatures were from this site and the evidence suggests the existence of a substantial building in the vicinity of the Maiden Castle Road site during the Romano-British period. The most complete piece is a *tegula* comprised of 11 joining fragments from the fill of hearth *02333* and soil layer *02304*. Six pieces of Romano-British material (1268 g) were recovered from the Late Iron Age/Romano-British occupation at St Georges Road; seven from Conygar Hill, and one from Maiden Castle Farm. The only features of note are three marks or signatures observed on two *?tegula* fragments and on the conjoining *tegula* fragments mentioned above. The majority of the medieval, post-medieval, and undated material came from Flagstones (Table 22). This suggests than the land in this area has been more intensively used, for occupation or agriculture, in the medieval and later periods, than the other sites examined; this is no doubt mainly because of its proximity to the town.

13 Fired Clay, by K.E. Walker

The collection of fired clay material (4896 g) consists of five identifiable objects (two slingshots and three fragmentary weights), 36 pieces of possible daub and 435 undiagnostic fragments (Table 23).

Flagstones

Fragments of two well-fired, clay slingshots were recovered from the lower fill of the Late Iron Age pit *00305* (Cat. nos 1 and 2). Examples of clay slingshots occur commonly on Iron Age sites (eg., Gussage All Saints, Wainwright 1979b, 100–1, fig. 76, no. 4010; Poundbury, Davies 1987b, 108–9, fig. 79, nos 3–6; Maiden Castle, Wheeler 1943, 49, pl. 32B; Poole 1991; Danebury, Poole 1984a, 398–9, fig. 7.44, nos 7.1–7.11). It has been suggested that slingshots may have been used in hunting (particularly birds) and warfare (Poole 1984a, 398), but also in stock control (shepherding) (N. Sharples, pers. comm.).

Three fragments of a clay weight (Cat. no. 5), made from a well-fired fabric with chalk or limestone inclusions, were recovered from Late Iron Age pit *51020*. Each of the pieces is worn and has broken around a perforation. None of the pieces conjoin, but each may form part of a triangular weight with three perforations. Triangular perforated clay weights have been found in lowland Southern England in contexts dating from the 5th century BC onwards (cf, Champion 1975, fig. 2). Triangular clay weights with three perforations, similar to this example, have been recovered from Early and Middle Iron Age contexts at Gussage All Saints (Wainwright 1979b, 100–101, no. 4020), Danebury (Poole 1984a, 401–6, figs 7.47 and 7.48), Late Iron Age contexts at Hengistbury Head (Poole 1987, 165–6, ill. 119, nos 169–72); they were also recovered from all phases of the Iron Age occupation at Maiden Castle (Wheeler 1943, 294).

Middle Farm

Two poorly-preserved, possible clay weights, made of a dark friable fabric, were recovered. One (Cat. no. 3), comprising three conjoining and 107 small, non-conjoining fragments, was found in the fill of a Bronze Age pit, *03157*. The size and shape of the extant outer surface suggest that this object was probably a cylindrical or bun shaped loomweight. No evidence for a perforation has survived. The second (Cat. no. 4) was recovered from the secondary fill of a Bronze Age linear boundary ditch, *03051*. This object comprises two conjoining and 34 non-conjoining fragments and may be identified as a cylindrical or bun-shaped loomweight. Such loomweights have been found in Early and Middle Bronze Age contexts at Poundbury, Dorset (Davies 1987b, 109–12, fig. 79, 1–2), from the Bronze Age settlement at Eldon's Seat, Dorset (Cunliffe and Phillipson 1968, 223–4, fig. 20, 6), and from the Late Bronze Age settlements of Thorny Down, Wiltshire (Stone 1941, fig. 8), Aldermaston Wharf and Knight's Farm, Berkshire (Bradley *et al.* 1980).

Discussion

Relatively small clay weights, bun-shaped, cylindrical or triangular, are generally interpreted as loomweights, although it is recognised that some of the larger examples may have functioned as thatch or door weights. Ethnoarchaeological research has shown the use of such weights, to keep the warp threads taut on upright looms (Tzachili 1986). Examples are known where weights have been found in association with features interpreted as the setting for an upright loom (Megaw and Simpson 1979, 265). It should be noted however that there is little evidence for the existence of upright looms, even in the Iron Age, in Wessex (Mar-

Table 23 summary of fired clay by site

	Objects		*?Daub*		*Fragments*	
	Slingshots	*Weights*	*No.*	*Wt (g)*	*No.*	*Wt (g)*
St Georges Road						
Period 4	–	–	–	–	3	6
Period 6	–	–	–	–	1	2
Period 7	–	–	–	–	1	13
Flagstones						
Period 1	–	–	–	–	5	6
Period 1/2	–	–	–	–	5	25
Period 3	2 (Cat. nos 1, 2)	1 (Cat. no. 5)	–	–	177	1933
Period 6	–	–	–	–	1	19
Period 7	–	–	–	–	3	15
Maiden Castle Farm						
Period 2	–	–	–	–	1	1
Maiden Castle Road						
Period 4	–	–	36	386	208	756
Period 7	–	–	–	–	9	38
Middle Farm						
Trench A Period 2	–	2 (Cat. nos 3, 4)	–	-	12	37
Trench B colluvial sequence						
Context 50895	–	–	–	–	1	5
Context 50804	–	–	–	–	2	3
Unstratified	–	–	–	–	6	24
Total	2	3	36	386	435	2883

chant 1989, 6). Further indication of weaving activities may come from the worked bone. In view of the indication of possible weaving activity, it is particularly interesting to note the complete lack of spindle-whorls, the most commonly surviving indicator of the spinning process. The organisation of weaving and spinning activities may have wider social implications and warrants further research (cf. Marchant 1989).

Fired Clay / Daub

Fragments of fired clay material with a smoothed upper surface and an underside which is deeply grooved or corrugated, in a manner resembling the surface of woodbark, were recovered from quarry pit *02308* at Maiden Castle Road. The fragments cannot definitely be shown to be structural daub, as wattle impressions are not discernable. The grooved underside may be the result of the clay being used as a lining material, for example on a pit or hearth wall. The fragments, although fired or baked, show no signs of excessive burning or soot marks. No other fragments display any distinguishing marks suggesting possible function.

14 **Stone**, by C.K. Copson with Frances Healy

A total of 629 pieces of stone (83,519 g) was recovered (Table 24), in addition to three massive slabs and another large fragment from Flagstones, none of which has been weighed. This total excludes worked or utilised stone objects which are discussed separately above. Petrological identification were made by P.C. Ensom

Sources

Almost all the stone would have been be obtainable within 10 km of Dorchester, most of it from the limestones and sandstones of the Portlandian series which forms the South Dorset Ridgeway 5 km to the south. The nearest concentration of large sarsens is in the area of Little Mayne Farm, West Knighton, 3.5 km to the south-east (RCHM(E) 1970, 513; Bailey 1975), although sarsen may have been present in the immediate area, derived from Bagshot Beds now eroded from the surface of the Chalk (Wainwright 1979a, 1–4). 'Portland' chert can be found in the gravels of the Dorchester area as can flint pebbles.

Table 24 Number and weight (g) of stone fragments by site and period

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*
St Georges Rd										
Period 4B	–	24/4611	1/924	–	–	–	–	–	–	–
Period 4C	–	7/259	–	–	–	–	–	–	–	–
Period 6	–	5/1210	1/150	–	–	–	–	1/730	–	–
Period 7	–	1/170	–	–	–	–	–	–	–	–
Flagstones										
Period 1/2	19/5263*	11/1454	22/9530*	–	2/36	–	–	–	2/2	–
Upper fills enc. & ring-ditch	51/4974	33/2325	–	–	1/41	–	–	–	2/2	–
Period 3	7/3215	180/19600	7/1938	5/235	–	–	1/332	–	–	–
Period 6	–	15/4468	–	–	–	–	–	–	–	–
Period 7	–	–	–	–	–	–	–	–	–	–
Conygar Hill										
Periods 1 & 2	–	–	1/138	–	–	–	–	–	–	–
Maiden Castle Farm										
Period 2	1/202	7/55	–	–	–	–	–	–	–	–
Maiden Castle Rd										
Period 1/2	–	1/330	–	–	2/122	–	–	–	–	–
Period 4A-C										
Settlement & cemetery	2/142	89/7634	12/646	–	3/43	1/29	–	–	1/1	–
Late Roman buildings	1/60	36/5080	7/1332	–	2/9	–	–	–	1/216	2/312
Period 7	–	6/70	–	–	–	–	–	–	–	–
Middle Farm										
Trench A, Period 2	–	9/1307	1/358	–	–	–	–	–	1/1	–
Trench B, Period 2	–	1/10	–	–	–	–	–	–	–	2/258
Bridport Road Ridge										
Period 2	–	–	–	–	–	–	–	–	–	–
Period 7	–	–	–	–	–	–	–	–	6/34	–
Unphased/unstratified	–	5/914	–	–	–	–	–	1/202	6/88	–
Total	81/13856	430/49497	52/15016	5/235	10/251	1/29	1/332	2/932	19/344	4/570

Table 24 (continued)

	11	*12*	*13*	*14*	*15*	*16*	*17*	*18*	*19*	*20*	*21*
St Georges Rd											
Period 4B	–	–	–	–	–	–	1/40	–	–	–	–
Period 4C	–	–	–	–	–	–	–	–	–	–	–
Period 6	–	–	–	–	–	–	–	–	–	–	–
Period 7	2/28	–	–	–	–	–	–	–	–	–	–
Flagstones											
Period 1/2	–	–	–	1/224	–	–	–	–	–	–	–
Upper fills enc. & ring-ditch	–	–	1/63	–	–	–	–	–	–	5/106	1/36
Period 3	–	4/1334	–	1/96	–	–	1/38	–	–	–	–
Period 6	–	–	–	–	–	–	–	–	–	–	–
Period 7	–	–	–	1/28	–	–	–	–	–	–	–
Conygar Hill											
Periods 1 & 2	–	–	–	–	–	–	–	–	–	–	–
Maiden Castle Farm											
Period 2	–	–	–	–	–	–	–	–	–	–	–
Maiden Castle Rd											
Period 1/2	–	–	–	–	–	–	–	–	–	–	–
Period 4A-C											
Settlement & cemetery	–	–	–	–	1/3	1/104	–	–	–	–	–
Late Roman buildings	–	–	–	–	–	–	–	–	–	–	–
Period 7	–	–	–	–	–	–	–	–	–	–	–
Middle Farm											
Trench A, Period 2	–	–	–	1/50	–	–	–	–	–	1/114	–
Trench B, Period 2	–	–	–	–	–	–	–	–	–	–	–
Bridport Road Ridge											
Period 2	–	–	–	2/364	–	–	–	–	–	–	–
Period 7	–	–	–	–	–	–	–	1/22	–	–	–
Unphased/unstratified	–	–	–	–	–	–	–	–	1/68	–	–
Total	2/28	4/1334	1/63	6/762	1/3	1/104	2/78	1/22	1/68	6/220	1/36

Key

1	Sarsen	12	Fine-grained sandstone (?Greensand)
2	Portland/Purbeck Limestone	13	Upper Greenscand river pebble
3	Calcareous sandstone/arenaceous Limestone (Portland)	14	Flint pebble
4	Portland Sandstone	15	Old Red Sandstone
5	Lower Lias Limestone	16	Mendip Sandstone
6	Kimmeridge Limestone	17	Portland Chert
7	Oolitic Limestone (Corallian)	18	Metasediment river pebble
8	Ham Hill Stone	19	Dolorite
9	Slate	20	Quartzite pebble
10	Kimmeridge Caly	21	Unidentified rock type
11	Beef Calcite	*	Large slab also present

Materials from less local sources are all present in small quantities. Kimmeridge and Corallian Limestones, Kimmeridge Clay, Upper Greensand, and beef calcite would all have been obtained within Dorset. More distant sources would have provided Lower Lias Limestone, Ham Hill stone, Old Red Sandstone, and Mendip Sandstone, all from Somerset, and slate, including phyllite, from the south-west.

Flagstones

This site produced almost the only sarsen from the area of the project, other finds being confined to small, single pieces from Maiden Castle Farm and three pieces from Maiden Castle Road. Flagstones also produced the largest quantity of Limestones and Sandstones (Table 24). Two fragments of sarsen came from layer *00260* of the pre-enclosure pit *00221*. Most, however, was found in the ditch segments of the enclosure, as was the majority of limestone and sandstone.

A large sarsen slab overlay a cremation in the base of ditch segment *16* (Fig. 26); and a similarly large slab of calcareous sandstone covered an inhumation in the base of ditch segment *19* (Fig. 27). These make it all the more probable that a sarsen slab found at a depth of 0.9 m overlying ashes and half-charred bones during the construction of Max Gate in 1891 came from the largely unexcavated south-eastern half of the monument. Irregular sarsen fragments, measuring respectively 0.61 x 0.25 x 0.11 m (SF48) and 0.54 x 0.46 x 0.3 m (SF88), were found in the primary fills of ditch segments *30* and *33*.

There are, in addition, numerous smaller fragments of sarsen, limestone, and sandstone (Table 24). Many, including 18 fragments (3022 g) of sarsen, occurred in the primary fills of the ditch segments. Others, including 56 fragments (683 g) of sarsen, were found in the subsequent fills. Most stone fragments from the ditch segments show fresh, angular breaks with little weathering; a few are cracked or discoloured as if by fire. A minority of the sarsen fragments are flakes with conchoidal fractures.

Stone fragments were absent from the inner ring-ditch. A further sarsen slab, however, overlay the inhumation in the central grave (Fig. 31), which also contained one fragment of limestone and one of sandstone.

Other Sites

Smaller and more diverse collections of stone from other sites were concentrated in Romano-British and later deposits (Table 24).

Discussion

It is difficult to distinguish the debris of stone dressing from that of stone destruction. Fragments from the ditch fills at Flagstones may represent either, given that large stone slabs were present on the site, at least two of them by the time of the primary infilling of the ditch segments. Destruction seems the more likely for two main reasons: (1) the surviving slabs show no obvious sign of having been dressed and (2) the material from the ditches lacks both the hammers and mauls and (among the sarsen) the frequency of struck flakes which characterise the debris of Neolithic and Early Bronze Age sarsen dressing at Mount Pleasant (Wainwright 1979a, 28) and Stonehenge (Pitts 1982, 97–104; Montague 1995). The fragments from the ditch may thus have resulted from the breaking-up of other slabs, perhaps partly by the use of fire. In this case, the placing of slabs over burials may represent the reuse of some of the components of a demolished stone setting. If so, the setting would predate the sarsen 'cove' within Site IV at Mount Pleasant, built *c.* 3630±60 BP (BM–668; 2200–1820 cal. BC) by users of Beaker pottery (Wainwright 1979a, 28).

Sarsen, limestone, and sandstone from Iron Age and later contexts at Flagstones (Table 24) may derive from the earlier phases. The bulk of the material at other sites along the By-pass route may be interpreted as building stone, especially given its concentration in Romano-British contexts at Maiden Castle Road (Table 24). Post-Roman material, sometimes intrusive, is probably represented by small quantities of slate, which occurred only in medieval and later deposits at Greyhound Yard, Dorchester (Bellamy 1993a). The single fragments of diorite, unfortunately unstratified, is the product of modern processing techniques, and is best interpreted as a modern roadstone.

15 **Slag**, by G. McDonnell

A total of 204 pieces of slag (4073 g) was recovered. The majority of the pieces are smithing slag lumps. The only exceptions to this are 14 fragments (783 g) of hearth bottom from the Romano-British settlement at Maiden Castle Road, of which 10 (285 g) are from quarry pit *02308*, and 37 fragments of hearth lining, 36 of which were also recovered from Maiden Castle Road (Pit *02387*, Phase 4C). One piece of hearth lining (49 g) was found in the topsoil at Flagstones.

16 **Flaked Stone Assemblages**, by P. Bellamy

Introduction

There are three main aspects to the analysis of the lithic material; a general assessment of the individual excavated site assemblages as a background for more detailed work; a detailed characterisation of the better stratified groups from the main excavated monuments with particular emphasis on temporal change and function; and a comparative study with the assemblage collected during fieldwalking along the route as part of the Maiden Castle Landscape Survey (Sharples 1991) in order to allow wider regional discussion.

The fieldwalking along the Dorchester Southern By-pass was carried out under the auspices of the Maiden Castle Landscape Survey and full details are discussed in that volume. A comparative study of the excavated lithic assemblage from the route with the

Table 25 flaked stone assemblages: total assemblage composition

	Site 2		*Site 3*		*Site 4*		*Site 5*		*Site 6*		*Site 7*		*Site 8*		*Site 9*	
	No	*%*	*No*	*%*	*No*	*%*	*No*	*%*	*No*	*%*	*No*	*%*	*No*	*%*	*No*	*%*
Flint																
Total	761		6899		168		1959		957		14		1075		759	
A	13	1.71	436	6.32	3	1.79	129	6.58	24	2.51	–	–	19	1.77	27	3.56
B	24	3.15	119	1.72	2	1.19	55	2.81	10	1.04	–	–	1	0.09	5	0.66
C	269	35.35	3109	45.06	34	20.24	790	40.33	258	26.96	11	78.57	430	40.00	349	45.98
D	281	36.93	1917	27.79	43	25.60	464	23.69	322	33.65	3	21.43	346	32.19	267	35.18
E	9	1.18	61	0.88	2	1.19	–	–	30	3.13	–	–	10	0.93	5	0.66
F	8	1.05	137	1.99	4	2.38	56	2.86	10	1.04	–	–	38	3.53	51	6.72
G	75	9.86	624	9.04	63	37.50	222	11.33	196	20.48	–	–	185	17.21	19	2.50
H	82	10.78	490	7.10	17	10.12	243	12.40	107	11.18	–	–	47	4.37	36	4.74
Portland chert																
Total	2		10		–		–		1		–	–	2		9	
A	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
B	–	–	–	–	–	–	–	–	–	–	–	–	–	–	1	11.11
C	–	–	2	20.00	–	–	–	–	–	–	–	–	–	–	2	22.22
D	2	100	5	50.00	–	–	–	–	1	100	–	–	2	100	4	44.44
E	–	–	1	10.00	–	–	–	–	–	–	–	–	–	–	–	–
F	–	–	2	20.00	–	–	–	–	–	–	–	–	–	–	2	22.22
G	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
H	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–

A = complete cores; B = broken cores; C = complete flakes; D = broken flakes; E = burnt flakes; F = implements; G = chips; H = miscellaneous debitage

assemblage collected during fieldwalking is contained in the archive; essentially the excavated assemblage confirms the data recovered in fieldwalking.

Sampling and Analysis Strategy

The lithic assemblages consist of four different components: material recovered by excavation; sieved samples from stratified excavated contexts; topsoil samples; and finds recovered by casual fieldwalking during road construction. The total lithic assemblage from Sites 2–9 (no flint was collected from Site 1) on an individual context basis. The classification used is comparable with those for other sites in the Dorchester area such as Maiden Castle (Edmonds and Bellamy 1991), South Dorset Ridgeway (Woodward 1991), Alington Avenue (Bellamy forthcoming), and Greyhound Yard (Bellamy 1993a).

The basic headcount catalogue defines the overall assemblage characteristics and includes all four components outlined above. On the basis of this, certain elements within the overall assemblages were selected for more detailed analysis in order to define and characterise certain key groups which would help establish a comparative framework for the other less well defined parts of the lithic assemblages. These key groups include flint recovered by manual excavation and also from sieved samples. Originally it was hoped to use the sieved samples alone to minimise recovery bias but both elements had to be combined in order to produce a reasonable sample size. A rapid comparative assessment revealed that the two elements were broadly similar, the main difference being that the sieved samples contained a larger number of small pieces. These could be useful in establishing the presence or absence of knapping chips (which are not studied in detail in this report). The complete flakes, cores, and implements were subject to detailed metrical analysis and the data processed by computer.

The terminology used is based on Tixier *et al.* (1980). The metrical analysis is based on that used at Rowden and Cowleaze (Harding 1991) and at Alington Avenue (Bellamy forthcoming) but the flake classification has been simplified into the traditional primary, secondary, and tertiary division (respectively >66%, 66–33% and >33% dorsal cortex). The cores were classified according to Clark *et al.* (1960).

The following are the key groups chosen for detailed analysis on the basis of their significant position within the stratigraphic sequence:

1. Flagstones: pre-enclosure pits
2. Flagstones: Neolithic enclosure
3. Flagstones: central ring-ditch
4. Maiden Castle Farm: ring-ditch *02027*

Table 26 Flint and chert implement assemblages

Site and Period	*Implement Type*																		*Total*
	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*	*13*	*14*	*15*	*16*	*17*	*18*	
St Georges Road																			
Period 4A curvilinear enclosure	–	–	–	–	–	–	1	–	–	–	–	–	1	–	–	–	–	–	2
Period 4B rectangular enclosure	–	–	–	–	–	–	2	1	–	–	–	–	–	–	–	–	–	–	3
Period 6C field system	–	–	–	–	–	1	–	–	–	–	–	–	–	–	–	–	–	–	1
Topsoil	–	–	–	–	–	–	–	–	–	–	1	–	1	–	–	–	–	–	2
Flagstones																			
Period 1A pre-enclosure pits	–	–	–	–	–	–	2	–	–	–	–	–	–	–	–	–	–	2	4
Period 1B enclosure																			
Primary fills	–	1	–	–	–	–	1	–	–	–	–	1	6	–	–	–	–	–	9
Initial soil fills	–	–	–	–	1	–	6	2	1	–	1	2	2	–	–	–	–	–	15
Final soil fills	–	–	1	–	–	–	8	1	–	2	–	–	6	–	–	–	–	–	18
Period 2																			
Central burial	–	–	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	1
Peripheral pits	–	–	–	–	–	–	1	–	–	–	–	–	1	–	–	–	–	1	3
Crescentic gully	–	–	–	–	–	–	–	–	–	–	–	1	–	–	–	–	–	–	1
Soil fills of ring-ditch	–	–	–	–	–	–	14	8	–	2	6	–	28	–	–	1	2	–	61
Period 3																			
Ditch *00011*	–	–	–	–	–	–	2	1	–	1	–	–	2	–	–	–	–	–	6
Pits	–	–	–	–	–	–	2	–	–	–	1	–	2	–	–	–	–	–	5
Pits with inhumations	–	–	–	–	–	–	1	–	–	–	–	–	–	–	–	–	–	–	1
Ditch *00052*	–	–	–	–	–	–	1	–	–	–	–	–	2	–	–	–	–	–	3
Period 6 ditches	1	–	–	–	–	–	1	–	–	–	–	–	1	–	–	–	–	–	3
Topsoil	–	–	–	–	–	–	–	2	–	–	–	–	6	–	–	–	–	–	8
Conygar Hill																			
Period 1																			
Pit-ring *52118*	–	–	–	–	–	–	–	1	–	–	–	–	–	–	–	–	–	–	1
Pit-ring *52100*	–	–	–	–	–	–	–	–	–	–	–	–	3	–	–	–	–	–	3
Maiden Castle Farm																			
Period 2 ring-ditch, primary fills	–	–	–	–	–	–	1	–	–	–	–	–	–	–	–	–	–	–	1

Table 26 continued

Site and Period	*Implement Type*																		*Total*
	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*	*13*	*14*	*15*	*16*	*17*	*18*	
Period 2 ring-ditch, tertiary fills	–	–	–	–	–	–	4	15	–	4	3	–	27	–	–	–	2	–	55
Maiden Castle Road																			
Period 4 quarries																			
Soil fills	–	–	–	–	–	–	1	–	–	–	–	–	–	–	–	–	–	–	1
Ditched trackway	–	–	–	–	–	–	–	–	–	–	–	–	1	–	–	–	–	–	1
Quarries and pits	–	–	–	–	–	–	1	–	–	–	–	–	1	–	–	–	–	–	2
Inhumation cemetery	–	–	–	–	–	–	–	–	–	–	–	–	3	–	–	–	–	–	3
Structure *02309*	–	–	–	–	–	–	–	–	–	–	–	–	1	–	–	–	–	–	1
Topsoil	–	–	–	–	–	–	1	–	–	–	–	–	–	–	–	–	1	–	2
Middle Farm, Trench A																			
Period 2 enclosure *03050*	–	–	–	–	–	–	–	–	–	–	1	1	4	–	1	–	–	–	7
Ditch *03204*	–	–	–	–	–	–	1	–	–	–	–	–	–	–	–	–	–	–	1
Ditch *03051* primary fills	–	–	–	–	–	–	1	–	–	–	–	–	–	–	–	–	–	–	1
Secondary fills	1	–	–	–	–	–	4	–	–	1	1	–	3	–	–	–	–	1	11
Tertiary fills	–	–	–	–	–	–	–	–	–	–	–	–	2	–	–	–	–	–	2
Trench B																			
Post-holes *50850* and *50855*	–	–	–	–	–	–	1	–	–	–	–	–	1	–	–	–	–	–	2
Soil layer *50806* and ditch *03001*	–	–	–	–	–	–	1	–	–	–	1	–	2	–	–	–	–	–	4
Soil layers *50885* and *50804*	–	–	–	–	–	–	1	–	–	–	–	–	3	–	–	–	–	–	4
Topsoil	–	–	–	–	–	–	1	–	–	–	–	–	2	–	–	–	–	1	4
Bridport Road Ridge																			
Period 2 enclosure ditch	–	–	–	–	–	–	5	–	–	1	–	–	3	–	–	–	–	1	10
Topsoil	–	–	1	–	–	–	16	6	–	–	2	–	14	1	1	–	–	2	43

Implement type: 1 = leaf arrowhead 2 = chisel transverse arrowhead 3 = oblique transverse arrowhead 4 = barbed and tanged arrowhead; 5 = unclassified arrowhead 6 = laurel leaf 7 = scraper 8 = piercer 9 = fabricator; 10 = knife 11 = miscellaneous flake tool 12 = serrated flake 13 = miscellaneous retouched flake 14 = polished axe 15 = flaked axe 16 = pick 17 = miscellaneous core tool 18 = hammerstone

5. Maiden Castle Road: prehistoric quarry pits
6. Middle Farm: enclosure ditch *03050*
7. Middle Farm: linear boundary ditch *03051*
8. Middle Farm: colluvial deposits
9. Bridport Road Ridge: possible enclosure ditch

Within this report the tabulated detailed analyses of these key groups are retained in the archive.

Raw Material

The flaked stone artefacts have been divided into two main raw material types: flint and Portland chert. Several different types of flint were recognised, namely chalk flint, Tertiary gravel flint with a thin eroded cortex, and river gravel flint. These latter two types, which occurred in very small numbers, have not been quantified. The vast majority of the artefacts were produced from chalk flint which is readily available throughout the study area in the form of nodules weathered out from the underlying Upper Chalk. Evidence recovered from the recent excavations at Maiden Castle indicates that Tertiary gravel flint was being transported to that site, possibly in the form of prepared cores (Edmonds and Bellamy 1991). The results of the Maiden Castle Landscape Survey suggest that this flint type was derived from the Charity and Ludford series soils which occur along the top of the Bridport Road Ridge, on top of the Conygar Hill ridge and on the northern side of the Frome valley at Stinsford (ibid., 33). Small quantities of Tertiary gravel flint were recovered from Flagstones, Middle Farm, and Bridport Road Ridge. All the river gravel flint was found at Flagstones.

Artefacts of Portland chert formed a minute proportion of the total flaked stone assemblage (Table 25). It occurs in the study area as derived pebbles mainly within the Carstens series soils to the south of Maiden Castle in the South Winterborne valley (Woodward and Bellamy 1991, 31). It has been previously demonstrated that Portland chert was not treated any differently to flint in this area but was simply used as an alternative raw material where available (Edmonds and Bellamy 1991), therefore, the chert artefacts will not be considered as a separate element in this report. The Portland chert was found mainly on the Bridport Road Ridge and at Flagstones (Table 25).

Excavated Lithic Assemblages

A total of 12,592 pieces of worked flint and 24 pieces of Portland chert was recovered (Table 25). The data is summarised in Tables 25–9 with full details in archive. The results are discussed below by site.

The flint recovered from St Georges Road, Conygar Hill, and Fordington Field was in a very worn condition, with many broken pieces (Tables 25 and 28). These assemblages contained no diagnostic elements (Table 26) and there is no evidence to suggest associated contemporaneous flintworking and use.

Flagstones

Only a very small proportion of the total assemblage was recovered from stratified levels in the earlier prehistoric features. The majority came from the upper soil layers infilling the major monuments (Table 28). The overall distribution in the Neolithic enclosure was fairly even but with a greater concentration on the northern side. There was also a distinct concentration in the central ring-ditch and the peripheral pits on its northern side.

The pre-enclosure pits

The number of measurable pieces recovered from the pits containing earlier Neolithic pottery is very small (Table 27) and the sample is not large enough to characterise the industry reliably. Despite this, metrical analysis tentatively indicates that there may be some differences between this assemblage and the other stratified groups from this site. Full details of the metrical analyses and data are in archive.

The flint is in a fairly fresh condition but contains a significant proportion of burnt pieces (Table 27). No refitting flakes were recognised. This group contains a low proportion of primary and a high proportion of tertiary flakes (Table 289. Flakes with over 75% cortex cover are markedly under-represented. Over half of the flakes have 25% or less cortex cover remaining. An examination of the shape of the flakes shows that intermediate and parallel sided flakes are equally represented and dominate the assemblage. The majority have a breadth:length ratio of 3:5 which might suggest that there was a deliberate selection of flakes with specific proportions. The very low thickness:length ratios and the low incidence of hinge fractures and plunging flakes suggests that careful control was exercised during flake production. The occurrence of platform abrasion is greater; the range of platform thicknesses is more restricted; the greater use of soft hammer mode; and the striking angles tend to be steeper than in the other analysed assemblages. This substantiates the suggestion of greater control over flake removal.

Both of the cores recovered were of single platform A2 type (Fig. 78, 2–3). The large proportion of flakes with relict flake scars struck from the same direction corroborates the use of single platform cores.

This assemblage can be characterised as a flake industry with a tendency towards the production of broader flakes. The low proportion of cores, chips, and miscellaneous debitage, together with the high proportion of tertiary flakes and burnt pieces, provides a profile of an assemblage which is far from industrial in character. The small number of implements does not include any specialised types (Table 26). The occurrence of two hammerstones (Fig. 78, 1) in a small group of material of this size is perhaps significant and may indicate some specific activity.

The Neolithic enclosure

The material in the enclosure can be split into two main units: that from the primary chalk fillings; and that from the later soil fillings. Only the flint from the lower fillings was analysed in detail because the likelihood of contamination from later activity was considered to be too high in the upper fillings (*see site description*).

The lower fillings: The assemblage (Table 28) exhibits a much greater emphasis on production than the material from the pre-enclosure pits. There is a greater proportion of cores, a much higher percentage of chips and miscellaneous debitage, and approximately equal numbers of complete and broken flakes. The proportions of different flake types present (Table 29) and their position in the reduction sequence corroborate this impression. Primary and other cortical flakes form a much larger part of the flake assemblage and tertiary flakes appear to be under-represented. A small number of core rejuvenation flakes is also present. The majority of flakes have an intermediate shape but there is also a significant number with a divergent shape. This is a result of the large number of primary flakes which tend to be much broader at the distal end. In general, the flakes are quite small with the majority being under 40 mm in length. This is partly determined by the nature

of the raw material which tends to occur as small nodules on this site.

Much less control appears to have been exercised over the production of flakes in this assemblage compared with the group from the pre-enclosure pits. There is a wider range of breadth:length ratios and the thickness:length ratios tend to be greater. Hinge fractures and plunging flakes are more frequent and there is a much smaller incidence of the use of platform abrasion. The range of platform thicknesses is greater, the striking angles tend to be shallower, and the proportion of flakes removed by a soft hammer technique is smaller.

This particular group of material is unlikely to represent the complete assemblage, as primary preparation and core trimming flakes appear to be over-represented. This could mean that the data presented above does not adequately characterise the efficiency of the industry as a whole given that it has been shown elsewhere that the level of control increased with the progression from primary preparation to the production of blanks (Edmonds and Bellamy 1991). An analysis of the retouched flakes (archive) indicates that these tend to be longer (over 50 mm); narrower (with a breadth:length ratio of 2:5) and with a lower thickness:length ratio (less than 1:5), which suggests that the products were both longer and narrower than the surviving waste material and perhaps, therefore, the complete assemblage may exhibit a different statistical profile.

The cores (Fig. 78, 7–8) have been substantially worked and a large proportion had been abandoned when worked out. The unclassified cores consist mainly of nodules with only a few crude flake removals which appear to have been abandoned because thermal faults were encountered, or were otherwise unsuitable for further flake production.

This assemblage apparently represents discarded waste from a flake industry which was not primarily concerned with the production of narrow flakes and blades, although the apparent under-representation of tertiary flakes and other potential products (which suggests that these have been removed from this assemblage) might markedly obscure the true pattern. The number of implements, mainly miscellaneous retouched flakes (Table 26), is too small to be able to determine reliably the nature of the blanks (Fig. 78, 5 and 6). There is too little diagnostic material present to allow a reliable assessment of the chronology and the range of activity represented by the flint assemblage . The chisel arrowhead, for example, (Fig. 78, 4) is normally found in Late Neolithic contexts but can also occur in Early Neolithic contexts (Green 1984; Healey and Robertson-Mackay 1987).

The upper fillings: The character of the assemblage in the upper fillings of the enclosure had a greater similarity to the material in the ring-ditch (below) than to the flint in the lower fillings of this monument, and might be derived from the later phase of activity. A slightly different range of implements to that of the ring-ditch is included, possibly reflecting the distance from the probable source of the material.

The central ring-ditch

The assemblage associated with this structure can be divided into several elements: the central pit; the primary chalk filling of the ditch; the primary chalk filling of the peripheral pits; and the soil filling in the upper levels of the ring-ditch and the peripheral pits. All of these elements were investigated in detail but the small sample size from the primary filling of the ring-ditch was not susceptible to characterisation and has not been included here; and the analysis of the upper fillings was restricted to the ring-ditch only. The results of the analyses are presented in Table 29 with details in archive.

The central pit: Despite the small size of the assemblage, this group was analysed as it is the only material which can be considered, with any degree of confidence, to have been deposited contemporary with the construction of the monument. Any major differences between this group and the other material associated with the monument might indicate some degree of chronological variation. However, the fact that much of this material came from the upper levels of the pit suggests that it represents accidental incorporation rather than deliberate deposition. It includes a single very small core (Fig. 78, 10) which can be compared to similar Early Neolithic cores found in the causewayed enclosure ditch at Maiden Castle (Edmonds and Bellamy 1991, fig. 117) and a high proportion of cortical debitage with broad flakes of an intermediate or divergent shape. They were hard-hammer struck with fairly shallow striking angles and a high incidence of hinge fractures. A single oblique arrowhead (Fig. 78, 9) was found in the upper part of this pit.

The peripheral pits: Only the pits on the northern side of the monument contained a relatively large quantity of flint in the lower chalk fill. All the pits in the northern cluster contained some flint but one (*00191*) was distinguished by the large proportion of cores within it and another (*00407*) by the presence of several refitting flakes. The condition of this flint is very fresh.

The vast majority of the flakes are primary or secondary waste but all parts of the production sequence are present. The assemblage consists of broad flakes, hard-hammer struck, with a wide range of striking angles, platform sizes, and thickness:length ratios, suggesting a low degree of control. This assemblage is characteristic of the waste debitage from a local knapping episode. The flint in the upper soil fillings of the pits was not analysed in detail but appearedsimilar in character to that from the upper filling of the ring-ditch.

The ring-ditch: By far the greatest proportion of the flint associated with this monument was recovered from the upper soil fillings of the ring-ditch and the peripheral pits (Table 28). While this material is essentially unstratified, it is assumed that it was associated with the monument (perhaps derived from a central mound) because the focus of the lithic distribution appears to have been in the centre of the ring-ditch. Also, there is not a great degree of contamination from later material.

The material in the upper fill is again typical of the waste products of a flake industry with a high proportion of primary flakes, a very much reduced proportion of tertiary flakes, and a small number of rejuvenation flakes. There is a wide range in size and shape, in striking angles, platform thickness, and thickness:length ratios. One distinctive element of technology present in this assemblage is the use of a janus flake technique. This is represented by six retouched flakes (Fig. 78, 15 and 18) and one scraper with their butts thinned or removed and by a single janus flake (Table 29).

The occurrence of a large number and range of implements (Table 26; Fig. 78, 13–18) within this assemblage suggests that it is not purely discarded industrial waste. A study of the character of the scrapers, piercers, and retouched flakes (archive) shows that the blanks chosen for implements were similar to much of the discarded waste material though, in general, the blanks were selected from the larger end of the size range. It was also noticeable that the great majority of the implements were manufactured on the broader, thicker flakes, with more variability in the nature of those used for piercers.

All parts of the reduction sequence were represented although the proportion of wholly cortical flakes used was very small (Fig. 78, 17). The flake scar patterns indicate that the

Table 27 distribution of flint in the Flagstones enclosure

Segments	*2-3*	*4*	*5-7*	*8-10*	*11*	*13-14*	*15-16*	*18*	*19*	*24*	*28*	*29*	*30*	*32*	*33-4*	*35-9*
Primary chalk rubble fills																
Complete cores	–	1	–	3	5	–	1	–	–	1	–	5	–	–	–	7
Broken cores	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Complete flakes	–	29	5	32	15	3	6	–	1	4	–	19	2	5	1	29
Broken flakes	–	30	5	26	19	2	6	1	–	6	–	5	1	3	1	22
Burnt flakes	–	–	–	–	–	–	1	–	–	2	–	–	–	–	1	–
Chisel arrowhead	–	–	–	1	–	–	–	–	–	–	–	–	–	–	–	–
Scrapers	–	–	–	–	–	–	–	–	–	–	1	–	–	1	–	–
Serrated flake	–	–	–	–	–	–	–	–	–	–	–	1	–	–	–	–
Misc. ret. flakes	–	–	–	1	–	–	–	–	–	–	–	3	–	–	–	1
Chips	–	38	5	23	16	3	5	–	2	1	–	–	–	–	–	12
Misc. debitage	–	9	–	–	5	–	–	–	2	1	–	3	–	–	–	4
Total	0	107	15	86	61	8	19	1	5	15	1	36	3	9	3	75
Initial soil fills																
Complete cores	–	–	5	–	1	–	1	–	2	–	–	2	2	–	4	2
Broken cores	–	–	1	–	–	–	–	–	–	–	–	–	2	–	–	–
Complete flakes	–	3	22	–	7	2	19	–	1	–	1	60	15	12	46	15
Broken flakes	–	3	16	–	11	3	6	–	6	–	1	23	13	8	30	23
Burnt flakes	–	–	3	–	–	–	–	–	1	–	–	1	–	–	3	2
Unclass. arrowhead	–	–	–	–	–	–	–	–	–	–	–	–	–	–	1	–
Scrapers	–	–	1	–	–	–	–	–	–	–	–	–	1	1	2	–
Piercers	–	–	1	–	–	–	–	–	–	–	–	1	1	–	–	–
Fabricator	–	–	–	–	–	–	–	–	–	–	–	–	–	–	1	–
Misc. flake tool	–	–	–	–	–	–	–	–	–	–	–	–	1	–	–	–
Serrated flakes	–	–	–	–	–	–	–	–	–	–	–	2	–	–	–	–
Misc. ret. flakes	–	–	1	–	–	–	–	–	–	–	–	–	–	–	–	1
Chips	–	6	2	2	2	2	4	–	1	–	2	24	2	16	7	–
Misc. debitage	–	1	2	–	–	–	–	–	2	–	–	18	3	–	1	1
Total	0	13	54	2	21	7	30	0	13	0	4	131	40	37	95	44

Table 27 (continued)

Segment	*2-3*	*4*	*5-7*	*8-10*	*11*	*13-14*	*15-16*	*18*	*19*	*24*	*28*	*29*	*30*	*32*	*33-4*	*35-9*
Final soil fills																
Complete cores	5	6	8	19	16	3	13	–	2	2	2	2	41	8	9	2
Broken cores	2	1	4	1	1	–	–	–	1	1	–	1	10	–	–	4
Complete flakes	141	38	37	84	32	16	41	–	13	9	18	29	105	36	33	43
Broken flakes	97	14	12	52	22	18	22	1	4	9	3	34	73	32	19	33
Burnt flakes	–	1	–	1	–	1	–	–	–	–	3	–	–	3	1	1
Oblique arrowhead	–	–	–	–	–	–	–	–	–	–	–	–	1	–	–	–
Scrapers	–	–	–	1	–	–	–	–	–	1	3	1	1	–	1	–
Piercers	–	–	–	–	–	–	–	–	–	1	–	–	–	–	–	–
Knife	–	–	–	–	–	–	–	–	–	–	–	–	1	–	1	–
Misc. ret. flakes	2	1	–	–	–	–	–	–	–	–	–	1	–	2	2	–
Chips	36	13	1	16	7	5	17	–	1	5	1	26	5	14	2	7
Misc. debitage	18	1	3	7	8	1	3	–	2	2	–	2	14	8	2	5
Total	301	75	65	181	91	44	96	1	23	30	30	95	251	103	68	94

Table 28 Lithic assemblage by major monument type

Site and Period	*Complete Cores*		*Broken Cores*		*Complete Flakes*		*Broken Flakes*		*Burnt Flakes*		*Implements*		*Chips*		*Misc. Debitage*		*Total Lithics*
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	
St Georges Road																	
All features	8	1.32	22	3.62	206	33.94	221	36.41	9	1.48	6	0.99	72	11.86	63	10.38	607
Topsoil	5	3.25	2	1.30	63	40.91	60	38.96	–	–	2	1.30	3	1.95	19	12.34	154
Flagstones																	
Period 1A pre-enclosure pits	2	2.63	–	–	40	52.63	18	23.68	8	10.53	4	5.26	2	2.63	2	2.63	76
Period 1B enclosure																	
Rubble fills	24	5.18	1	0.22	156	33.69	130	28.08	4	0.86	10	2.16	111	23.97	27	5.83	463
Soil fills	157	7.71	29	1.42	883	43.35	588	28.87	21	1.03	33	1.62	225	11.05	104	5.10	2037
Ring-ditch and peripheral pits																	
Lower fills	41	8.40	6	1.23	250	51.23	137	28.07	1	0.20	3	0.61	13	2.66	26	5.33	488
Upper fills	163	6.33	63	2.45	1216	47.22	691	26.83	5	0.19	61	2.37	154	5.98	222	8.62	2575
Other features	–	–	–	–	5	18.52	10	37.04	–	–	2	7.41	9	33.33	1	3.70	27
Period 3	38	5.58	18	2.64	328	48.16	177	25.99	9	1.32	14	2.06	59	8.66	37	5.43	681
Period 6	2	3.28	–	–	24	39.34	20	32.79	6	9.84	3	4.92	2	3.28	4	6.56	61
Topsoil	9	1.80	2	0.40	203	40.52	155	30.94	8	1.60	8	1.60	49	9.78	67	13.37	501
Conygar Hill																	
Period 1 pit-rings																	
Chalk fills	–	–	1	5.00	2	10.00	6	30.00	–	–	–	–	6	30.00	5	25.00	20
Soil fills	3	2.11	1	0.70	28	19.72	35	24.65	2	1.41	4	2.82	57	40.14	12	8.45	142
Maiden Castle Farm																	
Period 2 ring-ditches																	
Lower fills	2	1.69	1	0.85	45	38.14	36	30.51	–	–	1	0.85	23	19.49	10	8.47	118
Upper fills	127	6.90	54	2.93	744	40.43	428	23.26	–	–	55	2.99	199	10.82	233	12.66	1840

Table 28 continued

Site and Period	*Complete Cores*		*Broken Cores*		*Complete Flakes*		*Broken Flakes*		*Burnt Flakes*		*Implements*		*Chips*		*Misc. Debitage*		*Total Lithics*
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	
Maiden Castle Road																	
Period 1/2 prehistoric features	4	2.80	1	0.70	51	35.66	41	28.67	13	9.09	–	–	26	18.18	7	4.90	143
Period 4																	
Features	20	3.05	9	1.37	160	24.39	240	36.59	12	1.83	7	1.07	128	19.51	80	12.20	656
Structures & other features	–	–	–	–	19	31.15	22	36.07	1	1.64	1	1.64	17	27.87	1	1.64	61
Topsoil	–	–	–	–	28	28.57	20	20.41	4	4.08	2	2.04	25	25.51	19	19.39	98
Fordington Field	–	–	–	–	11	78.57	3	21.43	–	–	–	–	–	–	–	–	14
Middle Farm, Trench A																	
Period 2																	
Enclosure ditch *03050*	1	0.99	–	–	30	29.70	33	32.67	1	0.99	7	6.93	24	23.76	5	4.95	101
Enclosure interior	–	–	–	–	1	25.00	2	50.00	–	–	1	25.00	–	–	–	–	4
Boundary ditch *03051*																	
Primary fill	5	0.87	–	–	21	45.65	15	32.61	–	–	1	2.17	1	2.17	3	6.52	46
Secondary fill	4	3.57	–	–	64	57.14	25	22.32	1	0.89	8	7.14	6	5.36	5	4.46	112
Tertiary fill	4	3.01	–	–	67	50.38	37	27.82	–	–	5	3.76	13	9.77	7	5.26	133
Other features	–	–	–	–	41	48.81	20	23.81	–	–	2	2.38	13	15.48	8	9.52	84
	–	–	–	–	13	40.63	14	43.75	3	9.38	1	3.13	1	3.13	–	–	32
Trench B colluvium																	
50808, 50807	–	–	1	2.63	17	44.74	20	52.63	–	–	–	–	–	–	–	–	38
50806, 50805	5	2.96	–	–	53	31.36	64	37.87	–	–	4	2.37	35	20.71	8	4.73	169
50895, 50804	–	–	–	–	41	25.79	48	30.19	2	1.26	4	2.52	62	38.99	2	1.26	159
50803, 50802	–	–	–	–	50	40.32	42	33.87	1	0.81	4	3.23	20	16.13	7	5.65	24
Topsoil	–	–	–	–	15	38.46	14	35.90	2	5.13	–	–	7	17.95	1	2.56	39
Bridport Road Ridge																	
Period 2 enclosure ditch	5	3.05	–	–	61	37.20	61	37.20	–	–	10	6.10	17	10.37	10	6.10	164
Topsoil	22	3.64	6	0.99	290	48.01	210	34.77	5	0.83	43	7.12	2	0.33	26	4.30	604

majority of the flakes were removed by flaking from a single direction, as attested by the large number of single platform cores (Fig. 78, 11). Unclassified cores consist mainly of nodules discarded after one or two crude flake removals suggesting much testing of the raw material.

There are great similarities between the assemblages in the different parts of the ring-ditch and apparent differences might be explained by the disparity in sample size. They may be homogeneous chronologically in terms of raw material but there are several points which need to be borne in mind. The apparent emphasis on core trimming and testing might mask more subtle differences between assemblages. The most significant difference can be seen in the material from the upper fillings of the ring-ditch which contains both evidence for janus technique and a range of tool types of possibly Middle–Late Bronze Age character of a now familiar type (eg. Harding 1991).

Maiden Castle Farm

The material from ring-ditch *02027* is the second largest assemblage recovered by excavation (Table 25) and presents an analogous situation to the central ring-ditch at Flagstones with very little flint in the lower chalk fillings but a large quantity in the upper soil layers (Table 28). The flint had a generally even distribution with no specific clustering evident which may indicate that the origin of this material was in the centre of the area defined by the ring-ditch.

Once again the flint industry displayed an emphasis on the testing and trimming of cores, with a high proportion of cortical flakes (Table 29) and a large number of unclassified cores which had been abandoned after a few rough flake removals. The character of the flakes is very similar to the Flagstones ring-ditch assemblage and is possibly of Middle–Late Bronze Age in date. However, the raw material now occurs as nodules in a larger size range and slightly inferior quality. There is limited evidence for the use of a janus flake technique.

The implements comprise a slightly larger proportion of the assemblage than in the Flagstones ring-ditch and includes a similar range of types (Table 26; Fig. 79, 19–26), although there was a very much smaller number of scrapers and a greater number of piercers. As at Flagstones blanks appear to have been preferentially selected from the larger and broader end of the size range. No completely cortical flakes were used.

Maiden Castle Road

The flint from this site was in a very worn condition. Overall the assemblage composition was very similar to that recovered from St Georges Road (Table 25) and is probably representative of similar conditions. The comparatively high proportion of burnt flakes is a reflection of the intensity of the subsequent settlement activity on the site.

Prehistoric quarry pits

The flint from the quarry pits and other potentially early features which may have been contemporary with the use of the flint on site, was selected for detailed analysis. However, the number of measurable pieces proved to be too small for adequate characterisation. These features contained a very worn undiagnostic flake assemblage which does not suggest great intensity of activity close to the site and probably represents accidental incorporation of residual material.

Middle Farm

The lithic assemblage is surprisingly small considering the amount of earlier prehistoric activity revealed on this site (Tables 25 and 26). The range of implements includes several possibly residual Early Neolithic types such as a leaf arrowhead, serrated blade, and an unfinished flaked axe. The absence of piercers is notable. The majority of the flint was recovered from the colluvial deposits in Trench B and from the upper fillings of linear boundary ditch *03051* in Trench A (Table 28).

Enclosure ditch 03050

A very small amount of material was recovered from this feature. The assemblage consists mainly of small worn flakes with a high proportion of broken pieces suggesting that it is in a secondary position, derived from earlier activity.

Linear boundary ditch 03051

The lithic assemblage from the primary, secondary, and tertiary fillings of the boundary ditch have been combined to produce a reasonable sample size. It can be seen from Table 28 that most of the flint was recovered from the upper levels of the ditch. The integrity of this assemblage is uncertain and the probability of some mixing is high. However, the low density of flint over the rest of the site, together with the different nature of much of the material in the boundary ditch, does suggest that it was specifically associated with this feature.

The technological attributes of this group of material are similar to those defined from the two ring-ditch assemblages though the overall proportions tend to be a little larger. There are several refitting flakes from the secondary fillings. The cores compare well with those from the Middle–Late Bronze Age assemblages previously examined.

The assemblage composition is different to both ring-ditch assemblages (Table 28) with a much higher ratio of whole versus broken flakes; fewer cores, chips, and miscellaneous debitage; and a greater proportion of implements. The flake component consists of a much higher proportion of tertiary flakes with a corresponding reduction in the proportion of primary flakes (Table 29) suggesting that this material is not primarily discarded knapping waste but contains a wider range of material, possibly reflecting use as well as production.

Some of the retouched flakes and scrapers would not be out of place in a Bronze Age assemblage (Fig. 80, 30, 31) but other implements such as the leaf arrowhead, the polished edge knife, and some of the finer scrapers clearly belong to an earlier phase of activity as might a single chip from a polished axe in the tertiary fills. The absence of piercers is notable given that these appear to be one of the most characteristic types in Middle–Late Bronze Age assemblages (Harding 1991). Two phases of activity seem to be represented. The first is a residual element derived from possible Early Neolithic activity, which can only be clearly recognised by the character of certain implements. The second is a localised knapping episode which can perhaps be dated to the later Bronze Age.

The colluvial deposits

The colluvial sequence in Trench B contained a comparatively large amount of flint. It was assumed that the bulk of this material was derived from the site at the top of the slope, and therefore, a comparative assessment would help incorporate this colluvial sequence into the overall site history by employing the approach used at Loscombe Wood (Harding and Bellamy 1991). This consisted of a comparative analysis of the flint (which had been individually recorded in two dimensions within the colluvium), in relationship to the defined groups

Table 29 flake class of selected stratified deposits

	Primary		*Secondary*		*Tertiary*		*Rejuvenation*		*Janus*		*Retouched*		*Total*
	No.	*%*	*No.*	*%*	*No.*	*%*	*No.*	*%*	*No.*	*%*	*No.*	*%*	
Flagstones													
Pre-enclosure pits	2	6.25	21	65.63	9	28.13	–	–	–	–	–	–	32
Enclosure	59	40.14	67	45.58	14	9.52	2	1.36	–	–	5	3.40	147
Central burial pit	10	37.04	12	44.44	5	18.52	–	–	–	–	–	–	27
Ring-ditch chalk fills	13	81.25	3	18.75	–	–	–	–	–	–	–	–	16
Peripheral pits	34	42.50	38	47.50	6	7.50	2	2.50	–	–	–	–	80
Ring-ditch soil fills	231	39.69	254	43.64	61	10.48	6	1.03	1	0.17	28	4.81	582
Maiden Castle Farm													
Ring-ditch													
Primary fills	1	100	–	–	–	–	–	–	–	–	–	–	1
Secondary fills	2	66.67	1	33.33	–	–	–	–	–	–	–	–	3
Tertiary fills	173	32.77	246	46.59	71	13.45	12	2.27	1	0.19	24	4.55	528
Maiden Castle Road													
Quarry pit	1	8.33	7	58.33	4	33.33	–	–	–	–	–	–	12
Middle Farm													
Trench A													
Enclosure *03050*	10	28.57	14	40.00	6	17.14	–	–	–	–	5	14.29	35
Boundary ditch *03051*													
Chalk fills	5	35.71	3	21.43	5	35.71	1	7.14	–	–	–	–	14
Burials	–	–	–	–	1	100	–	–	–	–	–	–	1
Soil fills	4	17.39	11	47.83	6	26.09	–	–	–	–	2	8.70	23
Final infilling	12	19.67	30	49.18	14	22.95	3	4.92	–	–	2	3.28	61
Bridport Road Ridge													
Enclosure ditch	16	25.40	28	44.44	14	22.22	2	3.17	–	–	3	4.76	63

already analysed from this and the other neighbouring sites, in order to define diagnostic elements within the sequence.

Analysis of the assemblage from each of the elements of the colluvium indicated that there were no clear diagnostic elements to elucidate the chronology or the source of this material. There appears to be a small, possibly Early Neolithic component, as well as later material. This material is similar to that from enclosure ditch *03050* and from other contexts in Trench A. It is likely that both represent material accidentally incorporated by downwash.

Bridport Road Ridge

Most of the flaked stone from this site was recovered from the ploughsoil (Table 28). This material contains all of the elements defined during the Maiden Castle Landscape survey as being typical of the area of the Bridport Road Ridge (Woodward and Bellamy 1991), including small blades and blade cores, the majority of which are produced from Tertiary gravel flint; several hammerstones; and two axes.

Possible enclosure ditch

The small concentration from this feature was examined to determine whether it represented a specific knapping cluster. This was hampered because the material was not sieved and so the evidence from the chips was not available. The nature of some of the flint, including some of the implements, suggests that it is not an homogeneous assemblage but there is a small amount of contamination from earlier residual material.

The assemblage composition is not identical to the Bronze Age knapping debris from Flagstones or Maiden Castle Farm. There is a smaller proportion of cores and equal quantities of complete and broken flakes. The flake component consists of a relatively low number of primary and a larger number of tertiary flakes. The technology, on the other hand, is similar, with the majority of the flakes being hard hammer struck producing characteristic large prominent bulbs of percussion and very thick platforms. The range of implements is quite restricted (Table 26; Fig. 80, 34–6) and, in common with the Middle Farm enclosure, includes no piercers. This material, which had a spatially limited distribution, may represent a specific knapping episode, although no refitting flakes were recognised.

Fig. 78
Flagstones
1 Flint, hammerstone, SF191, 00273, Period 1A.
2 Flint, core, SF207, 00273, Period 1A.
3 Flint, core, SF208, 00273, Period 1A.

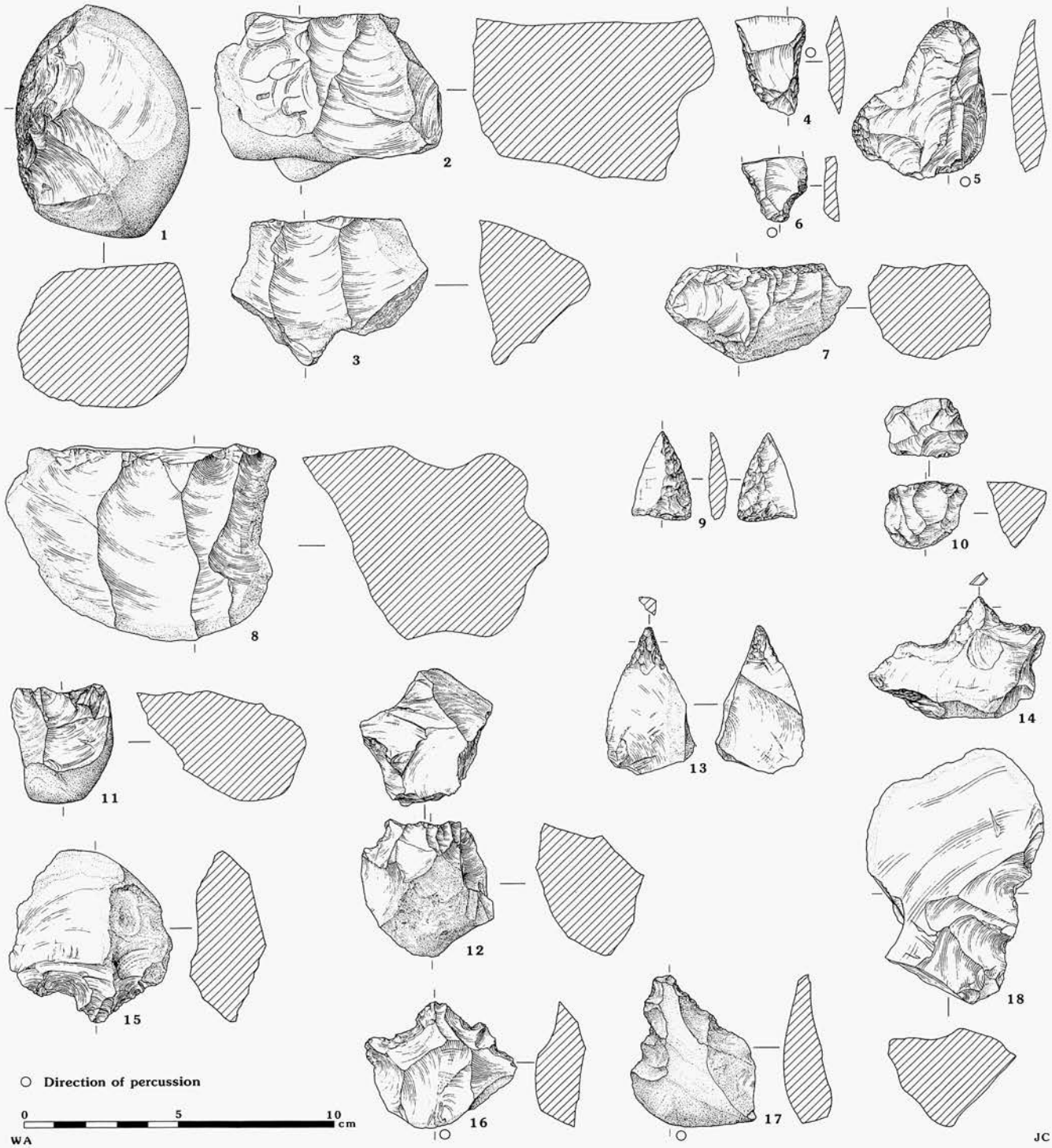


Figure 78 Flaked stone objects: Flagstones (1–18). Scale 1:2

4 Flint, PTD chisel arrowhead, SF198, 00334, Period 1B.
5 Flint, end and side scraper, SF203, 00537, Period 1B.
6 Flint, broken retouched flake, SF197, 00333, Period 1B.
7 Flint, core, SF209, 00333, Period 1B.
8 Flint, core, SF210, 00345, Period 1B.
9 Portland chert, oblique arrowhead, SF095, 00431, Period 2.
10 Flint, core, SF211, 00431, Period 2.
11 Flint, core, SF212, 00166, Period 2.
12 Flint, core, SF213, 00166, Period 2.
13 Flint, piercer, SF145, 00166, Period 2.
14 Flint, piercer, SF131, 00158, Period 2.
15 Flint, retouched flake, SF146, 00166, Period 2.
16 Flint, retouched flake, SF147, 00166, Period 2.
17 Flint, retouched flake, SF140, 00158, Period 2.
18 Flint, retouched flake, SF160, 00169, Period 2.

Fig. 79
Maiden Castle Farm
19 Flint, piercer, SF194, 02031, Period 2.

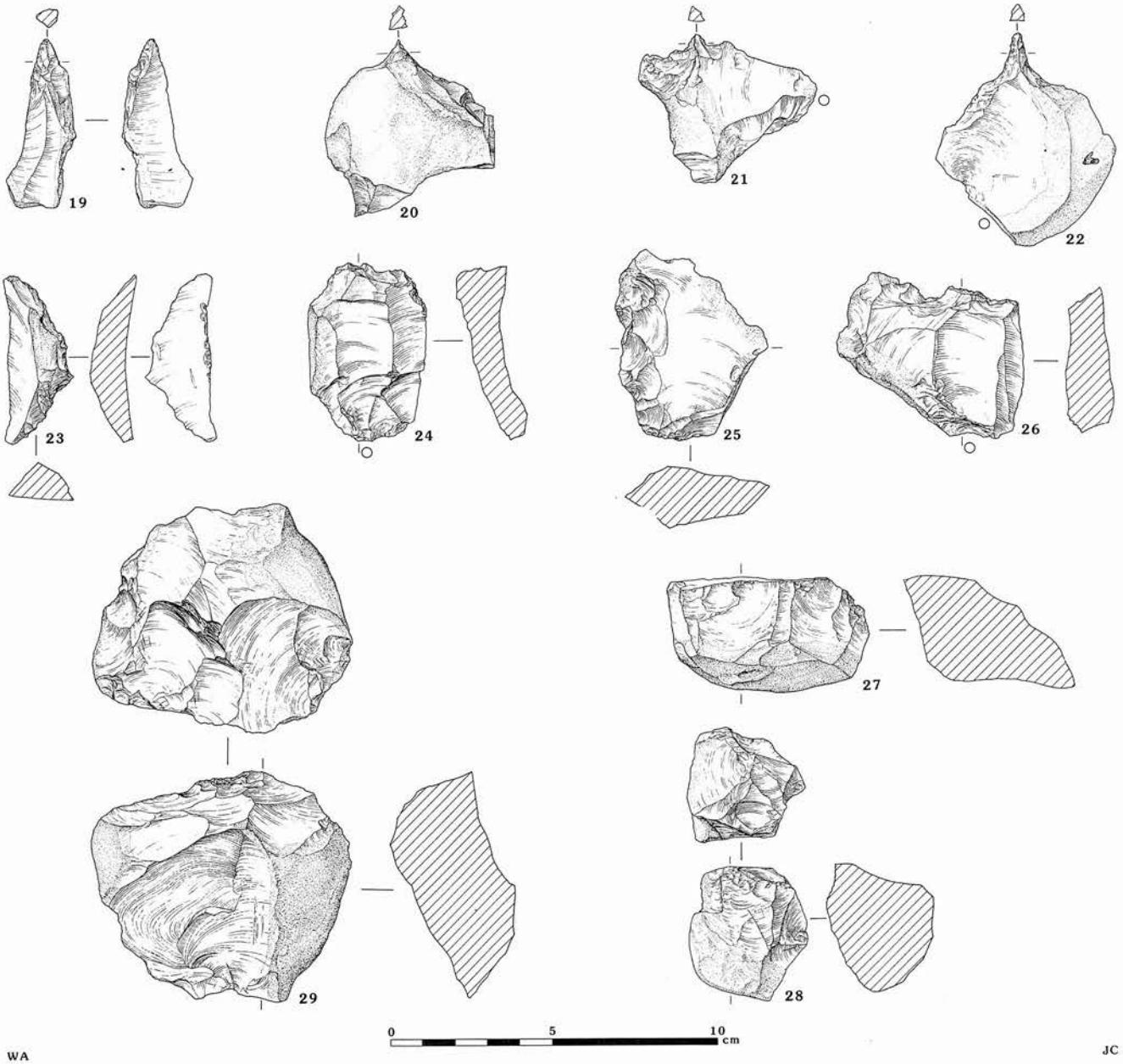


Figure 79 Flaked stone objects: Maiden Castle Farm (19–28). Scale 1:2

20 Flint, core piercer, SF221, 02036, Period 2.
21 Flint, piercer, SF215, 02033, Period 2.
22 Flint, piercer, SF199, 02035, Period 2.
23 Flint, backed knife, SF197, 02031, Period 2.
24 Flint, scraper, SF187, 02011, Period 2.
25 Flint, retouched flake, SF181, 02028, Period 2.
26 Flint, retouched flake, SF176, 02009, Period 2.
27 Flint, core, SF234, 02009, Period 2.
28 Flint, core, SF235, 02009, Period 2.
29 Flint, core, SF236, 02009, Period 2.

Fig. 80
Middle Farm
30 Flint, retouched flake, SF123, 03106, Period 2.
31 Flint, retouched flake, SF133, 03156, Period 2.

Bridport Road Ridge
32 Flint, core, SF939, 50824, Period 2.
33 Flint, core, SF940, 50824, Period 2.
34 Flint, scraper, SF880, 50824, Period 2.
35 Flint, backed knife, SF882, 50824, Period 2.
36 Flint, retouched flake, SF885, 50824, Period 2.

Discussion

The analysis of the assemblages at Flagstones has clarified several details of the site development. The earliest phase of activity associated with the pre-enclosure pits is not well defined but the nature of the flint suggests that this is not purely concerned with the production of flint artefacts. The material from the lower fillings of the enclosure, on the other hand, is industrial in character, consisting mainly of waste knapping debitage. It seems likely that the raw material was derived from the chalk removed during the construction of the

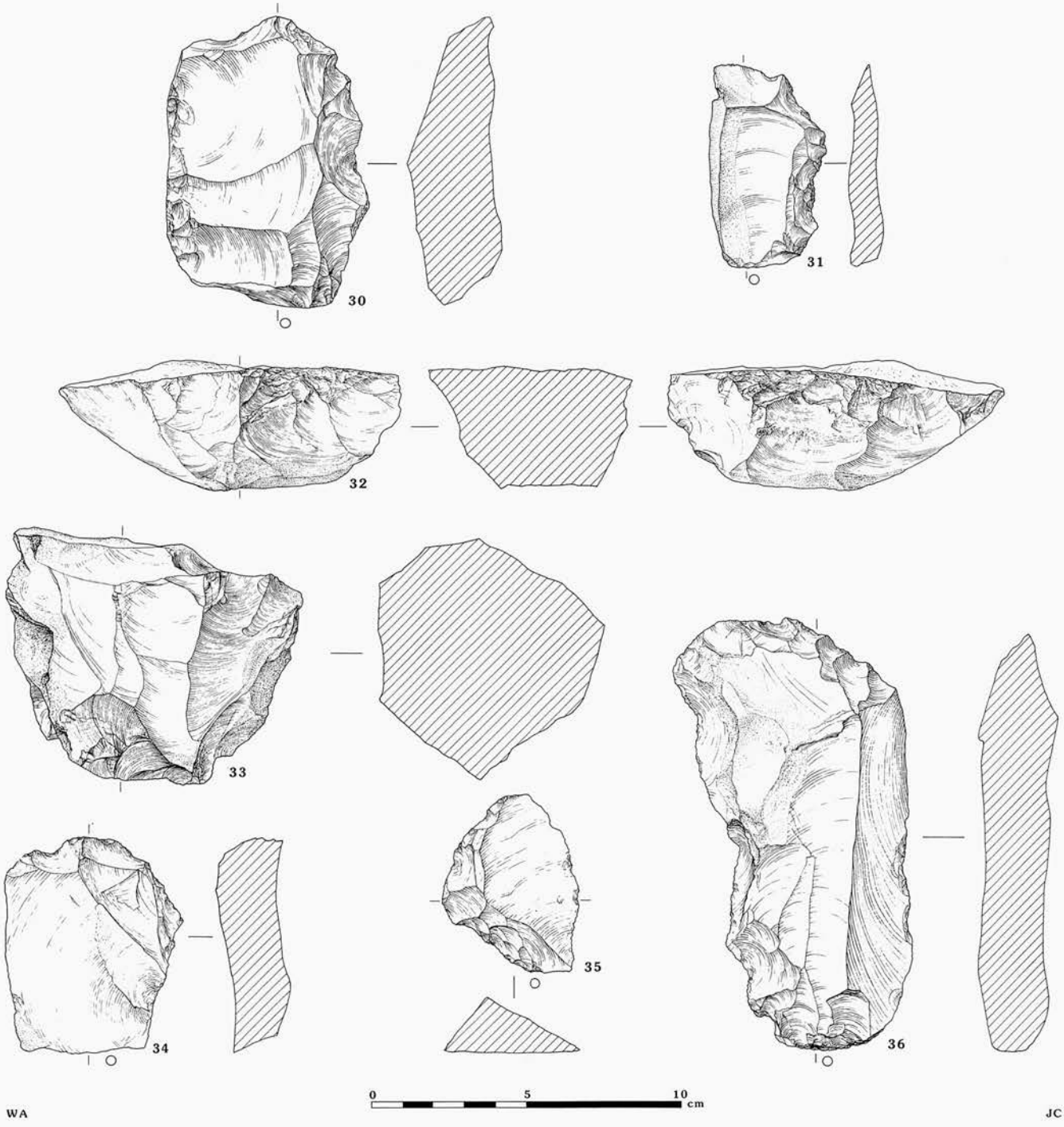


Figure 80 Flaked stone objects: Middle Farm trench A (30, 31); Bridport Road Ridge (32–6). Scale 1:2

monument. There appears to have been a degree of testing of raw material and working down of cores, but it is not clear how much was knapped on site, and how much was removed in the form of cores or finished products. It is also uncertain whether the material was deliberately dumped into the segments or was accidentally incorporated. The fact that the material was distributed fairly evenly around the whole circuit argues against deliberate deposition. The low density of flint in the lower fillings and its generalised distribution suggests that it was not primarily worked within the immediate vicinity of the monument. The situation is very reminiscent to that at the adjacent Alington Avenue long barrow (Bellamy forthcoming).

The much greater amount of material in the upper fillings of the enclosure segments, on the other hand, is very heterogeneous and suggests that it represents a mixed assemblage derived from the surrounding land surface during the silting of the segments and the subsequent agricultural reworking of the soils.

The flint in the Flagstones ring-ditch is in a secondary position, but it has been assumed that the origin of the material was a central mound, on the basis of the non-focused distribution pattern. It is not possible to

determine whether this flint assemblage was originally incorporated in the mound or whether it represents a later separate phase of flint working activity on top of the mound similar to that found at Cowleaze (Woodward 1991). The material in the peripheral pits is very similar in character to that in the ditch and was probably part of the same industry. A similar situation exists in the ring-ditch at Maiden Castle Farm where there is a comparable flint assemblage in the upper filling of the ditch.

The excavated structures at Middle Farm contained very little associated flint. The features within the enclosure and the enclosure ditch itself contained no contemporaneous flint artefacts. The boundary ditch contained mainly earlier derived material with a small amount of knapping debris which may be contemporary. Both this and the assemblage from Bridport Road Ridge possibly represent a similar situation to that revealed at Rowden where there was evidence for the dumping of knapping waste into field boundary ditches (Bellamy 1991a; Harding 1991).

There is now a sufficient number of sites investigated in the Dorchester area to allow the flint assemblages to be considered in a wider regional framework. For the purposes of this report, the region under discussion is that defined by the RCHM(E) South Dorset Ridgeway Area (RCHM(E) 1970; Woodward 1991). Detailed information is now available for a series of datable assemblages from several sites in the region: Alington Avenue (Bellamy forthcoming); Mount Pleasant (Wainwright 1979a); Greyhound Yard (Bellamy 1993a); Maiden Castle (Edmonds and Bellamy 1991); Rowden and Cowleaze (Harding 1991). A comparative assessment of this corpus of data in relationship with the results of the analyses of the By-pass assemblages may throw some more light on the chronology and character of these sites. Difficulties of comparison arise only in the case of Mount Pleasant where the comparative information is not always available, although the general trends can be ascertained.

Despite the large scale of archaeological investigation in this area and the presence of a series of stratified, dated assemblages, the range and number of artefacts which can be seen to be either chronologically or functionally diagnostic is small. The chronology cannot be reliably determined by the character of the flint itself but must be provided by other independent means. In terms of function, it is not easy to determine whether an assemblage represents industrial or domestic activity, on the basis of the flint alone. This has often to be assessed in relationship to the presence or absence of other artefact types or deposits.

Chronology

Analysis of the metrical attributes of the flakes from selected stratified assemblages in conjunction with the available radiocarbon dates (Table 30), indicates that they broadly conform to the general trend towards the production of broader flakes through time (Ford *et al.* 1984; Pitts 1978; Harding 1991). The three anomalous assemblages in this sequence — the pre-enclosure pits at Flagstones, Bridport Road Ridge, and Middle Farm boundary ditch *03051* — are all small assemblages and the last two have evidence for some contamination from earlier material which make any statistical analysis unreliable. The assemblage from the enclosure at Flagstones fits well into a Late Neolithic context as suggested by the radiocarbon dates.

The range of tool forms is not conducive to detailed characterisation. There does, however, seem to be a general tendency for piercers to form a more dominant component in the Bronze Age assemblages (Table 31). The arrowheads broadly conform to the chronological pattern defined by Green (1980).

Function

It is possible to see some general patterns in the flint assemblages which may indicate functional differences or variation in the range of activity represented. Consideration of the ratio of cores to flakes (Table 30) will give a rough indication of whether flakes or cores are under-represented in the assemblage. The proportion of implements (Table 30) and their type (Table 31) should give an indication of the amount of other activity not purely connected with lithic production. Taken together these provide an approximate index of the nature of the assemblage, ie, whether it is more 'industrial' or 'domestic' in character. It could be expected that an 'industrial' assemblage would have a low implement proportion and a high core proportion.

An examination of the ratio of cores to flakes (Table 30) shows that there is a group of assemblages (from Flagstones, Alington Avenue, Maiden Castle Farm, Middle Farm, and Bridport Road Ridge) which has a very large proportion of cores to flakes; and at the other end of the spectrum a group (from Mount Pleasant, Rowden, and Cowleaze) which has a very low proportion of cores to flakes. The correlation between high core to flake ratio and low implement proportion is not exact, as the implement proportion, in general, is very low (cf. Healey and Robertson-Mackay 1983) and assemblages such as those from Rowden and Cowleaze have both a very low core ratio and a very low implement proportion. The highest implement percentages occur in the smallest assemblages, ie., the pre-enclosure pits at Flagstones and the groups from Middle Farm and Bridport Road Ridge, which suggests that this is a reflection of statistically unreliable samples, rather than a true description of these assemblages. Thus, the assemblages can be split into three groups: those with a high core to flake ratio and low implement proportion; those with a low core to flake ratio and low implement proportion; and those with a slightly higher implement proportion.

The first group consists of the assemblages from Alington Avenue, Flagstones, and Maiden Castle Farm. The general character of these assemblages is one of discarded knapping waste and, in all instances, there is a suggestion that the products have been removed for use elsewhere. All of these assemblages were associated with monuments and would appear to be only of secondary importance to the use of the site. In the case of the Alington Avenue long barrow and Flagstones enclosure, the flint probably represents the working of raw material fortuitously recovered during the construction of the monuments. Although the evidence is not so conclusive, a similar pattern emerges in relationship to the large timber monument at Greyhound Yard. The situation at

Table 30 comparative regional data

Site	*General date range (cal. BC)*	*Total lithics*	*Breadth:length ratio* <2:5(%)	>5:5(%)	*Ratio cores/ flakes*	*% implements*
Earlier Neolithic						
Rowden (Neo. pit)	4360–3380	1926	23.55	17.76	1:71	0.67
Maiden Castle (phase 2)	3990–2930	7705	58.01	8.72	1:56	3.16
Alington Avenue (long barrow)	3370–2910 (Har-8579)	1929	36.85	14.25	1:27	1.09
Flagstones (pre-enclosure pits)	3970–3540 (Har-9161)	76	12.50	12.51	1:33	5.26
Later Neolithic						
Greyhound yard (post-pits)	2920–2340	2464	14.05	38.64	1:47	0.6
Flagstones (enclosure)	3370–2910 (OxA-2322)	463	8.84	31.97	1:12	2.16
Mount Pleasant (pre-enclosure)	2890–2460 (BM-644)	1164	c 22	c 30	1:161	2.57
Mount Pleasant (enc. ditch)	2890–1430	9796	c 10	c 44	1:90	2.20
Mount Pleasant (site IV)	2870–1820	3366	c 10	c 42	1:225	3.07
Bronze Age						
Flagstones (ring-ditch)	–	3063	7.90	41.59	1:8	2.09
Maiden Castle Farm (ring-ditch)	–	1958	1.25	44.13	1:7	2.86
Alington Avenue (round barrow)	–	784	data not available		1:11	0.77
Middle Farm (enclosure *03050*)	–	101	data not available		1:6	6.93
Bridport Road Ridge (?enclosure)	–	164	12.70	34.92	1:24	6.10
Middle Farm (boundary ditch)	1690–1260 (Har-9160)	291	17.29	32.65	1:18	4.81
Rowden (M–LBA field boundary)	–	4955	6.04	49.70	1:92	0.87
Mount Pleasant (palisade)	2590–1820	5733	c 6	c 52	1:98	2.98
Cowleaze (M–LBA) (tpq)	1600–1130 (Har-5618)	5130	5.26	50.24	1:158	0.95
Rowden (M–LBA hut)	1400–930	5585	4.98	53.81	1:88	0.88

the Flagstones, Maiden Castle Farm ring-ditches, and the double ring-ditch at Alington Avenue is not so clear.

The second group consists of the assemblages from Rowden, Cowleaze, and Mount Pleasant. The assemblages from the South Dorset Ridgeway are all very similar in that the implement proportion is very low. The material dumped into the abandoned hut and into a field boundary ditch at Rowden and the material on the barrow at Cowleaze, have all been interpreted as discarded industrial waste (Harding 1991). The low proportion of cores, in this case, suggests that they have been curated to a different area, as confirmed by the evidence from the Early Neolithic pit at Rowden where refitting has shown that some of the cores are missing. At Mount Pleasant the character of the assemblage is not so well defined as much of the flint appears to be in a secondary position. The low proportion of cores suggests that production was not the major activity.

The majority of the remaining assemblages (pre-enclosure pits, Flagstones; Middle Farm; Bridport Road Ridge) are very small and therefore the statistical characterisation is unreliable. These assemblages will not be discussed here. The one exception is Maiden Castle (phase 2) which appears to exhibit a real difference to the above groups, in that it has a comparatively low core to flake ratio and a relatively high implement proportion and has a much larger proportion of non-cortical flakes compared to the other assemblages under consideration here. The assemblage contains evidence for both production of core and flake artefacts and for their use. There appears to be a higher quality of flintworking, (reflected in the much more pronounced blade component), and the evidence for the transportation of artefacts to the site (Edmonds and Bellamy 1991).

It is difficult to refine the range of activities on each site based on the implements. The proportion of the whole assemblage is so low and generally the numbers of each type are so small as to make detailed discussion meaningless. However, the overall range of types may give an indication of the diversity of activity. Maiden Castle (phase 2), Mount Pleasant (enclosure and palisade), and Flagstones (ring-ditch) stand out as having the largest implement variability. All three groups form part of large complex monumental sites.

In general, there is a much greater number of piercers in the Bronze Age assemblage. The notable exceptions to this are at Middle Farm and Bridport Road Ridge where no piercers were recovered from the excavations. The significance of this is difficult to ascertain, it may reflect a restricted range of activities associated with these enclosures, but could also be partly a function of the small sample sizes involved, as several piercers were found on the surface during this project (Table 26, topsoil). Piercers are generally one of

Table 31 comparative regional implement assemblages

Site	*General date range (cal. BC)*	*Implement type*																	
		1	*2*	*3*	*4*	*5*	*7*	*8*	*9*	*10*	*11*	*12*	*13*	*14*	*15*	*16*	*17*	*18*	*Total*
Earlier Neolithic																			
Rowden (pit)	4360–3380	–	–	–	–	1	2	–	–	1	1	–	8	–	–	–	–	–	13
Maiden Castle (phase 2)	3990–2930	4	–	–	–	–	32	2	–	2	7	44	145	–	2	2	1	3	244
Alington Ave. (long barrow)	3370–2910 (Har-8579)	–	1	–	–	–	10	2	–	–	1	–	–	–	–	–	–	–	14
Flagstones (pre-enc. pits)	3970–3540 (Har-9161)	–	–	–	–	–	2	–	–	–	–	–	–	–	–	–	–	2	4
Later Neolithic																			
Greyhound Yard (post-pits)	2920–2340	–	–	–	–	–	–	2	–	–	–	–	11	–	–	–	–	–	14
Flagstones (enclosure)	3370–2910 (OxA-2322)	–	1	–	–	–	1	–	–	–	–	1	6	–	–	–	–	–	9
Mount Pleasant (pre-enc.)	2890–2460 (BM-644)	–	3	–	–	–	15	–	–	1	–	6	2	1	1	–	–	–	29
(enclosure ditch)	2890–1430	–	9	–	–	1	161	6	2	–	–	7	20	2	4	–	–	4	216
(Site IV)	2870–1820	–	–	–	2	–	89	–	–	–	–	3	5	–	–	–	1	–	100
Bronze Age																			
Flagstones (ring-ditch)	–	–	–	1	–	–	15	8	–	2	6	–	29	–	–	1	2	1	65
Maiden Castle Fm (ring-ditch)	–	–	–	–	–	–	5	15	–	4	3	–	27	–	–	–	2	–	56
Alington Ave. (double ring-ditch)	–	–	–	–	–	–	–	2	–	–	–	–	–	–	–	–	–	1	3
Middle Farm (enclosure)	–	–	–	–	–	–	–	–	–	–	1	1	4	–	1	–	–	–	7
Bridport Rd Ridge (?enclosure)	–	–	–	–	–	–	5	–	–	1	–	–	3	–	–	–	–	1	10
Middle Farm (boundary ditch)	1690–1260 (Har-9160)	1	–	–	–	–	5	–	–	1	1	–	5	–	–	–	–	1	14
Rowden (M–LBA field boundary)	–	–	–	–	–	–	–	1	–	–	–	–	9	–	–	–	–	1	11
Mount Pleasant (Palisade)	2590–1820	1	8	–	–	–	131	2	3	–	–	12	9	1	3	–	–	1	171
Cowleaze (M–LBA) (tpq)	1600–1130 (Har-5618)	–	–	–	–	–	–	–	–	–	–	–	5	–	–	–	–	–	5
Rowden (M–LBA hut)	1400–930	–	–	–	–	–	2	9	–	–	–	–	30	–	–	–	–	2	43

Implement type: 1 = leaf arrowhead; 2 = chisel transverse arrowhead; 3 = oblique transverse arrowhead; 4 = barbed and tanged arrowhead; 5 = unclassified arrowhead; 7 = scraper; 8 = piercer; 9 = fabricator; 10 = knife; 11 = miscellaneous flake tool; 12 = serrated flake; 13 = miscellaneous retouched flake 14 = polished axe; 15 = flaked axe; 16 = pick; 17 = miscellaneous core tool; 18 = hammerstone

the few tool types which occur with any frequency in Bronze Age assemblages.

Spatial and chronological patterning

The flint cannot contribute much to a discussion of habitation patterns as the evidence is very restricted. The habitation sites in general are on a slighter scale than the monuments and, therefore, have been more disturbed by subsequent agricultural activity.

The occurrence of Early Neolithic flint in pits, on both the Ridgeway (Rowden) and on the 'Alington Ridge' (Flagstones) indicates that the Early Neolithic habitation occurs as buried, isolated, discrete phenomena but at widespread locations. This pattern appears to be confirmed by some of the evidence from the Maiden Castle Landscape survey (eg., Sample Area 15) and a similar pattern has been noted in other regions (Healy 1983).

The habitation and other activity areas, dated to the Bronze Age (ie, the house at Rowden and the enclosures at Middle Farm and Bridport Road Ridge), have very little associated flint suggesting that activities involving the use of lithic artefacts was primarily taking place away from these sites. The absence of piercers from Middle Farm and Bridport Road Ridge is not reflected in the distribution of artefacts collected from the surrounding field surfaces which suggests that their absence is part of a specific pattern related to the function of these enclosures.

The arrowheads are one of the most chronologically diagnostic implement types and their distribution appears to exhibit some definite patterning which has been discussed previously (Woodward 1991; Woodward and Bellamy 1991). The arrowheads recovered from the By-pass reinforce this pattern, contributing further examples to the concentrations on the Alington Ridge and Bridport Road ridge (Davies *et al.* forthcoming).

The evidence from the excavations, therefore, broadly confirms the patterns recognised within the Maiden Castle Landscape Survey. On the basis of the data from both of these and the South Dorset Ridgeway Survey, three general zones can be outlined.

1. Central monumental zone

This zone, centred around Dorchester and the Frome valley, contains a large number of monumental sites (Maumbury Rings, Mount Pleasant, Greyhound Yard, Alington Avenue, Flagstones). The evidence shows that the flint consists mainly of debitage from the exploitation of raw material procured during the construction of the monuments and the production of artefacts. This characteristic appears to be most strongly marked in the Neolithic monuments. It implies that there was no contemporaneous settlement adjacent to the monuments. Direct evidence for prehistoric habitation is extremely limited in this zone.

2. Lowland agricultural zone

The main characteristic of this zone between the rivers Frome and South Winterborne, is the low density of flint except in very specific locations. The general spread of material is, on the whole, very crude and in a worn condition. It can be seen as reflecting general activity within an arable agricultural regime (cf. Middle Farm colluvial sequence). The specific concentrations of flint can be seen as the result of clearance activity from the fields and the subsequent use of this material in certain marginal locations such as barrows (Lanceborough barrow group, Maiden Castle Farm ring-ditch, Fordington Farm round barrow) and field boundaries (Middle Farm). In the Early Neolithic, Maiden Castle dominates this zone, with its large amount of flint and the range of activities represented, including the transport of certain raw material types to the site and both production and use of flint artefacts. Other evidence for Early Neolithic habitation is slight. The occurrence of several Bronze Age enclosures within this landscape is not related to concentrations of lithic activity, but rather, the opposite appears to be the case. The evidence from the Landscape Survey suggested that the Bridport Road ridge was an area of raw material procurement and preparation. No further evidence to substantiate this was recovered from the excavations.

3. Upland agricultural zone

This zone consists of the South Dorset Ridgeway and contains evidence for both domestic and industrial activity. The pattern appears to be similar to the lowland agricultural zone, with knapping activity confined to peripheral areas within the arable field system. Both the Neolithic and Bronze Age lithic activity exhibits the same trends. A consistent characteristic, which differentiates this zone from the others, is the apparent curation of the cores away from the area of deposition of the rest of the flint waste. The reasons for this are unclear.

17 Human Remains, by Juliet Rogers

Human remains from three sites, Flagstones, Maiden Castle Road, and Middle Farm were submitted for examination. This report on them was submitted in 1990. The remains were represented mainly by inhumation burials and by four cremation burials. There was also some disarticulated bone from these sites. Some of the skeletal remains were in good condition but the majority were fragmented and in many instances the surface had been abraded. The skeletons were from four periods, Neolithic, Bronze Age, Late Iron Age, and Romano-British, the largest group being Romano-British.

The individual bones and bone fragments from cremation burials were assigned to their anatomical category if possible. A note was made of the size and weight of fragments from each type. All the cremation burials were of adults — sex could not be determined.

Skeletal examination of inhumations comprised assessment of age and sex and measurement of long-bones for stature estimation (Stewart 1979). A note was made of cranial and post-cranial variants (Brothwell 1981). An examination of the skeletons for dental status and evidence of disease was also made. The small number of skeletons from each period prevented any statistical analysis or meaningful comparison with skeletal data from other sites. The remains are considered separately from each site.

Table 32 summary of human remains from Flagstones

Location	*SF*	*i/c*	*Age*	*Sex*	*Stature (m)*	*Pathology/ abnormality*	*Comment*
Period 1/2 Enclosure ditch							
Segment *2*, interface primary/upper fills	SF75	i	adult	M	1.75		Prob same individual as that from segment 3
Segment *3*, upper soil fills	–	i	adult				
Segment *14*, chalk rubble	SF76	i	10–12				OxA–2321; 4210±110 BP
Segment *16*, primary burial	SF35	c	35+				
Segment *19*, primary burial	SF31	i	2–3				HAR–9158; 4490±70 BP
Segment *25*, uppermost soil fills	SF69	i	adult				Prob same individual as from segment 28
Segment *28*, initial soil fill	–	i	adult				
Segment *30*, primary burial	SF78	i	6–12 months				
Segment *30*, mixed with SF78	–	i	3–5				part of l. femur
Other Period 1/2 features							
Pit *50256*	–	c	adult				
Pit *50258*	–	c	adult				
Pit *50260*	–	c	adult				
Grave *00430*	SF80/3	i	adult	M			HAR–9159; 3560±70 BP
Period 3 Late Iron Age features							
Pit *00302*	SF834	i	adult	?F	1.60	o.s. shoulders, elbows, knees	
		i	<6 months				skull frags only
Grave *50264*	SF835	i	45+	?M			caries
Grave *00015*	SF72	i	adult	F	1.55		
Grave *00041*	SF73	i	16–17				
Pit *00300*	SF74	i	adult	M	1.58	sa L6	
Pit *00019*	SF77	i	3–4			sp L5	
Grave *00432*	SF79	i	adult				

i = inhumation; c = cremation; o.s = osteoarthritis; sa = sacralisation; sp = spondylolysis

Flagstones

Periods 1 and 2. Neolithic and Bronze Age

The enclosure segments at Flagstones yielded one cremation burial, four skeletons, which were incomplete, fragmented and abraded, and five collections of disarticulated bone or single occurrences. These represented a minimum of eight individuals: three adults, one adult male, and four children. The positions of the skeletons around the enclosure can be identified from Figure 22. The child skeletons from segments *14* and *19* were submitted for radiocarbon dating and the results are outlined in Table 1 and discussed more fully in Chapter 2.3.

The skeleton from segment *2* was that of an adult male where stature could be estimated at 1.75 m. There were no abnormalities except for slight shortening of both maxillary lateral incisor teeth of the skeleton from segment *14*.

All parts of the body from the cremation burial from segment *16* (Table 32) were represented but most fragments were unidentifiable and too small for an assessment of sex to be made. The individual is adult, one molar tooth indicating a possible age of over 35 years. Three cremation burials were also recovered from within the crescentic gully feature (Fig. 22; Table 32).

One skeleton was recovered from the burial pit in the centre of the ring-ditch. It was represented by a very small quantity of badly decayed and fragmented bone. Most was recovered from the base of the pit with some disarticulated bone from the pit fills. However, there was no duplication between these bones and those of the skeleton and the similar condition, colour, and maturity of the bone makes it highly likely that all the remains represent a single individual. Although less than 50% of the skeleton survives, the deceased could be identified as a young adult male. A sample of the skeleton was submitted for a radiocarbon determination (HAR–9159 3560±70 BP).

Period 3. Late Iron Age

This assemblage is represented by seven skeletons and one group of disarticulated bone from an infant of less than 6 months, recovered from pit *00302*. Most of the skeletons were fragmented but five of them had over

half the bones preserved. Table 32 displays the information derived from these skeletons.

Dental status
Only five of the skeletons had surviving dentitions, including the child from pit *00019*. Only one individual, from grave *50264*, had caries, two out of 29 teeth being affected. The only other abnormality was the ante-mortem loss of all teeth from the six available tooth spaces of the skeleton from pit *00302*. Also affected were the skeletons in grave *00015* with six teeth out of 32 tooth spaces and pit *00300* with 12 out of 20 lost ante-mortem.

Evidence of disease
The skeleton in pit *00302* had severe osteoarthritis of both shoulders, elbows, and knees with extensive eburnation and changes in bony contour of the affected joints. There was also widespread osteophytosis of the lumbar spine. This is a type of osteoarthritis often seen in older females. There was no evidence of disease in the other skeletons although that in pit *00300* had signs of a common congenital abnormality in the sacralisation of an extra lumbar vertebra. The spondylolysis of the fifth lumbar vertebra (separation of the vertebral arch) can be acquired following trauma.

Maiden Castle Road

Period 4. Romano-British

One skeleton and one disarticulated assemblage were found in the 'square' enclosure *02252* (Fig. 46). Very little of the skeleton, of an adult, from the central burial pit remained and the bone was abraded. The disarticulated bone from the grave *02289*, cut into the west enclosure ditch, comprised some teeth and skull fragments, representing an infant and an adult.

The inhumation cemetery
Twenty-two skeletons from 19 graves and four small assemblages of mixed adult bones (SFs 140, 150, 152, and 155 from graves *02228*, *02215*, *02220*, and *02223* respectively) were recovered from the cemetery (Fig. 49). The 22 skeletons represented 6 children, 6 male adults, 9 female adults, and 1 adult of unknown sex. Table 33 displays age, sex, and stature. Non-metric variants recorded were possible both for cranial and post-cranial areas but no particular pattern or frequency of any one variant was discernable.

Dental status
Seventeen of the Romano-British inhumations had dentitions ranging from the whole skull with intact maxilla and mandible to a few loose teeth. The commonest abnormality was again the ante-mortem loss of teeth (seven skeletons). No signs of abscess or enamel hypoplasia were seen and only one individual, from grave *52011*, had caries, in one tooth. One individual from grave *02202* had severe periodontal changes with recession of the alveolar margin and another, from grave *02209*, had a moderate degree of calculus. The skeleton from grave *02228* had an impacted mandibular third molar and that from *02230*, although adult, had retained a deciduous second mandibular molar. No other dental abnormalities were apparent.

Table 33 summary of inhumation burials from Maiden Castle Road (Period 4C)

Grave	*SF*	*Age*	*Sex*	*Stature (m)*	*Pathology*
02202	SF16	35–40	M	1.64	sp thor/lumb v.
	SF19/25	25–35	?F		
02205	SF23	1–2			
02207	SF22	adult	F	1.54	
02209	SF36	25–35	M	1.68	
02213	SF18	5–6			
02215	SF43	19–20	M	1.65	periostitis
02217	SF832	4–5			
	SF833	9–14			
02218	SF41	adult	F	1.59	os shoulder, frac. hand
	SF145	adult			
02220	SF28	adult	?F		
02223	SF35	1–2			
02228	SF97	adult	F	1.59	frac. finger
02230	SF98	17–25	F		
02232	SF117	35–45	F	1.57	frac. medial tibial condyle
02318	SF90	18–20	F	1.73	
02331	SF99	4–6			
02350	SF72	18–19	F	1.54	
02367	SF122	adult	M	1.65	os cerv./thor. facet joint
02389	SF133	adult	M	1.72	
52011	SF1400	25–35	M	1.70	spl; os hand; frac. tibial plateau

sp = spondylosis; spl = spondylolysis; os = osteoarthritis; frac. = fracture; thor. = thoracic; lumb. = lumbar; cerv. = cervical; v. = vertebra

Evidence of disease
Eight skeletons displayed evidence of pathological change, mostly confined to minor changes such as osteophytosis. Four individuals had healed fractures, three had osteoarthritis, one widespread periostitis, and one unilateral spondylolysis of the fifth lumbar vertebra. Osteoarthritis is common in skeletal assemblages and the examples in this group involve a right metacarpal phalangeal joint (grave *52011*), a right shoulder (grave *02218*), and cervical and thoracic facet joints (grave *02367*) are no different from the expected pattern.

The prevalence of healed fractures in this sample is somewhat higher than is usual but the sample is so small that no significance can be derived from this. There were two fractures of tibial condyles (graves *52011* and *02232*), and two of the hand (5th proximal phalanx left hand, grave *02228*, and 2nd left metacarpal, grave *02218*). Only one example of periosteal new bone

formation (grave *02215*), was present. All the leg, foot, and arm, and some hand bones of this skeleton were extensively covered by a fine and superficial deposit of striated bone. There are many causes of widespread periostitis (Resnick and Niwayama 1988) but their differentiation depends on the clinical condition and examination of the patient. It is impossible to decide which type may have been the cause of the bony change in this young individual although the most likely cause would probably be an infection.

Middle Farm

Period 2. Bronze Age Linear Ditch *03051*
There were three inhumations from this site representing four adults (Figs 56, 60). Burial *03183* (SF97) was very fragmented and represented two adults, one of them possibly female. Apart from a pair of iliac fragments (female), it was impossible to sort the bones and fragments between the two individuals. Burial *03421* (SF100) was an adult male and was represented by fragmented bone from the whole skeleton apart from the skull. Burial *03142* (SF103) was also an adult male and was similarly incomplete and fragmented. A sample from burial *03421* was submitted for a radiocarbon determination (HAR–9160; 3200±90 BP).

Evidence of disease
Each of the inhumations had evidence of joint disease and trauma. Trauma was represented by well-healed fractures of midshaft of left tibia and fibula (burial *03183*), distal shaft of left radius (burial *03421*) and second left metacarpal (burial *03142*). Osteoarthritis was present in all three skeletons, of the left knee of burial (*03183*), left wrist of burial *03421* and cervical spine of burial *03142*.

18 **Antler Picks**, by Frances Healy

Red deer antler picks were found only at Flagstones. The generally eroded state of the bone and antler from Neolithic and Bronze Age contexts there has hampered recognition and has often led to recent breakage. Nevertheless, it was possible to identify five picks or pick fragments (Cat. nos 1, 3–6), all from the primary fills of the enclosure, and four other possible or probable picks (Cat. nos 2, 7–9), one from the primary fills, the others from subsequent fills. Most are shed antlers.

The method of pick manufacture described by Legge (1981, 102) and Clutton-Brock (1984, 26) consists of the removal of the bez and trez tines and the crown, leaving the brow tine to serve as the working tip of the implement and the beam as the shaft. Occasionally the brow tine was removed, leaving the bez tine as the functional tip, as in an example from Mount Pleasant (Wainwright 1979a, fig. 78, A7) and two from Flagstones (Cat. nos 1 and 6). Where preservation is good, the marks of this process may be seen on well preserved examples in the form of cutmarks and of coincidental localised burning, the latter apparently intended to make the antler more brittle and easier to cut (Clutton-Brock 1984, 26). The marks of subsequent use take the form of wear or damage to the tip, battering of the burr, and smoothing of the lower part of the beam.

The condition of the Flagstones material often makes it impossible to tell if these features were originally present. Cutmarks were recorded on a beam fragment submitted for radiocarbon dating (Cat. no. 2). A small patch of burning survives on the burr of one pick (Cat. no. 5), exceptionally made not on a shed antler but one from which the pedicle was cut. Similar burning occurs on another example at the base of a cut-off tine (Cat. no. 6). There are two chipped and worn tine tips (Cat. nos 3 and 6).

An excess of left over right antlers (4:1) may, although numbers are small, reflect deliberate selection, the curvature of the tines making a left antler a more convenient implement for a right-handed user (Legge 1981, 101). There is at least one find of an apparently unmodified antler, severely eroded but retaining three tines (Cat. no. 8). This too may have been used as an implement on the evidence of better preserved examples from Neolithic quarry fills at Hazelton, Gloucestershire, which, although tines were rarely removed, displayed the battered butts and worn tine tips associated with use as picks (Saville 1990, 205–9).

Where measurement has been possible, it shows that some of the antlers (notably Cat. no. 1) fall at the larger end of the range for Late Neolithic red deer from Grime's Graves and Durrington Walls (Clutton-Brock 1984, figs 9–22).

The use of antler picks in the excavation of the enclosure segments is evidenced by pickmarks on the walls, notably in segment *28*. Consistently with this, four picks (Cat. nos 1, 4–6) and one possible pick (Cat. no. 2) were found on the ditch bottom. Three possible picks and other antler fragments from the subsequent fills may also date from the construction of the enclosure, subsequently silting into the ditch segments from the surface and topsoil, or may have been used and discarded during the excavation of the central ring-ditch or the pits peripheral to it.

19 **Discussion**, by Elaine L. Morris

A number of aspects will be discussed in this section to synthesise and compare the patterns deduced from the analyses of the artefacts presented above and from comparison with assemblages from other sites in the area. The main themes concentrate on the nature of artefact procurement, via production or exchange and trade, and artefact use, whether in apparently domestic and subsistence contexts or in more specialised or structured deposits. Examination of the use of artefacts will incorporate the nature of the activities indicated by them and will return to a discussion of the nature of the organisation of production systems for the prehistoric and Roman periods.

Artefact Procurement

The means by which the inhabitants of both prehistoric and Roman period sites obtained the artefacts necessary for subsistence, both in the domestic and wider social

spheres, is an important aspect of archaeological investigations. People can produce their own artefacts or they can obtain them through exchange networks and by trade within a market system.

The production of artefacts can be investigated at three levels: actual on-site production; the indication that artefacts could have been made from resources available in the local area; and the clear evidence that artefacts could not have been made locally due to the absence of the raw materials required. Flintknapping is the most obvious example of the first of these.

The second level requires a definition of local resource availabilty and a consideration of the general requirements for the product to function and the desirability of that product. Recent work considering the nature of ethnographic pottery production systems within sedentary agricultural communities has discovered that potters prefer to obtain their clays and any special additives for temper from within 7 km and 10 km respectively of the location of production, which is usually near or at their homes if suitable clays and additives are available (Arnold 1981; 1985, 35–60, fig. 2.5).

The requirements of fuel and water for pottery production are already required for general subsistence in daily living and do not place any special restriction on location of pottery production. If fuel and water are not plentiful, villages are not likely to be located near clay deposits no matter how good such clays may be. The location of other raw materials also dictates the availability of resources and the location of production. Other variables to be considered are the acquistion of raw materials by trade or exchange, such as iron ores, and the reuse of objects as a raw material resource, such as copper alloy objects, which can be remelted.

The importance of an artefact or its need for a particular activity may dictate the nature of its procurement. The distance people are willing to travel to acquire quality stone for particular tasks is dependent upon the location of other stones which may be sufficient for a particular task although not the prime choice for that task. Different mechanisms may come into effect in the procurement of a distant raw material at different times and these can be interpreted from the nature of the archaeological record and the artefacts themselves.

An example of this is the presence at the Lodsworth quarry in West Sussex of roughout stones for rotary querns but the absence of roughouts for saddle querns, and the considerable difference between the distributions from the source of these diachronic quern types (Peacock 1987). The Lodsworth stone is a very distinctive, Upper Greensand rock. For the saddle querns, a system of direct procurement and unspecialised preparation of the stones has been interpreted particularly due to the distance of distribution with 'the maximum being 65 km; most sites are less than 40 km from the source' (ibid., 75, fig. 6), but specialist production and indirect procurement through trade have been interpreted for the rotary querns due to the great distance at which these have been found (maximum distance for Iron Age examples is *c.* 130 km, with the majority within 70 km; ibid., fig. 7).

The difference between the distances which potters are willing to travel to procure clays and that proposed for quernstone users is an example of the significance of the artefacts and the ubiquity of raw materials which can affect how we investigate different artefacts. No single definition of 'local area' is necessarily suitable for all artefacts.

The demonstration that artefacts could not have been produced locally can be achieved by the characterisation of the physical and chemical components fossilised in the artefacts. For pottery, this is demonstrated through visual examination and petrological analysis to determine the most likely sources for the clays and inclusions found. Such technqiues are also suitable for stone analysis. When the nearest distance for a suitable resource is over 30 km from the location of artefact recovery, the designation of 'non-local' production is automatic and the presence of an exchange transaction or trading is inferred if the society was sedentary. The recognition of a possible source within this distance, at *c.* 10 km or 20 km, or in circumstances where the nature of the society suggests a non- sedentary or mixed system, problems of interpretation arise and may need consideration on an individual material basis.

Exchange systems are the mechanisms by which groups acquire materials unavailable within their own territories or circulate objects amongst recognised trading partners as a means of maintaining communication and stability. The latter is viewed as a form of insurance policy or risk-buffering mechanism (Halstead and O'Shea 1982; 1989) in the likelihood of future periods of subsistence difficulties, social change or political stress. These anomolous situations can be seen archaeologically through a chronological investigation of production and distribution of common artefacts such as pottery. When suitable clays and tempering materials are readily available, depending upon the type of vessel needed, and pottery had been produced in that area at one time but had subsequently ceased, it can be suggested that an artificial situation had been created whereby pottery was acquired only through trading partners. A possible example of this change has been demonstrated for the nature of pottery production and exchange for the later prehistoric period in Somerset and north Dorset (Alcock 1980; Ellison 1986; Gale 1979; Morris 1987; Bonner and Morris in prep.), and examples from elsewhere are known (Morris in press).

Long-distance trade for scarce, desirable resources and the trade of products within local and regional market systems are well-documented both archaeologically and historically.

Use of Artefacts

Once artefacts have been obtained their use in practical subsistence activities or as part of more specialised tasks can be investigated. This section will not attempt to categorise any activity as being 'ritual' or 'non-ritual', but will examine the evidence for the use of artefacts, the nature of their deposition, and the likely functions which this information can provide. Functions include both the primary purpose for which artefacts were obtained or manufactured and the secondary or subsequent roles for which they may have been adapted. An example of such altered use would be the production and use of a Middle

Bronze Age Deverel-Rimbury urn for the storage of food or for cooking which was subsequently used in a funerary context.

Evidence for the use of artefacts in subsistence-related, domestic activities can consist of the range of implements present in a flint assemblage, the visible residues on objects such as limescale, burnt food, and soot (Lambrick 1987), usewear (Hally 1983; 1986), and the alteration of vessels from original forms. The full nature of the deposition of artefacts and their roles within a social system may be considered to include specially structured deposition which may be related to subsistence based and/or non-subsistence based activities (Richards and Thomas 1984; Hill 1989; Cunliffe 1992) and can occur in the archaeological record of certain periods with some frequency (ibid., 75). This situation reflects the current acceptance that 'economic systems are deeply embedded in social and religious systems' (ibid., 82).

Neolithic

Artefacts from the earlier and later Neolithic activity along the Southern By-pass provide a microcosm of the general changes found elsewhere as well as specific attributes diagnostic of this area within the south-western region.

The earlier Neolithic bowl material includes a range of fabrics which demonstrates both localised production and pottery acquired through exchange. The Flagstones pre-enclosure material consists of flint and shell-gritted wares, both of which are likely to be made from locally available resources (Williams, archive), while that from the segmented enclosure and the anomolous activities of the earliest phase at Maiden Castle Road present an increased range of fabrics including the distinctive gabbroic fabric pottery from Cornwall. The differences between these collections may signify a chronological development in production and exchange or may simply reflect variation in assemblage size.

The larger Neolithic bowl assemblage from Maiden Castle consists of mainly flint (45%) and shell-gritted (41.0%) fabrics, with a 1% component of beef calcite and 4% of sand-bearing fabrics, all of which may have been of local manufacture, and 5% non-local gabbroic fabric (Cleal 1991a, table 54). However, this range is also suggested for the small collection from the single pit at Corfe Mullen where gabbroic vessels have also been identified amongst Neolithic bowl material (Calkin and Piggott 1938, nos 10–11; Peacock 1969).

A further possible chronological development in Neolithic production and exchange should be viewed against the undecorated nature of the South-Western Neolithic bowl tradition. The long distance exchange of plain vessels during this period contrasts sharply with the extremely decorated nature of the subsequent Late Neolithic–Early Bronze Age phases, consisting of Peterborough wares, Grooved Ware, and Beaker vessels, and the complete absence of long distance or regional exchange of pottery but the continued exchange of stone axes. The Grooved Ware pottery from Conygar Hill, while not specifically assigned to source, is likely to be of local manufacture (Williams archive).

The production of flint tools from the Neolithic Southern By-pass sites is also significant. Earlier Neolithic activity at Flagstones is represented by an assemblage suggesting both production and use, while that of the primary infilling of the enclosure segments is clearly production based and later Neolithic in character. The resource for both knapping episodes is locally available flint.

The functions of both the earlier and later Neolithic pottery and flint tools from the By-pass sites are difficult to assess and must be considered in relation to the contexts of recovery. The earlier pottery and flintwork (a significant proportion of which were burnt) were recovered from pits, one associated with quantities of burnt animal bone, mainly cattle, and chalk with ash and charcoal, a situation very similar to that at Rowden (Woodward 1991), Corfe Mullen (Calkin and Piggott 1938), and possibly Sutton Poyntz, near Weymouth (Farrar 1957). The flint implements include scrapers and hammerstones, while the pottery consists of open, neutral and closed forms, the latter with lugs for suspension. However, indicators of the use of these round-bottomed pottery vessels is lacking, with no evidence for limescale, sooting, burnt residues, or internal abrasion.

Soot and residues were observed on eight vessels in the contemporaneous, but much larger assemblage from the Maiden Castle enclosure (Cleal 1991a, 177). The contextual information strongly suggests a subsistence based collection of artefacts in the variety of vessel shapes and also the presence of both siliceous (flint and sand) and calcareous (shell) fabrics suitable for different thermal and mechanical stresses from manufacture and use (Braun 1983) and the non-industrial character of and the implements in the flint assemblage, as well as the burnt condition of the deposit.

The Neolithic pottery from the segmented enclosure lacks a suitable number of diagnostic pieces for vessel shapes and functions to be discussed. The presence of gabbroic pottery here and at the causewayed enclosures at Maiden Castle, Hambledon Hill, Whitesheet Hill (Cleal in prep.), Robin Hood's Ball, and Windmill Hill (Peacock 1969), could have indicated the use of this material, acquired through long-distance exchange, only at special monumental locations. However, its recovery from quarry features at Maiden Castle Road and in a pit containing burnt material at Corfe Mullen suggest otherwise.

It is curious that no gabbroic pottery was identified in the assemblage of 391 sherds of Neolithic bowl material mainly recovered from the pre-enclosure bank deposits at Mount Pleasant less than 2 km north-east of Flagstones and that this collection was predominantly non-shell-gritted (Longworth 1979, 84).

The industrial nature of the flint assemblage in the primary filling of the segments is a good example of expediency utilising the flint nodules recovered during the construction of the enclosure, despite the apparently ritual focus at the latter with the presence of engravings and burials beneath stone slabs. The recovery of a whetstone of Welsh origin (Fig. 77, 1; Cat. no. 1) from a stratigraphically early but probably natural feature and a rubber, which is likely to have been obtained from Chesil Beach at least 12 km away and was found in the primary filling of the segmented enclosure, provide the only other apparently domestic artefacts of probable Neolithic date in the collection. There were found in

association with identifiable bones of cattle and canids. Other objects, such as the chalk ball and sarsen slabs are interpreted as relating to the non-domestic character of the segmented enclosure, with the antler picks used in construction.

The Late Neolithic material at Conygar Hill provides little indication of the activities which occurred there, but the large sherd size of the small quantity of highly decorated Grooved Ware pottery from a single vessel, in association with pig bones in the primary fill of the pits, is not dissimilar to that from other Late Neolithic monuments where feasting has been interpreted (Richards and Thomas 1984, 206; Thomas 1991, 21–2). In addition, the change in vessel form from the thin-walled round-bottomed containers of the Neolithic bowl tradition to the thick-walled, flat-bottomed vessels of Grooved Ware must be significant in technological and social terms. The absence of gabbroic pottery in later Neolithic assemblages outside Cornwall is worthy of note, and the evidence from the Southern By-pass does not contradict this.

Bronze Age

Investigation of the production and use of later Neolithic–earlier Bronze Age flint is not possible within the limited collections recovered from the By-pass, but the fabrics used to make the decorated vessels of this period from By-pass sites all could have been produced from local resources.

The later Bronze Age, however, is well-represented by the flintknapping episodes at the ring-ditches at Flagstones and Maiden Castle Farm and the occupation at the Middle Farm complex. These assemblages are typical of the Late Bronze Age, with the essentially wasteful use of locally available small flint nodules to produce a basic range of scraping, cutting, and boring tools. The flint assemblages from the linear boundary ditches at Middle Farm, however, do not represent evidence for the primary phases of implement production and may well indicate activity not associated with the original use of the ditches. The contrast in range of implements between the assemblages from the ring-ditches and these boundary ditches, particularly the absence of piercers at Middle Farm, is striking. The latter aspect may well be associated with the use of worked bone points at this site performing a similar function.

The production of pottery during this Middle–later Bronze Age period is difficult to investigate due to the wide use of either grog or flint as temper which previously had never been linked to anything but local production. The range of pottery, mainly recovered from the occupation at Middle Farm, is dominated by fabrics likely to be of local manufacture, in this case grog-tempered material. In addition, eight sherds from grog-tempered or calcite-gritted vessels recovered from ditches *03050* and *03051* have carbonised residues (archive) and provide evidence for use regularly associated with domestic activities.

These activities are further indicated by the presence of worked bone artefacts, piercers, a needle, and a gouge, as well as clay weights, quernstones, and whetstones (*above*). The bone implements are most likely to have been used in textile production and clothing manufacture, the querns in food preparation and the whetstones as tool sharpeners.

This array of artefacts recovered from the same deposits is typical of Middle–later Bronze Age settlements in southern England (Barrett *et al.* 1991a; Bell 1990; Burstow and Holleyman 1957; Drewett 1982; Ellison 1987; Holleyman and Curwen 1935; Rahtz and ApSimon 1962; Green 1987; Stone 1937; 1941), but the additional recovery of four adult, tightly-flexed inhumation burials in ditch *03051* is not. Cremation is the Middle Bronze Age burial rite, and disarticulated fragments of human bone are not uncommonly found in later Bronze Age deposits. Presently this occurrence of complete skeletons can only be interpreted as a localised ritual, one which re-emerges in the archaeological record of the later Iron Age.

Late Bronze Age occupation was not recovered specifically along the route of the By-pass, but occasional artefacts such as the single rim sherd from the final infilling of ditch *03051* (Fig. 66, 51) and a similar type from St Georges Road (Fig. 64, 1), in addition to the flint assemblages, indicate activity in the area. Late Bronze Age occupation was recovered less than a kilometre to the east of Middle Farm, at Coburg Road (Smith 1988, Smith *et al.* 1992).

Iron Age

The only Early Iron Age activity in the immediate area occurs quite late at Maiden Castle from about the 5th–4th centuries BC (Wheeler 1943; Sharples 1991, 241) and at Poundbury, starting earlier on the basis of the presence of diagnostic pottery types in and below the ramparts (Richardson 1940, fig. 5; Green 1987), while early 1st millennium BC/later Bronze Age and Early Iron Age occupation has been demonstrated further south at Chalbury (Whitley 1943), Quarry Lodden (Bailey and Flatters 1971), and elsewhere.

An assessment and interpretation of the nature of the earlier Iron Age activity from the excavated areas at Maiden Castle and sites in its hinterland has been presented elsewhere (Sharples 1991, 241–9 and 257–64). The end of the Early Iron Age and the inception of the Middle Iron Age witness an undecorated and localised phase of pottery production. Most of the occupation debris, however, belongs to the end of the Middle Iron Age and Late Iron Age at that site (phases 6E–6H; ibid., figs 149 and 192). In particular, the vast bulk of the pottery was not produced locally with between *c.* 55–78% coming from the Poole Harbour area and a distinctive regional style emerging, the Maiden Castle/Marnhull vessels and decorations (Sharples 1991, fig. 200). A resurgence of decoration was, therefore, at this time coupled with a regional exchange system for pottery in the Dorchester area and elsewhere in Dorset and Somerset (Morris 1987) and this continued into the Late Iron Age.

Activity of the pre-Roman Late Iron Age period is represented at Flagstones from a small number of features. The pottery is completely non-local in source originating from the Poole Harbour area and elsewhere. The vessel forms have been interpreted as distinctively biased in range with with a noticeable absence or infrequency of specific bowl types and a surfeit of re-adapted examples. It is believed that this is the first time

that such variation in a Late Iron Age assemblage in Dorset has been discussed as significant. The ability to recognise such a bias, while probably the result of the incomplete excavation of this undefined settlement, strongly suggests that functional variability across a settlement is possible to ascertain, as was demonstrated for the Early Iron Age enclosed phase at Winnall Down, Hampshire (Fasham 1985). An extension of this approach to investigate the differences between settlements may, therefore, be possible in the future.

The use of the re-adapted vessels with post-firing perforations was examined through residue analysis with unfortunately inconclusive results (Heron 1992). It has long been suggested that perforated later Iron Age vessels were probably used in cheese production (Harding 1974) and some evidence has already been forthcoming to support this interpretation (Evans *et al.* 1987). However, 16 samples from one unperforated and nine perforated vessels from Flagstones (Fig. 70, 10, 17, 19, 20 and Fig. 71, 21–3, 25–7) and other Wessex sites were tested but the results were minimal or too general for interpretation, despite the success of such analysis elsewhere (Evans and Needham 1987; Heron and Pollard 1988). The paucity of perforated vessels in the much larger later Iron Age assemblage from Maiden Castle and the absence of specific 'fineware' forms at Flagstones had suggested that differences existed in the activities between these sites, one a hillfort and the other a settlement. The frequency of charred residues, sooting, limescale, pitting, and abrasion amongst the By-pass material and that from Maiden Castle (Brown 1991, table 67) deserve further investigation beyond the scope of the present discussion.

The recovery of a variety of worked bone artefacts, unworked shale, a clay weight likely to have been used in textile production, and one iron gouge with quantities of butchered animal bone, suggests that more occupation of this period exists in the immediate area. One pit provided a focus for receipt of both human and animal burial in apparently structured deposition, a recognised behavioural pattern for the period. Human burial close to or within settlements has been a consistent part of Dorchester area prehistory and emphasises the inseparable nature of life and death processes.

Summary

Although the excavations along the Southern By-pass were not instigated with the aim to recover complete settlements or monuments from any period, it is possible to examine aspects of the changes in artefact acquisition through production or exchange and the use of artefacts in different contexts. The evidence shows clear changes in the nature of these activites, from local production and long distance exchange in the earlier Neolithic to local production of most domestic goods in the Bronze Age, and eventually the complete loss of local production of common artefacts, such as pottery, by the Late Iron Age in favour of regional trade. The functions performed by these artefacts, however, is much more difficult to deduce, primarily because of the limited focus of several of the excavations along the route, as well as the difficulty of interpreting the data recovered. In many cases, the small quantities of material limited any comparative examination within and between these sites and others in the region, but the presence of new locations of prehistoric activity does contribute to the wider understanding of human adaptation in this area.

4. Environment and Economy: Exploitation and Farming of the Downland

edited by Michael J. Allen

1 Introduction, by Michael J. Allen

Despite the wealth of available environmental data from the Dorchester area, it has been usual for previous projects and archaeological landscape studies to focus on a major monument or single site. Studies have been based on Mount Pleasant (Wainwright 1979a), Maumbury Rings (Bradley 1976) and Maiden Castle (Sharples 1991), and sites along the South Dorset Ridgeway (Woodward 1991). Few have examined the spatial aspects pertinent to a landscape study, with the notable exceptions of the Maiden Castle Landscape Survey (Woodward in Sharples 1991; Evans and Rouse 1991a) and the *South Dorset Ridgeway* (Woodward 1991). Both of these projects were 'landscape' orientated although very little sampling for environmental information was conducted outside the main predefined archaeological sites. The excavations and environmental information from the Dorchester Southern By-pass redress the bias towards a specifically monument based study because the route of the By-pass provides a sample corridor through this exceptional archaeological landscape (Woodward and Smith 1987) which deliberately avoided monuments. It did not intentionally include archaeological sites.

This corridor allowed the sample investigation of a substantial block of downland rather than a number of isolated monuments. The information derived is considered, therefore, to be more representative of landuse and farming practices as a whole within the local landscape. The results of this work are further enhanced by a number of other recent studies in the area; Alington Avenue (Davies *et al.* forthcoming), Fordington Barrow (Bellamy 1991b), Dorchester Greyhound Yard (Woodward *et al.* 1993), and Dorchester County Hall (Smith 1993) all of which include environmental datasets in the form of land snails, faunal assemblages, and charred plant remains.

The aims of the environmental analyses were to characterise and contrast farming practices and the exploitation of natural resources through time. We can use this information to examine how past human populations have used the land, and to define the role of those populations in the shaping, development, and history of this area of chalkland. Because of the large number of sites and environmental available datasets within a relatively small area, the Dorchester Southern By-pass project affords the opportunity, not only for multiple analyses, but attempt the construction a high resolution interpretation of changing mosaics of landuse in order to provide a relatively detailed background to the observable prehistoric activity (Allen 1994).

The environmental data were used to address two spheres of inquiry; that of 'landscape' (ie landscape resources: soils and vegetation), and that of human economy and farming (ie, animal and plant husbandry), the latter being, to an extent, conditioned by the former. These two environmental programmes can be summarised as investigations of:

i) the human impact upon, and intervention with, the landscape, ie. landscape history, and
ii) the exploitation of those resources and attributes, ie. economic evidence.

Although most analyses presented here contribute to both themes they each tend to address predominantly one or the other, and those addressing principally the environment are presented first. The understanding of soil patterns and soil change is foremost as this is seen to largely determine the parameters governing farming potential and possibility. Detailed soil work conducted within the Maiden Castle Landscape Survey (Staines 1991) combined with molluscan analysis provides the foundation for the summary presented here, and carbonised seed and animal bone evidence indicate the operating farming (and trading) practices.

Changes in animal and crop husbandry are recorded, but reasons for those changes are addressed by combining the information from both the 'landscape' and 'farming' lines of inquiry. The environmental information aimed at detecting those changes and determining whether they were a result of environmental and topographical conditions or cultural choice.

In order to achieve these aims a large programme of environmental analysis was conducted to characterise, compare, and interpret both within and between sites. The chalklands contain their own inherent biases in preservation resulting in a dominance of land snail and faunal data. Conversely pollen, waterlogged and mineralised plant remains were not preserved. Bulk soil samples taken from all the sites and processed from many dated features (especially at Flagstones) reveal the comparative scarcity of plant macrofossils to be a result of a widespread low concentration of data rather than a lack of processed material. These samples also produced relatively large quantities of bone which augmented that from manual recovery. Samples for soil analysis were taken to complement and enhance the programme undertaken under the auspices of the

Maiden Castle Landscape Survey (Staines 1991). Samples were taken for land snail from sites, largely as columns of samples through ditches, but also from non-site, colluvial, locations.

2 Prehistoric Soil Patterns of the Dorchester Environs: a Synthesis, by Stephen Staines

Introduction

The current pattern of soils and soil erosion in the Dorchester area has been extensively described and discussed in relationship to Maiden Castle and the Dorchester Environs (Staines 1991). These patterns show that considerable soil changes have taken place over the study area as a result of soil erosion and deposition. The analysis of soils from excavations at Greyhound Yard (Woodward *et al.* 1993), Alington Avenue (Davies *et al.* forthcoming), Fordington Farm (Bellamy 1991b; Woodward *et al.* 1986), and along the route of the Southern Dorchester By-pass (Woodward and Smith 1987) gives considerable additional detail on ancient soils. These soil descriptions, in conjunction with the soil survey of the study area, enables some attempt to be made at the depiction of soil patterns prior to clearance in the Neolithic and the subsequent exploitation of soils for agriculture. This report presents a synthesis of the soil analyses from excavations along the Dorchester Southern By-pass, Alington Avenue, and Dorchester, Greyhound Yard, providing a synthesis of these soil data within a chronological framework which can be described and understood as a result of archaeological research and fieldwork. Full details of analytical and sample details are provided in archive.

Evidence for Soil Change

From the nature of current soil patterns and erosion it is to be expected that considerable soil changes have taken place over the study area as a result of past soil erosion and deposition. The excavations at Greyhound Yard, Alington Avenue, Fordington Farm, and along the route of the By-pass have provided an unrivalled opportunity to examine a range of deposits spanning long time periods. The evidence for soil change comes from several sources:

- soil remnants contained in tree hollows,
- soils buried beneath barrows and other monuments,
- turf lines and discrete soil lenses in fills, and
- the nature of ditch fills themselves.

The work outlined here is described in detail in the various archive reports listed above. Much of the data derive from detailed soil descriptions, analyses for particle size (mechanical analysis), carbonates, and thin-section examination of representative horizons.

Pre-Neolithic and early Neolithic soils

Several deposits revealed during the By-pass excavations represent the eroded remnants of tree-throw hollows (Macphail and Goldberg 1990). The fills to these holes contain both substratum material (B/C horizon) and subsoil material (Bt horizon) and, in the absence of archaeological dating evidence, they could be regarded as representing soils not dissimilar to the original woodland soils.

The largest tree hollow (*02491*) at Maiden Castle Road, had brown, only slightly calcareous, clayey subsoil material which contained areas of oriented clay. Others were more calcareous but contained areas of obviously only slightly modified clayey, non- or slightly calcareous, subsoil material. Low carbonate contents, microstructure, and large clay contents (30–54%) suggest that these materials are the subsoils of acid, clayey argillic brown earths, similar in some ways to those found today on clay-with-flints and plateau drift deposits. The present soils around the sites examined are shallow, light textured (*c.* 25% clay), very chalky and very calcareous. The Mollusca from the largest tree hollow have been examined (*below*) and the results suggest an open country environment. This may have been because no molluscs remain from the original woodland because of acidic soil conditions which are not conducive to their preservation.

Late Neolithic/Bronze Age soils

A buried clayey argillic brown earth was identified beneath the barrow excavated at Fordington Farm. This soil had layers which were tentatively identified as topsoil or upper subsoil material of silty clay loams (32–35% clay) but the subsoil had both high clay content (66% and 58% clay) and contained translocated clay seen in thin section. The soil was thus identified as a fine silty over clayey argillic brown earth which was probably acid prior to barrow construction.

At Greyhound Yard similar soils were found buried beneath Roman structures whilst the fills of the large post-holes of the hengiform timber circle (Late Neolithic) contained cones of non-calcareous silty clay loam and silty clay. Primary fills to the post-holes contained discrete soil remnants in the chalk rubble packing material. These were identified as topsoil, upper and lower subsoil horizons derived from an acid argillic brown earth developed from clayey plateau drift and silty windblown silt (loess).

Several buried turf lines were analysed from the Neolithic enclosure segments at Flagstones. These layers were dark brown lenses with fine blocky and granular structures and occurred at the base of the fills. Clay contents were varied but mostly exceeded 35% (the lower limit of the clay fraction for clayey soils). In thin section, although much obscured by secondary carbonates leached from above and deposited in the 'turf' material, the soil contained areas of carbonate-free soil. This suggests that the original soil may have been relatively carbonate free. The thickness of the original soils are unknown.

The secondary ditch fills and the fills to the central ring-ditch contained very clayey soil as compared with the modern soil on site. There was also a generally

consistent trend of browner soil colours deeper in the ditches. This, combined with a vertical increase in clay content suggests that the original soils may have been clayey acid brown earths.

The fills to the pit-rings below Conygar Hill, which may be of comparable date with Flagstones, show a similar pattern of high clay content and brown soil colours. The fills of nearby ditches are similar again with a vertical (downwards) increase in clay content. It should be noted that all these fills are variably chalky but chalkiness is to be expected from ditches dug into a Chalk substrata even though the surrounding soils are not themselves chalky. Erosion of relatively shallow soils over a chalky substrate could be expected to produce some chalkiness but chalk from banks and from the ditch sides will all contribute.

Other, possibly Neolithic, fills investigated included a quarry feature at Maiden Castle Road which also had a very large clay content in comparison with later fills and modern local soils. Similar information is provided by colluvial deposits at St Georges Road and a section at Middle Farm. At St Georges Road two colluvial sections were examined, one of which was on a slope and comprised the positive portion of a lynchet. Both sections showed increases in clay content from around 25% in the main colluvial mass to around 35% at the base of the colluvium. This is clear evidence for erosion of heavier soils to provide the earliest colluvium with subsequent erosion of lighter soils. In the same way carbonate content can increase upwards suggesting that more and more of the chalky substrate is being exposed to the plough and eroded as the heavier subsoil is stripped off. At Middle Farm most of the colluvium, which is less calcareous here since part of the source material may derive from non-calcareous soils upslope, has only a moderate clay content but a Bronze Age ditch within the colluvial sequence containing much heavier, browner soil with a low carbonate content.

Table 34 clay and calcium carbonate contents (% air dry soil)

	Tree-holes	*LN/ EBA*	*IA/ RB*	*Med.*	*Modern topsoils*
Av. clay %	39	43	36	28	26
Av. $CaCO_2$ %	3	30	52	47	32
No. samples	5	27	17	17	11

NB clay contents are expressed as % of <2 mm peroxidised carbonate-free soil

Romano-British-medieval soils

Other ditch fills and material within other features confirm this pattern. At St Georges Road a series of shallow ditch fills ascribed either to Romano-British or medieval periods show a change in clay content from an

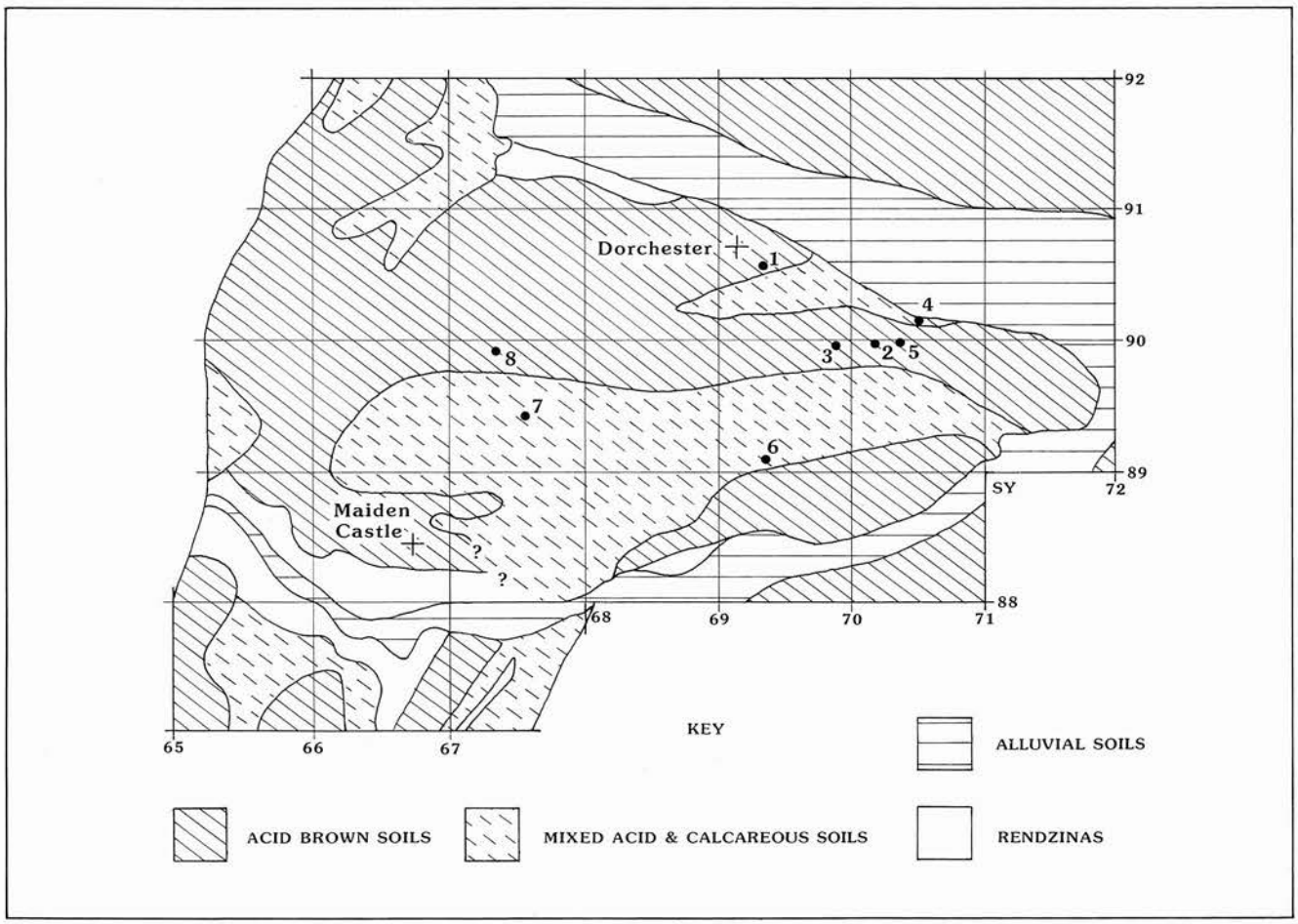


Figure 81 Reconstruction of the soil pattern in the study area prior to significant impact by man on the landscape. Sites described in this volume are numbered.

Table 35 scheme of possible soil and landscape development of the environs of Maiden Castle

Period	*River valleys and adjoining slopes*	*Rolling countryside*	*Ridges and plateaux*
Pre-Neolithic	Gravelly soils in river floodplains; probable shallow rendzina-like soils on adjacent steep slopes	Mosaic of soils: mainly shallow acid brown earths in thin loess & clay-with-flints, with some shallow calcareous soils. Dry valley floors occupied by gravelly acid brown soils	Dominated by deep acid silty over clayey acid brown earths; rare calcareous soils on adjoining slopes to dry valleys
Neolithic	Deforestation & exploitation of calcareous soils on slopes, erosion & shallowing of soils; little deposition in valleys of alluvium	?Little change. ?Some deforestation	Little change except on spur ends abutting river valleys; some erosion of shallower brown soils
Bronze Age	Little exploitation — ?abandonment of eroded soils. ?Alluvium deposition begins in river valleys	Major expansion of agriculture onto this area; start of conversion of brown earths to rendzinas, colluvial deposition starts in dry valleys	Deforestation as more isolated ridges & margins of main plateaux exploited for natural products; spur ends & ridge margins exploited agriculturally, erosion of these areas continues, ?some abandonment due to low soil fertility
Iron Age/ Romano-British	Little exploitation & change on slopes; alluviation in river valleys	Continued erosion of remaining brown earths & conversion to rendzinas; few brown earths remain at end of period except brown calcareous soils in dry valley bottoms	Exploitation as pastoral use, arable usage of edges & minor valley slopes converting shallower brown earths to rendzinas & brown calcareous soils; ?little woodland surviving
Medieval	Arable usage further shallows soils & produces very shallow, very chalky rendzinas; restricted use of these slopes as soils become further impoverished. Alluviation in river valleys; exploitation of alluvial soils where wetness not severe	Intensive exploitation, continued erosion & accumulation of colluvial deposits in dry valleys; few brown soils left	Increased arable pressures especially around margins but many soils too acid for arable use without liming. Erosion of spur ends & plateaux margins
Post-medieval/ modern	Abandonment of steeper slopes to grassland in 20th century. Utilisation of river valleys for dairying	?Continued arable usage except of very chalky rendzinas until 20th century arable expansion. Almost entirely rendzina soil cover except in dry valleys & depressions where colluvium has accumulated	Eventual spread of arable onto acid soils with increase in lime use. Spur ends & ridge edges now rendzinas, rest of ridges still acid brown soils which have lost silty upper horizons around plateaux margins

average of 34% for Romano-British fills to an average of 29% for medieval fills. The mass of analytical data has been reviewed and fills allocated to a broad dating system and from this (Table 34) it is clear that there are consistent trends.

Discussion

It should be noted that these samples cannot be considered to be necessarily a statistically representative sample but it seems that they do represent consistent trends. It is clear that clay contents of soil have declined as erosion has removed the clayey soil cover to replace it with silty, calcareous rendzina soils. The silt in these modern soils cannot derive from the underlying Chalk and it must be presumed that it comes from silty topsoils of adjacent soils which have been transported by erosion. The carbonate figures are more difficult to interpret as the data making up the averages are very variable.

Naturally when dealing with ditch fills it is difficult to distinguish between carbonates deriving from chalk from the ditch sides or adjacent spoil heaps and carbon-

ate derived from inclusion of Chalk substrate in eroded material. Care was taken with sampling to exclude larger chalk fragments and samples from obviously primary fills were excluded from the data utilised here.

However, the average figures quoted here may reflect some soil and land-use changes. The low carbonate percentages of the tree hollow soils (most of the carbonate is believed to derive from leaching from overlying calcareous soils and sediments) are consistent with an interpretation of these soils being acid argillic brown earths before tree-throw and burial. The apparent rise in carbonate values in later fills, with a maximum in Romano-British and medieval fills, could be interpreted as being consistent with intensive exploitation of the soils for agriculture and entrainment of chalky substrates in the soils and ultimately the ditch fills. Unfortunately the virtual absence of buried undisturbed soils of these periods prevents confirmation of this contention. The lower carbonate values of modern topsoils could reflect relatively long periods when the study area was under grassland since the medieval period and/or the likelihood that part at least of the ditch material is derived from subsoils, which would perhaps be more calcareous than topsoils. The values of carbonate content reported here are high as compared with many chalky soils (mainly rendzinas) found today on the Dorset chalkland. This could be interpreted as the effect of intense agricultural activity in the past and also the location of most sites close to a major settlement which would in itself predispose the soils to intensive use.

Following consideration of the evidence presented above an attempt has been made to construct a map (Fig. 81) showing the distribution of soils in the study area as they might have been prior to significant impact by man on the landscape. This map represents a synthesis, not only of the data presented here and in the relevant excavation reports, but partly based on wide experience of soils over the whole of the Dorset chalkland. In addition an attempt has been made to sketch in a possible scenario for soil and landscape changes over the period in question (Table 35). This sequence must, however, be considered provisional.

3 Land-use History: Land Molluscan Evidence, by Michael J. Allen

The region to the south of Dorchester, being predominantly Chalk with highly calcareous soils, is ideal for the preservation of land mollusc shells. The region is one of the most intensively studied landscapes and has already been subjected to a whole series of detailed molluscan analyses. Most studies have been based on the monumental sites of Mount Pleasant (Evans and Jones 1979), Maumbury Rings (Evans 1976), and Maiden Castle (Evans and Rouse 1991b), and few have examined the spatial aspects pertinent to a landscape study with the exceptions of the Maiden Castle Landscape Survey (Woodward in Sharples 1991) and the recently published *South Dorset Ridgeway* (Woodward 1991). In that latter volume, for instance, molluscan analysis and detailed land-use history is based on only limited assemblages from three sites, though the analysis of the colluvial deposits at Loscombe Wood provided some off-site environmental critique (Bell *et al.* 1991).

The route of the Southern Dorchester By-pass provided a sample corridor of 8.1 km of downland. A large sampling programme was conducted to enable the reconstruction the land-use history of the southern Dorchester environs. The analyses here attempt to integrate both on-site and off-site data as well as examining both monumental and non-monumental sites and thus may provide a more representative sample of this archaeological landscape.

Most of the mollusc data are site based, only Middle Farm Trench B and Fordington Bottom offered off-site analyses. One must always be wary of on-site land snail analysis which will obviously be biased towards the open environments of the habitation or activity site itself. If, however, enough analyses are conducted within limited spatial proximity then this bias can be overcome to some extent (Allen 1994) and within this project the density is such that a comprehensive cover is provided (Fig. 1).

Further, these data comprise in excess of 31,000 snails which, when considered with the recent large scale analyses at Alington Avenue (Allen forthcoming), Fordington Farm (Allen 1991b), Greyhound Yard (Allen 1993a), and Fordington Bottom, constitutes a database of over 235 samples and in excess of 75,000 snails which can be considered a sound basis from which to make statements of the land-use history of the southern Dorchester area. This report was completed in 1991.

Method

A total of 127 samples from seven of the main excavations within the southern Dorchester By-pass corridor was analysed. The samples were processed following the methods outlined by Evans (1972) and described elsewhere (Allen 1989; 1990). Processing and identification were undertaken by the author and the extraction of molluscs was aided by Sarah Wyles and Rachael Seager Smith. The ecological groups referred to in text are those defined by Evans (1972, 194–6) and the tripartite classification of ditch sediments is that also outlined by Evans (ibid., 321–8) and Limbrey (1975, 290–300) as exemplified by the recent work of both Evans (1990) and Bell (1990b). Sample size was nominally 1 kg, but in specific cases (eg. Flagstones) 2 kg air-dried samples were processed to ensure mollusc assemblages were large enough to make palaeo-environmental interpretations. The results for the main sequences are presented in Tables 36–8 and Mf 12–13 and in diagrammatic form in text (Figs 82–8) in which nomenclature follows Waldén (1976). All other tables and details are in archive. Magnetic susceptibility was also recorded on a number of samples using the methods described by Allen (1988) in order to augment palaeo-environmental interpretation (cf. Allen 1986, Allen and Macphail 1987).

Molluscs were analysed from excavations at St Georges Road, Flagstones, Conygar Hill, Maiden Castle Farm, Maiden Castle Road, and Middle Farm, trenches A and B, as well as the Western Link in Fordington Bottom.

St Georges Road

A series of spot samples was taken from the primary fills of a number of shallow linear ditches of the Roman to medieval periods with the aim of examining the nature

of these boundaries through time (archive). All the assemblages have a synanthropic element indicative of the high level of human activity represented at this site.

Period 4. Romano-British linear ditches

Three samples taken from Romano-British linear ditches all contained very restricted mollusc assemblages typical of very open dry, possibly arable, conditions seen elsewhere on the By-pass (eg. Maiden Castle Road). The only significant variation here was the occurrence of *Trichia striolata* which, although classified as a shade-loving species, is also highly synanthropic and typical of waste ground, gardens and other habitats disturbed by humans.

Period 6A–C. Medieval linear ditches

A series of eight samples through the medieval period was analysed. These produced significantly different results and two assemblage groups can be discerned. The first group, which included most of the minor linear features, covered all medieval periods. These assemblages were dominated by open country species but also contained *T. striolata, Aegopinella nitidula*, and *Oxychilus draparnaudi* all of which are synanthropic. The local environment depicted by these assemblages is one of generally open habitats with areas highly disturbed by humans and perhaps localised tall grasses within the ditches. The second assemblage group is confined to the two larger, intercutting parallel north–south orientated linear ditches *01105* and *01306* (Period 6).

The assemblages although similar to those described above also contained significantly higher shell numbers and more shade-loving species. Here not all of the shade-loving species can be attributed to humanly disturbed habitats and it is likely that the increase in species diversity and shell numbers is a result of the richer microhabitats provided by a hedged ditch. The high numbers of *Helix aspersa* are typical of such environments but might also be explained by a number of snails hibernating in the loose ditch fills.

Summary

The linear features recorded here indicate a high level of human disturbance concomitant with the level of 'farmyard' type activity recorded in the nature of the archaeological structures. Most of the linear ditches are typical of open environments though one medieval ditch series is certainly suggestive of a hedged ditch and is the only such evidence from the entire By-pass project.

Flagstones

One of the largest and most extensive programmes of mollusc analysis was conducted from the site at Flagstones. A total of 39 samples was analysed spanning the pre-monument Neolithic, the Late Neolithic enclosure, Bronze Age ring-ditch, and subsidiary Late Iron Age contexts and features. In view of the significance of the Neolithic monument large (2 kg) samples were analysed throughout the site to ensure high enough shell numbers for palaeo-environmental interpretation.

Like most sites on the By-pass, all upstanding features (banks and mounds) had long since been ploughed out, and thus unlike Mount Pleasant (Wainwright 1979a) and Maiden Castle (Sharples 1991), no buried old land surfaces were available for analysis. The lack of suitable off-site data in the immediate vicinity led to the extensive sampling programme which consisted primarily of ditch sequences. Fallen turves, however, were recognised and examined in several sections. The detailed analysis here complements the work, in particular, at Alington Avenue (Allen forthcoming) only 120 m to the south-west and Fordington Barrow (Allen 1991b) which are also situated on the Chalk ridge east of Dorchester (Fig. 2).

Pit *00221*; Period 1a

Two isolated pre-monument pits were excavated containing Neolithic bowls of the South-Western Style; pit *00221* was sampled (Fig. 20, section J) and five contiguous samples were analysed (Fig. 82). Shell numbers were low throughout. The basal sample was dominated by *Oxychilus cellarius*, which attains 50%, and is an assemblage which is particularly difficult to interpret. Although it is a common woodland species it is also carnivorous (being found within the Neolithic burials at Waylands Smithy; Kerney 1991, 88). It can occasionally occur on 'bare chalk downs ... where no shelter or accumulated moisture is to be had' (Boycott 1934) and is common in long grassland. Here it is not accompanied by a significant proportion of other shade-loving species but was found with both semi-articulated sheep metatarsals and a series of more typical open country species. On balance this probably represents a fairly open, rather than shady, environment.

The overlying fills are dominated by open country species in particular *Vallonia costata* and *Pupilla muscorum* which increase up profile. These are assemblages of open, fairly rich, grassland. Magnetic susceptibility values are relatively high (Table 36) and concur with the richer more mesic environments indicated by the molluscs. There is however a dramatic change at the top of the sequence. The relative reduction in both *P. muscorum* and *V. costata* with the accompanied rises in *Helicella itala* and *Trichia hispida*, probably indicates the onset of agriculture. Interestingly two freshwater species; *Valvata piscinalis* and *Bithynia tentaculata* are present. Their occurrence in this sample is probably a result of accidental incorporation by animal or man, but, if the latter, may indicate the exploitation of the riverine resources of either the Frome or the South Winterborne. As the occurrence of two species is particularly rare, it is just possible that this might represent a form of manuring with riverine material (cf. Allen 1995b) or the use of rushes for thatch or bedding.

A radiocarbon assay from the base of the pit provided a determination of 4960±80 BP; 3970–3540 cal. BC (HAR–9161) which indicates that fairly open conditions existed during the earlier–mid Neolithic. If woodland existed, it had been cleared from around this site at least, and probably quite extensively in view of the paucity of shade-loving species, by this time.

The Neolithic monument; Period 1b

Two ditch segments were sampled in the southern area of the causeway circuit; the first (segment *7*) had a distinct and sharp edged humic turf lying 0.10 m above the floor of the ditch, while the second (segment *13*) had a fallen turf overlying the coarse primary fill.

Table 36 Flagstones: Neolithic mollusc sequences and magnetic susceptibility

Period	*1A*					*1B*							
Feature	*Pre-enclosure pit 00221*					*Neolithic enclosure ditch segment 7*							
Sample	*22*	*23*	*24*	*25*	*26*	*1*	*2*	*30*	*31*	*4*	*5*	*6*	*7*
Context	*00259*		*00260*			*00342*		*00341*		*00332*		*00336*	
Depth (cm)	*60-67*	*55-60*	*45-55*	*30-45*		*155-61*	*150-55*	*144-50*	*142-44*	*120-40*	*105-20*	*90-105*	*75-90*
Wt (g)	*1950*	*2000*	*2000*	*2000*	*1700*	*950*	*1312*	*1000*	*1000*	*2000*	*2000*	*2000*	*2000*
Pomatias elegans (Müller)	3	9	2	+	+	1	1	1	2	+	+	+	1
Carychium tridentatum (Risso)	1	2	–	–	–	–	3	6	63	–	–	–	–
Carychium spp.	–	–	1	1	–	–	–	–	–	1	2	–	–
Cochlicopa lubrica (Müller)	–	–	–	–	–	–	1	–	6	–	–	–	–
Cochlicopa lubricella (Porro)	–	–	–	–	–	–	–	–	–	–	–	–	–
Cochlicopa spp.	1	4	3	1	–	5	–	9	25	–	1	–	6
Vertigo pygmaea (Draparnaud)	+	1	–	–	–	1	8	15	49	–	–	–	5
Vertigo spp.	–	–	–	–	–	–	–	–	–	+	–	–	–
Pupilla muscorum (Linnaeus)	8	20	18	5	2	2	3	27	21	–	1	–	1
Vallonia costata (Müller)	8	17	14	11	1	1	2	23	45	2	–	2	6
Vallonia excentrica Sterki	–	3	3	2	4	8	27	141	270	2	3	4	13
Punctum pygmaeum (Draparnaud)	–	–	–	–	–	1	–	4	4	–	–	–	–
Discus rotundatus (Müller)	1	1	2	–	–	–	–	–	–	+	–	3	6
Vitrina pellucida (Müller)	–	–	–	–	–	–	1	3	–	–	–	–	3
Vitrea contracta (Westerlund)	–	–	–	2	–	–	–	–	–	–	–	–	–
Nesovitrea hammonis (Ström)	–	–	–	–	–	–	1	5	18	–	–	–	2
Aegopinella nitidula (Draparnaud)	–	–	–	–	–	–	–	–	–	–	–	–	–
Oxychilus cellarius (Müller)	32	5	2	1	1	–	–	–	–	–	–	2	7
Oxychilus alliarius (Müller)	1	–	–	–	–	–	–	–	–	–	–	–	–
Limacidae	1	2	–	1	3	–	–	5	2	–	–	1	3
Cecilioides acicula (Müller)	12	53	116	185	218	–	–	–	–	–	–	1	–
Cochlodina laminata (Montagu)	1	1	–	–	–	–	–	–	–	–	–	–	–
Clausilia bidentata (Ström)	–	1	–	–	–	–	–	–	–	–	–	–	–
Clausiliidae	–	–	+	–	–	–	–	–	–	–	–	–	–
Helicella itala (Linnaeus)	–	11	3	4	16	5	8	61	83	–	–	4	15
Trichia hispida (Linnaeus)	6	10	3	1	10	7	25	164	175	1	4	4	29
Helicigona lapicida (Linnaeus)	–	+	–	–	–	–	–	–	–	–	–	–	–
Cepaea nemoralis (Linnaeus)	–	–	–	–	–	–	1	–	1	–	–	–	–
Cepaea/Arianta spp.	2	6	6	1	+	1	–	6	4	–	3	+	+
Valvata piscinalis (Müller)	–	–	–	–	1	–	–	–	–	–	–	–	–
Bithynia tentaculata (Linnaeus)	–	–	–	–	–	+	–	–	–	–	–	–	–
Taxa	12	15	11	11	8	10	12	14	13	4	6	7	13
Shannon index (*H'*)	1.56	1.99	1.52	1.64	1.60	1.97	1.79	1.65	1.90	1.33	0.88	1.86	2.00
Total	65	93	57	30	38	32	81	470	768	6	14	20	97
Magnetic susceptibility ($x10^{-8}$SI/kg)	62	94	60	30	30	61	47	101	141	7	9	9	16

Note: all totals exclude Cecilioides acicula

Table 36 (cont.)

Period	1B										
Feature	Segment 7					Segment 13					
Sample	9	10	11	12	13	33	34	35	36	37	38
Context	Turf	00335			00308	00382		00388	00384		00389
Depth (cm)	75-85	65-75	55-65	35-45	5-20	110-30	90-110	77-90	71-77	65-69	30-35
Wt (g)	1976	1832	2000	2000	1916	2000	2000	2000	2000	2000	2000
Pomatias elegans (Müller)	8	3	5	–	–	–	–	2	4	6	–
Carychium tridentatum (Risso)	35	9	15	3	–	–	–	–	–	2	43
Carychium spp.	–	–	–	–	–	–	–	–	–	–	–
Cochlicopa lubrica (Müller)	–	6	–	–	–	–	–	–	–	5	1
Cochlicopa lubricella (Porro)	1	–	–	–	–	–	–	–	–	–	–
Cochlicopa spp.	19	10	3	10	16	–	–	2	1	18	4
Vertigo pygmaea (Draparnaud)	33	10	6	2	4	–	–	2	2	23	–
Vertigo spp.	–	–	–	–	–	–	–	–	–	–	–
Pupilla muscorum (Linnaeus)	44	9	4	31	43	1	–	4	6	40	1
Vallonia costata (Müller)	86	31	22	36	18	–	1	–	–	46	5
Vallonia excentrica Sterki	156	60	38	71	92	–	7	22	20	132	9
Punctum pygmaeum (Draparnaud)	2	2	–	5	8	–	–	–	–	3	–
Discus rotundatus (Müller)	21	3	5	3	–	–	–	–	–	–	3
Vitrina pellucida (Müller)	1	1	–	–	–	–	–	1	–	3	–
Vitrea contracta (Westerlund)	–	1	–	–	1	–	–	–	–	–	–
Nesovitrea hammonis (Ström)	9	3	4	4	2	–	–	–	–	–	2
Aegopinella nitidula (Draparnaud)	–	–	–	1	–	–	–	2	1	4	–
Oxychilus cellarius (Müller)	3	1	–	2	–	–	–	–	–	–	–
Oxychilus alliarius (Müller)	–	–	–	–	–	–	–	–	–	–	–
Limacidae	–	–	3	7	13	–	–	–	–	3	1
Cecilioides acicula (Müller)	1	2	3	377	141	–	–	–	1	–	81
Cochlodina laminata (Montagu)	–	–	–	–	–	–	–	–	1	–	–
Clausilia bidentata (Ström)	–	–	–	1	1	–	–	–	–	1	–
Clausiliidae	–	–	–	–	–	–	–	–	–	–	–
Helicella itala (Linnaeus)	129	19	20	99	92	2	10	15	21	114	23
Trichia hispida (Linnaeus)	251	76	31	72	76	2	6	29	6	138	2
Helicigona lapicida (Linnaeus)	–	–	–	–	–	–	–	–	–	–	–
Cepaea nemoralis (Linnaeus)	–	–	–	–	–	–	–	–	–	–	–
Cepaea/Arianta spp.	11	1	2	2	2	–	–	1	4	10	+
Valvata piscinalis (Müller)	–	–	–	–	–	–	–	–	–	–	–
Bithynia tentaculata (Linnaeus)	–	–	–	–	–	–	–	–	–	–	–
Taxa	15	16	13	13	13	3	4	10	10	15	10
Shannon index (H')	1.96	1.99	2.03	1.82	1.73	1.06	1.20	1.52	1.57	1.89	1.61
Total	809	245	158	368	368	5	24	80	66	548	94
Magnetic susceptibility ($x10^{-8}$SI/kg)	120	71	27	64	64	11	22	45	81	99	11

Note: all totals exclude Cecilioides acicula

SITE 3: FLAGSTONES
Early Neolithic Pit 00221

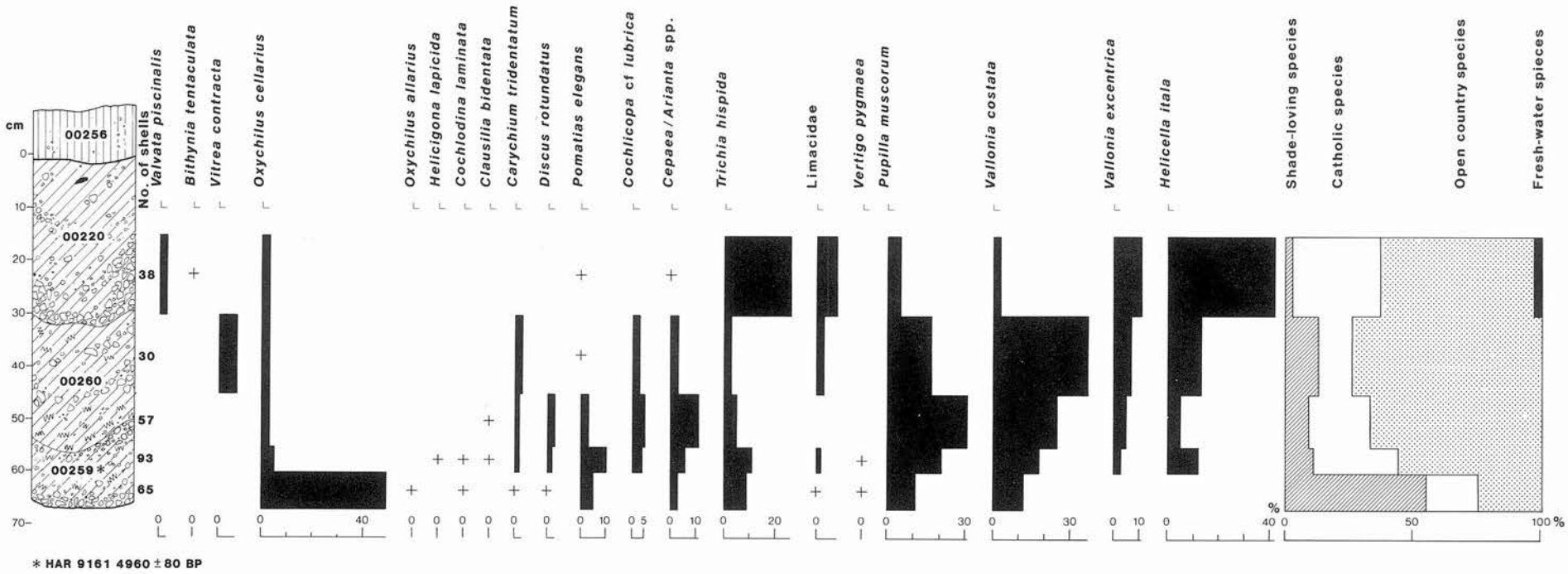


Figure 82 Land molluscs: Flagstones Period 1A; sequence from pre-enclosure pit 221

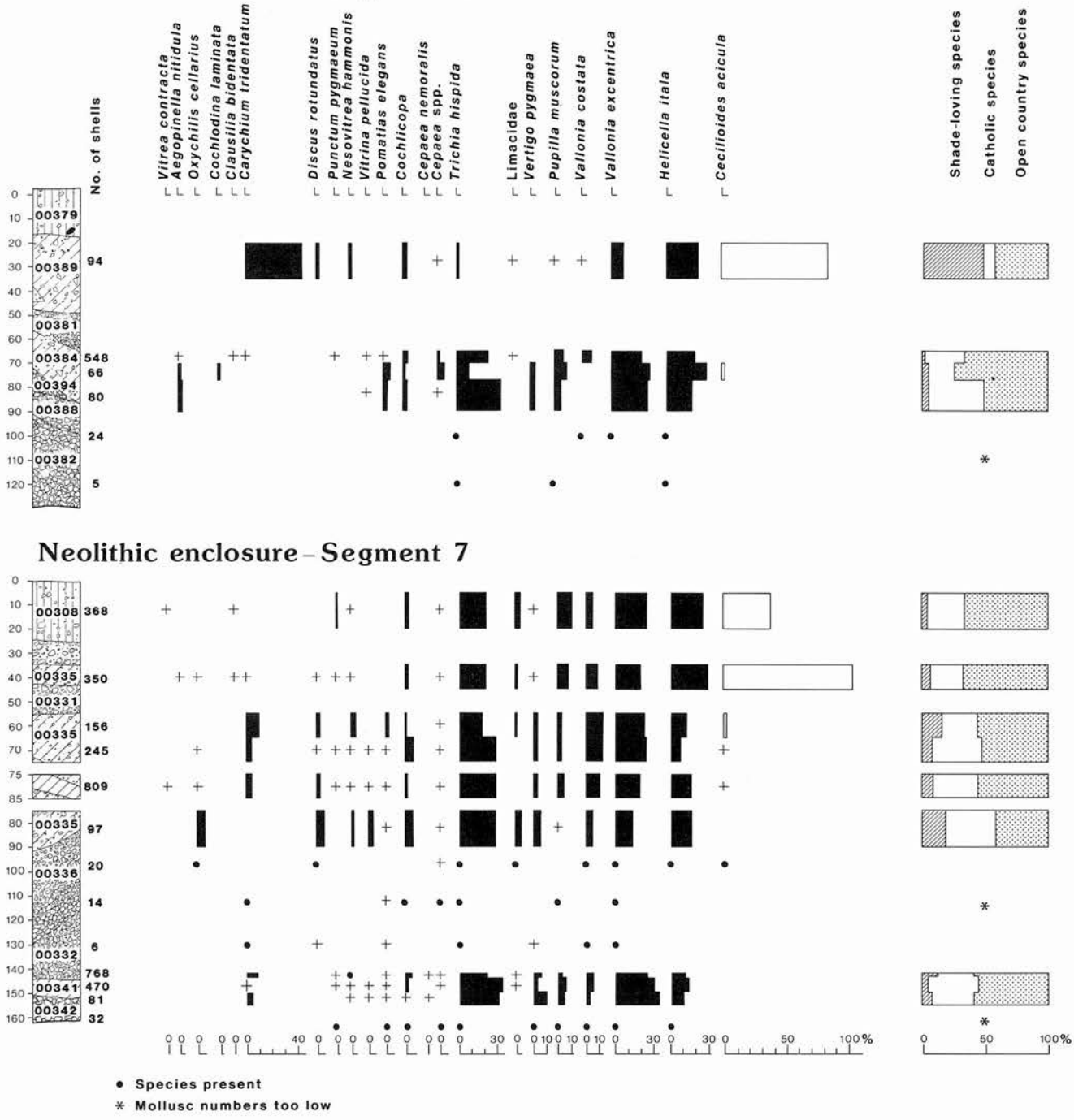


Figure 83 Land molluscs: Flagstones Period 1B; sequences from the Neolithic enclosure

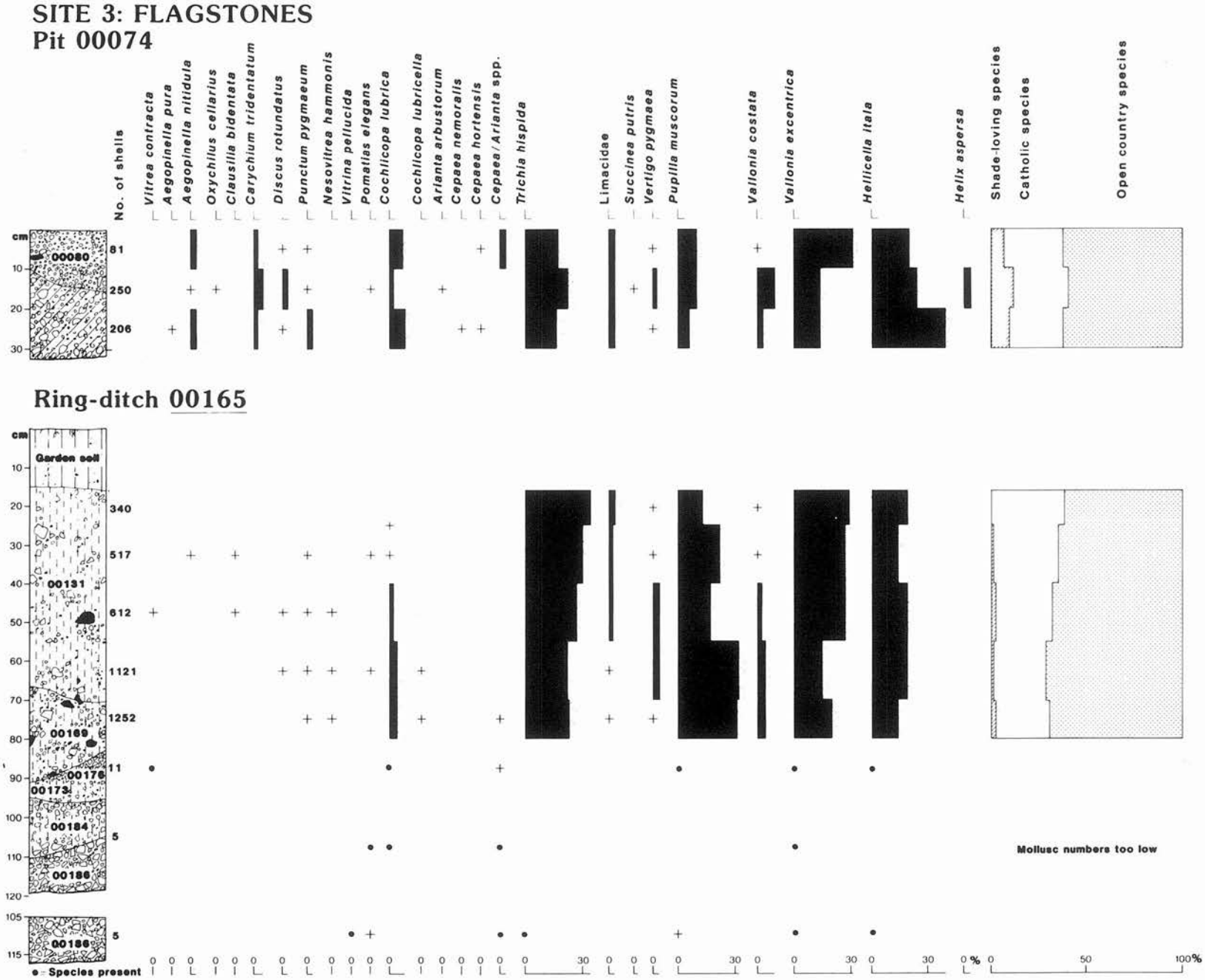


Figure 84 Land molluscs: Flagstones Periods 2 and 3; sequences from ring-ditch 00165 and Iron Age pit 0074

Table 37 Flagstones; mollusc sequences and magnetic susceptibility data from the Bronze Age ring-ditch, peripheral pits, and Late Iron Age features

Period	2											3	4		
Feature	Ring-ditch 00165								Pit 00197		Pit 00161	00074			Tree
Sample	14	15	16	17	18	19	20	21	27	28	29	39	40	41	32
Context	00186	00184	00176/3	00169	00131				00419	00196	00183	0080			
Depth (cm)	spot	100-115	80-95	70-80	55-70	40-55	25-40	16-25				20-30	10-20	0-10	
Wt (g)	2000	1890	1740	2000	2000	2000	2000	1800	2000	2000	2000	1000	1000	1000	1000
Pomatias elegans (Müller)	+	1	–	–	1	–	1	–	–	–	–	–	1	–	–
Carychium tridentatum (Risso)	–	–	–	–	–	–	–	–	–	–	–	5	12	1	–
Succinea putris (Linnaeus)	–	–	–	–	–	–	–	–	–	–	–	–	1	–	–
Cochlicopa lubrica (Müller)	–	–	–	25	18	–	–	–	1	6	1	–	2	–	–
Cochlicopa lubricella (Porro)	–	–	–	2	1	–	–	–	–	–	–	–	–	–	–
Cochlicopa spp.	–	1	1	26	28	9	7	4	4	10	7	17	4	6	–
Vertigo pygmaea (Draparnaud)	–	–	–	11	30	18	7	4	–	10	9	1	6	1	–
Vertigo spp.	–	–	–	–	–	–	–	–	2	–	–	–	–	–	–
Pupilla muscorum (Linnaeus)	+	–	4	390	355	103	111	43	19	199	101	12	25	8	–
Vallonia costata (Müller)	–	–	–	55	40	12	6	4	10	22	2	7	23	1	2
Vallonia excentrica Sterki	1	1	3	247	164	165	139	98	–	96	76	28	35	25	12
Punctum pygmaeum (Draparnaud)	–	–	–	12	7	4	4	–	–	4	1	6	3	1	–
Discus rotundatus (Müller)	–	–	–	–	–	–	–	–	–	–	–	1	8	1	–
Vitrina pellucida (Müller)	1	–	–	–	2	1	–	–	–	–	1	–	–	–	–
Vitrea contracta (Westerlund)	–	–	1	–	–	2	–	–	–	–	–	–	–	–	–
Nesovitrea hammonis (Ström)	–	–	–	8	3	2	–	–	–	–	–	–	–	–	–
Aegopinella pura (Alder)	–	–	–	–	–	–	–	–	–	–	–	1	–	–	–
Aegopinella nitidula (Draparnaud)	–	–	–	–	–	–	1	–	–	1	–	6	1	2	–
Oxychilus cellarius (Müller)	–	–	–	–	–	–	–	–	–	–	–	–	3	–	–
Limacidae	–	–	–	9	13	14	12	9	–	4	–	7	7	2	3
Cecilioides acicula (Müller)	3	–	–	26	60	162	345	417	5	–	6	3	1	9	130
Clausilia bidentata (Ström)	–	–	–	–	–	1	1	–	–	–	–	–	–	–	–
Helicella itala (Linnaeus)	1	–	2	175	214	117	75	63	4	57	20	81	61	16	25
Trichia hispida (Linnaeus)	1	–	–	291	245	164	153	115	8	46	30	32	54	14	21
Arianta arbustorum (Linnaeus)	–	–	–	–	–	–	–	–	–	–	–	–	+	–	–
Cepaea nemoralis (Linnaeus)	–	–	–	–	–	–	–	–	–	–	–	1	–	–	–
Cepaea hortensis (Müller)	–	–	–	–	–	–	–	–	–	–	–	1	–	1	–
Cepaea/Arianta spp.	1	2	+	1	–	–	–	–	–	1	–	–	4	2	–
Helix aspersa (Müller)	–	–	–	–	–	–	–	+	–	–	–	–	–	–	+
Taxa	5	4	5	12	13	13	12	8	7	11	9	15	16	13	5
Shannon index (*H'*)	1.23	0.64	1.25	1.73	1.77	1.68	1.60	1.50	1.62	1.63	1.50	1.25	2.11	1.79	1.30
Total	5	5	11	1252	1121	612	517	340	54	456	248	206	250	81	63
Magnetic susceptibility ($x10^{-8}$SI/kg)	21	37	28	35		54	50	61	10	15	13	48	47	37	28

Note: All totals exclude *Cecilioides acicula*

Segment 7
The base of the ditch contained a thin layer of chalk mud and another of small chalk rubble (Fig. 19, section A). The chalk mud contained very few shells, however, the chalk rubble lying just beneath the fallen turf produced enough shells for palaeo-environmental interpretation and displayed an almost identical assemblage to those from the turf. The turf, which undoubtedly originated from the ground surface through which the ditch was cut, contained a predominantly open country assemblage and high shell numbers (Fig. 83). These data, together with a significant peak in magnetic susceptibility (Table 36), confirm the field interpretation of a fallen turf. Although the turf was sampled at 0.05 m intervals in an attempt to examine any chronological variation, no significant change was observed except that shell numbers increased in the upper sample. The dominant species were *T. hispida* and *V. excentrica* with *H. itala* and a number of other open country species. A significant number of shade loving species were present albeit in low numbers. This probably represents a well, but not intensively, grazed established grassland although the possibility of arable or similar habitats cannot be discounted. The fact that a stonefree turf was recovered reinforces the interpretation of grassland.

The main coarse primary fills were largely devoid of shells but the species present were predominantly those seen in the fallen turf. The samples from the secondary and tertiary fills are remarkably constant. The lower, more humic and less stony, secondary fill (context 00335) has higher shell numbers and magnetic susceptibility values (Table 36) but does not signify a change in the local environment; this is a temporary stabilisation horizon. The assemblages are largely open country and almost identical in composition to those already described from the basal fallen turf, thus indicating a continuation of grassland conditions.

Segment 13
A second ditch fill sequence was analysed primarily because of the occurrence of a fallen turf overlying the primary fills which might enable any change within the local environments to be determined. Molluscs only occurred in significant numbers in the secondary and tertiary fills (Fig. 19, section B). The assemblages are almost identical to those from segment 7 (Fig. 83). The fallen turf showed an increase in both shell numbers and magnetic susceptibility. Only in the upper fill (context 00389) can any change in the assemblages can be seen. A reduction in the open country species and increase in *Carychium tridentatum* is probably indicative of long, ungrazed grassland. A slight increase in *H. itala* can also be detected indicating a reduction in grazing pressure. This episode can probably be attributed to the Late Iron Age on the basis of the associated pottery.

Period 2: Bronze Age ring-ditch *00165* and associated features

A column of eight samples from the ring-ditch was analysed (Fig. 32, section K). Although all the primary fills were very low in shells they were almost exclusively open country species (Fig. 84). The finer fills overlying the coarse chalk rubble produced assemblages characteristic of harsh xerophilous arable conditions and can be seen as typical ploughwash deposits. Associated pits around the ring-ditch also produced assemblages of open, probably arable, conditions (Table 37).

Period 3: Late Iron Age deposits

A short sequence of samples from pit *00074* produced open country assemblages with significantly more species which prefer more mesic oligotrophic environments and probably represent moist longer grasses (Fig. 84). The reduction of the large Helicellid *H. itala* in the upper samples might be a result of trampling and higher grazing density producing a short cropped turf suitable for the expansion of *V. excentrica*. Thus even in this short sequence a change from mesic to short grass can be detected. Although *Helix aspersa* is recorded in one sample from this context and may indicate Roman or post-Roman infills (Kerney 1977), here they may represent a small hibernating group which has burrowed into the top of the context at a later date.

Summary

It is evident from the data that by the earlier Neolithic period an essentially open landscape existed at Flagstones. Further, it may be implied from the specialised open country mollusc faunas and their continuous existence, that clearance was both extensive and well established by the Early Neolithic. The earliest evidence indicates an open downland of long ungrazed or only lightly grazed grassland. However, by the later Neolithic a well grazed short turfed downland existed. It was in this pastoral environment that the monument was constructed. This grassland can be seen to extend at least across to Alington Avenue (Allen forthcoming) and Fordington Farm (Allen 1991b) at this time. The monument existed in grassland for only a limited period of time (primary infills) and was then ploughed. Although no evidence of a field system existed, the Neolithic monument seems to have been under plough and although the Bronze Age barrow ditches are filled with ploughwash, the mound itself seems to have been respected. By the Late Iron Age the re-establishment of grassy downland conditions indicates cessation of tillage locally. Initially this grass within the ditches was relatively long and probably only lightly grazed. Whether this was an extremely localised 'cropmark' effect just confined to the ditches cannot be determined, but this longer grass was soon more intensively grazed producing a typical downland short grass turf.

Conygar Hill

Pit-Rings

A series of spot samples was taken by the excavator from both the lower and upper fills of a number of pits from both pit-rings (Figs 37 and 39). Shell numbers varied considerably, but the assemblages were consistent and represent very open conditions. All 14 samples were dominated by the open country species, in particular *P. muscorum*, *V. excentrica*, *H. itala* and *T. hispida* (Mf 12).

These assemblages, containing the xerophilous species *H. itala* together with *P. muscorum* and the Vallonias are typical

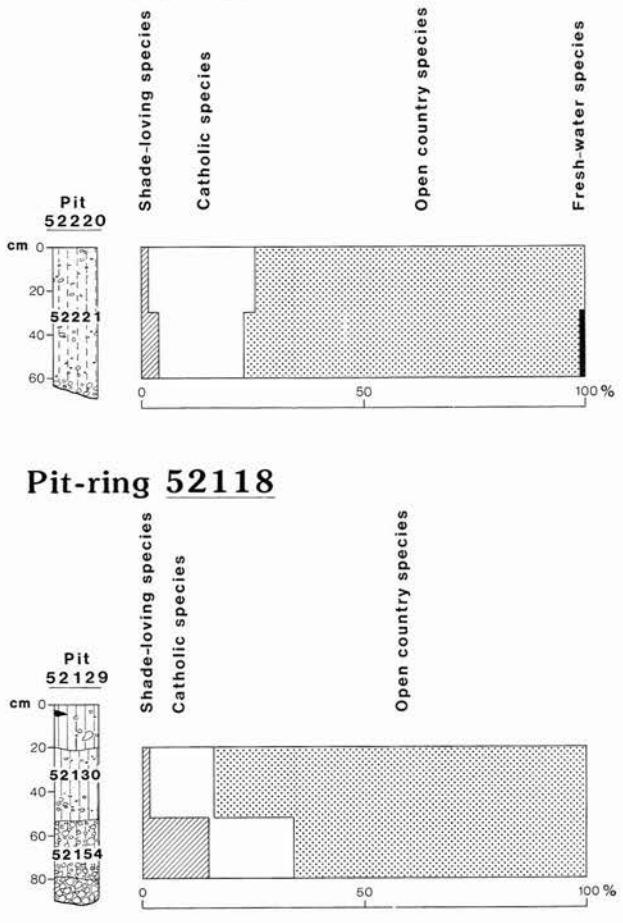


Figure 85 Land molluscs: Conygar Hill; summary diagram of assemblages from pit-rings 52118 and 52100

of short-turfed, open, dry, grazed grassland. However, the basal samples of both post rings but in particular pit *52129* contained higher proportions of shade-loving species (Fig. 85), notably *Vitrina pellucida, Aegopinella nitidula, Nesovitrea hammonis, Carychium tridentatum*, and *Vitrea* spp, none of which are obligatory woodland species. This suggests slightly more mesic conditions provided by longer, probably ungrazed, or only lightly grazed grassland.

Two specimens of the freshwater slum group *Lymnaea* cf. *truncatula* were recovered. This species probably survived in the stream and adjacent environments of the South Winterborne. Its occurrence here is outside its expected ecological range and probably represents accidental introduction by human or animal action.

No significant variation in the assemblages could be detected between the two rings. In general the samples from pit-ring *52118* produced less shells and proportionally slightly more shade loving species. This might possibly indicate that this pit-ring was constructed slightly before pit-ring *52100*, when the downland grass was slightly longer and the soil more acidic; but such statements must remain highly speculative. If any time difference between the construction of the two monuments it was probably minimal.

Magnetic susceptibility

The magnetic susceptibility results were inconclusive, except that the basal fills produced lower readings (averaging 13.6 SI Units x 10^{-18} SI/Kg) and the upper fills averaged 28. The main factor for variation here being the more calcareous lower fills 'diluting' the susceptibility reading. Interestingly though, the reading for the upper fills falls in the centre of the grassland range of susceptibility results recorded by Allen (1988, 73).

Summary

The pit-rings were constructed in well-established long, ungrazed grassland and probably survived in grassy downland. Some indication of possible exploitation of the South Winterborne is suggested by the recovery of fresh-water molluscs.

Maiden Castle Farm

Ring-ditches

Samples were examined from three of the four ring-ditches investigated (Figs 40 and 41). Two spot samples were provided by the excavator from lower and upper fills of ring-ditches *52034* and *52045* whilst a contiguous column of samples was taken from ring-ditch *02027* by the writer. Samples were taken with aim of determining the immediate pre- and post-monument environment.

Ring-ditch 02027

A contiguous column of five samples was taken from the northern section of the ditch (Fig. 41, section D). Unfortunately no buried soil existed beneath the extensively plough damaged monument which only survived as a badly eroded ring-ditch. Furthermore, no turves or humic horizons derived from an old land surface were noted in any of the ditch sections. The results of analysis are presented in Figure 86.

The basal samples contained few shells but these were predominantly of open country species. Lack of shells in those fills results from the rubbly nature of the deposits which accumulate quickly and are not conducive for snail life. The lower secondary fills (context 02007), were predominantly a fine calcareous loam with chalk stones. Stoniness decreased up the profile and, conversely, mollusc numbers increased. The assemblages displayed a restricted taxonomic range and were dominated by *H. itala*, *V. costata*, *P. muscorum*, and *Trichia hispida* (Fig. 86). These assemblages are typical of very open xerophilous conditions. *H. itala* occurs in very high proportions (29%) and is probably the most characteristic open country species (Evans 1972, 180); it prefers the hottest and driest habitats (Boycott 1934) while *V. excentrica* is the most xerophile of its genus (Thomas 1977a). These two species account for approximately 50% of the assemblages. The palaeo-molluscan fauna indicates a very open landscape and cultivated fields.

The occurrence of a single stray specimen of *Anisus leucostoma* is of particular interest. It is a fresh–brackish water species that lives in ponds, marshes, and wet ditches, and although it can resist temporary drier conditions (Ellis 1969) it cannot be seen as a part of the ditch assemblage. It must therefore have been brought in to the site, perhaps on the foot of a bird as commonly suggested for such stray species (eg. Thomas 1977b) or, perhaps, with manuring or mulching material for the arable fields.

The molluscan evidence indicates that the barrow was constructed in a very open, probably arable, landscape. The natural ditch fills are augmented by ploughwash from the adjacent tilled fields. Although there are indications of minor

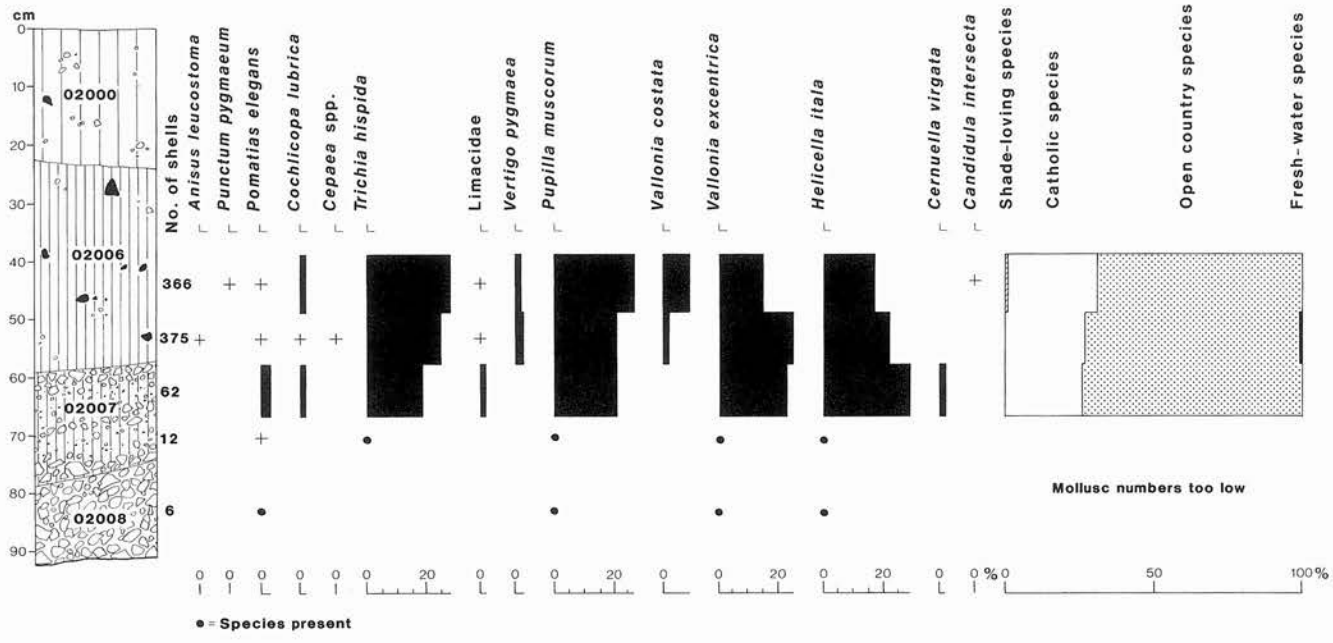


Figure 86 Land molluscs: Maiden Castle Farm; sequence from ring-ditch 02027

changes in the faunal composition with *T. hispida* becoming more abundant at the expense of *H. itala* (Fig. 86) the overall impression is of continuous open, dry, arable conditions prevailing at least during the accretion of the primary and secondary fills. The single occurrences of Introduced Helicellids (*Cernuella virgata* and *Candidula intersecta*) may indicate infills of medieval or post-medieval date but are probably intrusive here as some soil mixing is indicated by earthworm channels and the very high numbers of the burrowing species *Cecilioides acicula*.

Ring-ditches 52034 and 52045

Samples from the lower and upper fills of each of the ring-ditches were examine. The mollusc assemblages were impoverished. Although small assemblages, the predominant species seem to be those described above from ring-ditch *02027*. All the ring-ditches were built in the same or similar arable conditions.

Summary

It is evident that all the ring-ditches were built in a very open, intensively arable landscape, and were sited on thin eroded soils. The ditches rapidly became infilled and the monuments may even have been damaged by prehistoric ploughing.

Maiden Castle Road

A Neolithic/Early Bronze Age quarry feature and a number of Romano-British linear ditches were sampled by the writer and this was augmented by spot samples from a tree hollow provided by S. Staines. Soil analyses were also conducted on the same tree hollow sample (archive). The results of molluscan analysis are presented in microfiche (Mf 13).

Tree hollows

Three samples from feature *02491*, thought to be a tree hollow, were analysed. Few shells were recovered from the samples and none could be classified as shade-loving. All three depauperate assemblages were typical open country ones; if the feature was a tree hollow then the mollusc assemblages did not represent faunas of a wood or shrubby environment.

Neolithic/Early Bronze Age quarry; *02287*

Two spot samples were taken from this amorphous feature. The lower sample, of earlier prehistoric date, produced a limited assemblage of predominantly open country species dominated by *V. excentrica*. The upper sample, probably later prehistoric or Romano-British in date, yielded over 240 shells, predominantly open country species and again dominated by *V. excentrica*. Although separated by a considerable period of time these two assemblages represent similar, if not identical, environments.

Romano-British ditches

A series of Romano-British trackway and boundary ditches was sampled. Sampling was undertaken not only to determine the nature of the boundary ditches but also to examine any change within that environment through the life of the ditches. A number of spot samples from recuts and basal fills of replacement ditches in the northern end of the excavation (Fig. 43) were examined. All assemblages were dominated by open country species and shells were never abundant.

Earlier Romano-British ditched trackway

Two distinct groups could be identified. The basal fills of ditches *02237*, *02239*, and *02241* were dominated by *P. muscorum* with *V. excentrica*, *T. hispida*, and *H. itala* forming the majority of the assemblages. These probably represent fairly stable short turfed grassland conditions.

The upper fill of ditch *02241* and the basal fills of ditch *02243* were dominated by *V. excentrica* and *T. hispida* and a significant reduction in both *P. muscorum* and *H. itala* was recorded together with the presence of shade loving species including *Discus rotundatus*, *A. nitidula*, and *O. cellarius*. Such assemblages probably represent a combination of typical ploughwash deposits and moister conditions perhaps afforded by locally taller vegetation stands such as longer grasses in the ditch and on the field or track edge.

Curvilinear gullies

Two samples from the basal fills of the curvilinear gullies (*02303* and *02302*) were dominated by *V. excentrica* and *T. hispida* and produced no shade loving species. These assemblages are typical of ploughwash and indicate continued arable conditions.

Summary

Even from the later Neolithic\Early Bronze Age this area was one of extensive agricultural activity. Short turfed grassland of intensively grazed pasture existed, which gave way to a more intensive arable regime.

Middle Farm

Two main molluscan studies were conducted at Middle Farm (Fig. 55 and archive). The first from the colluvial deposits in trench B at the base of the slope provides off-site and a more rounded landscape picture, while two sequences from ditches within the occupation area (trench A) give a basic history of the local site environment.

Trench B; The colluvial sequence

A column of 13 contiguous samples was taken through the deepest point in the colluvial sequence and within the section hand excavated for the recovery of artefacts (Fig. 62). The deeper deposits were on the valley edge, at the base of the slope, rather than in the centre of the relatively broad, flat valley.

The advantage of studying the colluvial sequence is that it provides an off-site, non-site biased, land-use history into which to fit the more site oriented molluscan data. Here, however, as with many colluvial sequences (Allen 1988; 1991a; 1992; 1994) Beaker activity was discovered beneath the hillwash. The molluscan data provide on-site data relating to this episode of activity and more general off-site evidence relating to the Bronze Age and later land-use in the vicinity.

In order to interpret the environments of erosion and deposition it is necessary to integrate the palaeomolluscan evidence with the field observations and interpretations of the colluvial sequence. Measurements of depths are those at the sampling point (Figs 62 and 87).

Stratigraphic sequence

Depth (cm)	*Context*	*Description*
0–21	50802	*Topsoil*: dark greyish-brown silty loam with rare (5%) small flints
21–38	50803	*Stony horizon*: many medium & large flints (70%), common small & very small chalk pieces in medium light brown sily clay loam matrix. Deposit varied from 0.15 m to 0.2 m in thickness, being greatest at centre of valley floor
38–67	50804	*Upper colluvium*: pale medium brown silty clay loam, calcareous with rare flint & some small–medium chalk pieces. A 0.4 m thick layer similar to *50895* but distinguished by slightly paler brown colour. Deposit only occurred across centre of the valley and 'butted' positive lynchet *03044* on W. slope of valley
67–80	50895	*Upper colluvium*: medium brown silty clay loam with occasional very small chalk & small flint inclusions. Deposit only occurred across centre of valley
80–91	50805	*Stony lens*: calcareous band of abundant medium flints (70%) & small–very small chalk pieces in silty clay matrix. Lens occurred only across centre of valley floor, tapering to E., & to W. 'butted' positive lynchet *03044*
91–97	50806	*Lower colluvium*: weakly calcareous brown silty clay with some smaller flint (7–8%) & very small–small chalk fragments (5%), becoming stonier (predominantly flinty) towards base (*50807*). Deposit occurred across floor of coombe & to W. infilled negative lynchet *03026*
97–102	50807	*Flint band*: intermittent band of small–medium flints in brown silty clay loam matrix. Lens 0.05 m thick, only occurring in deepest part of deposit & tapering to E. Most pronounced in centre of coombe, cut by ditch *03001*
102–120	50808	*Stonefree lower colluvium*: almost stonefree dark brown silty clay with weak blocky peds & occasional flint inclusions. Did not contain chalk flecking apparent in overlying layers. Deposit was only *c.* 0.1 m thick & occurred in base of valley, not so extensive as underlying valley gravels (*50809*). Abrupt boundary with gravels & soil material within gravels was distinctly redder & more clay rich. Colluvium cut by ditch *03001*
120+	50809	*Gravels*: at base of sequence overlying Chalk bedrock, densely packed deposit of medium–coarse gravel (90%) in brown, slightly rubified, silty clay matrix — relict valley gravels. Layer was thickest (0.4 m) at base of W. edge of dry valley, gradually thinning on gentle E. slope. No finds

Mollusc sequence

Because of the non-calcareous and weakly calcareous nature of the colluvial deposits, large (2 kg) soil samples were processed. Surprisingly, these contained high numbers of molluscs (Table 38) except for the very basal clay rich deposit (*50808*) and the modern topsoil. Weakly calcareous deposits derived from acid soils, although support molluscs, do not usually preserve shells. Preservation here was made possible because of calcareous soils on the valley sides enabling both the incorporation of chalk pieces and the possible precipitation of calcium carbonate through the colluvium.

The assemblages are dominated throughout by open country species which represent about 85%, but never less than 56%, of the assemblage. Shade-loving species are extremely scarce, often absent, and never occur as more than 6% of any assemblage. Although the environment throughout sedimentation deposition was one of open downland, subtle variations can be observed within the mollusc sequence (Fig. 87). The basal weakly calcareous and stonefree colluvium (*50808*) is dominated by *V. excentrica* and *T. hispida* with other open country species, primarily *P. muscorum*, *H. itala*, and *V. costata* and few shade loving species. These assemblages can be paralleled in many other colluvial sequences (eg., Malling Down and Southerham Grey Pit, Sussex, Allen 1995c; Pink Hill, Buckinghamshire, Evans 1972; Kiln Combe, Sussex, Bell 1983; and Strawberry Hill, Wiltshire; Allen 1994) and are typical of ploughwash, indicating cultivation on the adjacent slope during the later Neolithic or earlier Bronze Age; possibly associated with the Beaker activity. There was no evidence of the previous soil, or of a woodland mollusc assemblage indicating an erosive phase prior to the basal deposit.

Above this a single sample from the stony flint lens (50807) produced an increase in both the shade loving species and *T. hispida*, but most dramatic is the apparent replacement of *V. excentrica* by *V. costata*. *V. excentrica*, is well suited to arable micro-habitats, while its congener *V. costata* is more common in grassland and even open woodland (Evans 1972, 153–60). The thin stone horizon itself indicates a possible hiatus or local stabilisation and earthworm working, while the mollusc assemblage supports and is typical of grassland conditions and enabling temporary colonisation by some of the shade loving species. The grassland does seem, however, to have been kept short and the reduction in *H. itala* may indicate intensive grazing (Evans 1972, 181) or even trampling (cf. Chappell *et al.* 1971). A minor peak within the magnetic susceptibility profile corroborates, to an extent, the interpretation of an episode of stabilisation (*see below*).

The mollusc assemblages from the colluvial sequence above this remain relatively consistent until the modern topsoil, despite distinct sedimentological variation. The assemblages are dominated by *V. excentrica* . Although *H. itala* and *P. muscorum* remain constant, *T. hispida* and *V. costata* decline up profile. Shade loving species are rare and virtually disappear altogether. This assemblage is similar to that described from the basal colluvium, and like there, indicates a reintroduction of cultivation on the adjacent slopes. No hiatuses can be detected within the mollusc sequence.

The modern topsoil shows a reduction in shell numbers, a proportional reduction in *T. hispida* and complementary increase in Limacidae. *H. itala* gives way to the introduced Helicellids *Candidula virgata* and *Cernuella virgata* which between then become dominant with *V. excentrica*. These upper assemblages are similar to the those from the main colluvial sequence and certainly indicate open downland. The increase in Limacidae, which usually shuns intensive arable areas, and the reduction of *T. hispida*, a common inhabitant of arable land, perhaps suggests grassland. The modern soil profile therefore probably represents an overall reduction in arable practices and introduction of more grazing; it is likely that a rotational system operated thus preventing even limited colonisation by more mesic species.

Magnetic susceptibility

Magnetic susceptibility was recorded from each of the samples (Table 38). Relatively high readings (averaging 75 SI units x 10^{-8} SI/Kg) were recorded in the topsoil and these decreased steadily to a minimum of 26 at the base. One minor peak within the declining values could be detected, and corresponds to the grassland stabilisation and earthworm-worked stone horizon. Magnetic susceptibility would be expected to increase in such conditions during a stabilisation where biotic activity is greater (Allen 1986; Allen and Macphail 1987).

Summary of the land-use history

The sequence shows four main mollusc zones (Fig. 87). The data, when considered with the sediment information, can elucidate its effect on the history of land-use.

The basal gravels were set in a clay matrix which may have supported a typical or argillic brown earth. These putative former soils (cf. Staines 1991 and above) have, however, been lost, presumably due to fairly large scale erosion events. This reminds us that the sequence described above is incomplete and only represents the hillwash remaining at the sampled location. Further, the initial erosion was probably caused by localised clearance and tillage and later accelerated by clearance or tillage of appreciably larger areas. As a hiatus exists within the sequence the date of initial clearance cannot be determined; however an early Neolithic radiocarbon date (4800±70 BP; 3780–3380 cal. BC; OxA–2382; Table 3) and a sherd of Neolithic bowl recovered from the colluvium (Fig. 62) indicate clearance prior to this at least. The fact that the basal colluvium contained a well established, open country mollusc fauna with so few shade loving species gives some indication of its longevity; it also suggests that if any local woodlands existed they must have been removed some considerable time prior to the first colluvial deposits recorded here.

The earliest colluvium recorded is an almost stonefree weakly calcareous deposit (50808) and the included silty soil matrix is probably largely derived from soils formed on plateau drift deposits and clay-with-flints on the adjacent slope and hilltop. Erosion is undoubtedly due to the tillage and cultivation of the adjacent slopes. The mollusc fauna is a well established and specialised

Table 38 Middle Farm, trench B: mollusc sequence and magnetic suscepibility data from the colluvial sequence

Sample	*1*	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*	*13*
Context	⊢*50808*⊣		*50807*	*50806*	*50895*	⊢*50804*⊣		⊢*50803*⊣			⊢*50802*⊣		
Depth (cm)	*110-120*	*102-110*	*91-102*	*80-91*	*67-80*	*57-67*	*47-57*	*38-47*	*28-38*	*21-28*	*11-21*	*5-11*	*0-5*
Wt (g)	*2000*	*2000*	*2000*	*2000*	*2000*	*2000*	*2000*	*2000*	*2000*	*2000*	*2000*	*1750*	*1500*
Pomatias elegans (Müller)	+	1	1	+	–	+	–	–	+	+	1	1	–
Carychium tridentatum (Risso)	–	–	–	–	–	–	–	1	1	–	–	–	–
Carychium spp.	1	–	1	–	–	–	–	–	–	–	–	–	–
Cochlicopa lubrica (Müller)	–	–	4	1	2	–	–	–	–	–	–	–	–
Cochlicopa lubricella (Porro)	–	–	–	1	–	–	–	–	–	–	–	–	–
Cochlicopa spp.	–	–	4	3	1	1	2	2	2	–	–	2	–
Vertigo pygmaea (Draparnaud)	–	2	–	12	10	4	7	11	12	6	–	3	1
Pupilla muscorum (Linnaeus)	15	7	9	42	42	26	36	51	43	25	2	7	2
Vallonia costata (Müller)	6	10	115	96	125	116	80	47	15	4	–	1	–
Vallonia excentrica Sterki	32	47	97	362	348	390	337	333	239	186	84	52	49
Punctum pygmaeum (Draparnaud)	–	–	1	1	–	–	–	2	–	–	–	–	–
Discus rotundatus (Müller)	+	–	1	–	–	1	–	–	1	–	–	–	–
Vitrina pellucida (Müller)	–	–	–	–	–	1	–	–	–	–	–	–	–
Vitrina crystallina (Müller)	–	–	–	–	–	–	–	2	–	–	–	–	–
Vitrea contracta (Westerlund)	1	–	–	–	–	–	2	4	1	–	–	–	1
Nesovitrea hammonis (Ström)	–	1	15	4	1	–	–	1	–	–	–	–	–
Aegopinella nitidula (Draparnaud)	1	3	6	2	–	–	–	–	1	–	–	–	–
Oxychilus cellarius (Müller)	–	–	2	1	1	1	3	1	1	–	–	–	–
Limacidae	2	–	2	5	–	3	15	20	16	47	12	9	6
Cecilioides acicula (Müller)	48	38	57	61	110	145	317	504	344	190	26	5	6
Clausilia bidentata (Ström)	–	–	–	–	1	–	–	–	–	–	–	–	–
Candidula intersecta (Poiret)	–	–	–	–	–	–	–	–	11	98	56	34	45
Cernuella virgata (Da Costa)	–	–	–	–	–	–	–	–	–	4	3	6	3
Helicella itala (Linnaeus)	13	10	31	103	82	106	43	58	32	3	2	–	–
Trichia hispida (Linnaeus)	15	31	155	291	175	60	129	75	54	8	11	11	3
Ariant arbustorum (Linnaeus)	–	–	–	–	+	–	–	–	–	–	–	–	–
Cepaea/Arianta spp.	–	+	5	1	1	2	2	2	–	–	–	–	–
Taxa	9	9	15	14	11	12	11	15	14	9	8	10	8
Shannon Index (*H'*)	1.64	1.58	1.64	1.51	1.48	1.32	1.43	1.50	1.51	1.42	1.28	1.58	1.24
Total	86	112	449	925	789	711	656	610	429	381	171	126	110
Magnetic susceptibility ($x10^{-8}$SI/kg)	26	32	37	47	66	59	58	62	71	72	90	93	62

Note: all totals exclude *Cecilioides acicula*

one, from which one could suggest the loss of the earliest ploughwash. Although only a single sherd of Beaker pottery was recovered from this deposit, cultivation can probably be attributed to Late Neolithic or Early Bronze Age (Beaker) activity.

This ploughwash is sealed by a thin flinty horizon (50807), which in the field was ascribed to the overlying colluvium. Field measurements of stone orientation (Briggs 1977), of both dip and strike, of 192 flints showed only mean lateral (dip) orientation of 0°, indicating that they were lying on a flat surface. The strike was random showing no modal orientation. Subsequent molluscan and magnetic susceptibility analyses suggest that this horizon represents an episode of short grazed or trampled grassland. A second episode of colluviation (50806) not only sealed this horizon but also truncated the old land surface, removing the turf and earthworm worked, stonefree horizon. Colluviation was once again

Figure 87 Land molluscs: Middle Farm trench B; sequence from the colluvial deposits (excluding Cecilioides acicula)

instigated by the renewed onset of tillage probably dating from the Early to Middle Bronze Age and can be associated with the enclosure and settlement at the top of the slope. The more calcareous nature of the ploughwash and inclusion of chalk pieces is indicative of severely thinned soils, probably rendzinas, on the valley sides.

A third erosive phase comprising a stony lens (50805) and upper calcareous colluvial deposits (50895 and 50804) then followed. The stony lens is a result of a high energy erosion event stripping the soil from the slopes and depositing the coarse material (flints) at the base of the slope and taking the fines (soil material) further down valley (Allen 1988; Allen 1991a; Boardman and Robinson 1985). Stone orientation measurements on 248 clasts showed a preferential dip of 49° and strike of *c.* 94° and is analogous to other recorded erosion fans on the chalk at Ashcombe Bottom, Sussex (Allen 1988; 1994) and the Sussex Downs (Boardman 1984; 1992). Such events occur regularly after harvest when the fields are dry and bare and highly susceptible to run-off erosion caused by the first winter storms (Boardman and Stammers 1984). It has been suggested that such evidence may indicate a winter cropping regime (Allen 1988; 1991a).

Overlying this erosion fan were more typical ploughwash deposits, becoming increasing calcareous and paler up profile. Although a distinction could be recognised in the field between a lower darker colluvium (50895) and an overlying lighter colluvium (50804) the mollusc assemblages show no significant change. The paler colour is due to a higher chalk content resulting from erosion of chalk as well as soil on the hillside. The relatively large quantities of Black Burnished ware enable this to be confidently dated to the Romano-British period, itself indicating a possible hiatus from the later Bronze Age through the Iron Age. Whether this hiatus is a result of lack of erosion, or lack of deposition at the sample point cannot be determined.

A final episode of erosion can be seen in the form of an extensive flint layer, probably a large erosion fan. Again this indicates intensive arable activity; the stone orientation from 276 records was similar to the previous stone lens (50805). The stones were larger and may represent an inter- rather than intra-field event (cf. Allen 1988, Fig. 6.5). The occurrence of the Introduced Helicellids in this and the overlying soil indicates a medieval or later date and this is consistent with the recovery of a sherd of post-medieval pottery.

The modern topsoil profile probably also contains a colluvial element, but suggests a reduction in the intensity and area under cultivation. A combination of grazed grassland and lower intensity arable activity is indicated by both molluscs and sediments. A general reduction in the pressure of land-use led to stabilisation and minimisation of erosion.

Trench A; The occupation site

Two large Bronze Age ditch sections were sampled by Amanda Rouse for land snails during the evaluation excavations (Figs 55 and 56). Ten samples were taken contiguously through the Early–Middle Bronze Age enclosure ditch *03050* and 19 samples from the large boundary ditch *03051* (Fig. 59). Sampling was mainly at 0.1 m intervals, except through the buried soil in ditch *03051* where sampling was at 0.05 m intervals. All the mollusc assemblages were depauperate; none produced more than 60 shells and thus the mollusc diagrams (Fig. 88) are histograms of absolute abundance. The paucity of shells (excluding the burrowing, and thus palaeo-insignificant, species *Cecilioides acicula*) is due to the localised capping of tertiary clay-with-flint deposits and acid soils. Although palaeo-environmental interpretation is obviously limited as a result of low mollusc numbers, some tentative and cautious interpretations can be made, especially in view of the adjacent colluvial mollusc sequence (*see above*).

Enclosure ditch 03050

The ditch revealed a deep chalk rubble primary fill which was almost totally devoid of shells. The few species that were recovered, *V. excentrica*, *V. costata*, and *H. itala* are all open country species. Both the secondary and lower tertiary fills are predominantly open country species with the addition of *T. hispida*. Shade loving species were only represented by non-apical fragments. The uppermost fill sample included *C. intersecta* which is either intrusive here, or indicates a medieval or post-medieval date (Kerney 1966). The meagre assemblages indicate very open downland, possibly even arable, conditions.

Boundary ditch 03051

The large boundary ditch *03051* contained a typical tripartite ditch fill sequence. Two mollusc zones could be detected. Although the coarse primary deposits produced very few shells, the upper primary and the secondary fills contained enough shells to make some palaeo-environmental statements. These deposits contained no open country species (except rare non-apical fragments). The main species present were *A. nitidula*, *O. cellarius*, and Limacidae. The assemblages are those, not of woodland, but localised shady conditions, probably afforded by the micro-environments within the deep ditch itself. The buried soil, which occurred at the top of the secondary fill and was sampled at 0.05 m intervals, contained very few shells. The lack of shells here reflects the lack of calcium carbonate in the humic brown earth soil that formed within the ditch.

The tertiary Late Bronze Age and Iron Age ploughwash deposits produced markedly different assemblages. The assemblages are almost exclusively consist of open country species; mainly *V. excentrica* and *H. itala* with *T. hispida*. Although depauperate, the assemblages are similar to many assemblages from colluvial and ploughwash deposits (eg. Bell 1983; Evans 1972), and particularly those from the bottom of the adjacent slope. They indicate open, probably, arable environments. The samples from the base of the modern soil produced similar assemblages and contained both *Helix aspersa* and members of the Introduced Helicellids, indicating that these layers at least are probably medieval or later.

Middle Farm trench A and B: summary

It is evident that the original soil cover, and initial colluvial deposits, do not survive in the examined

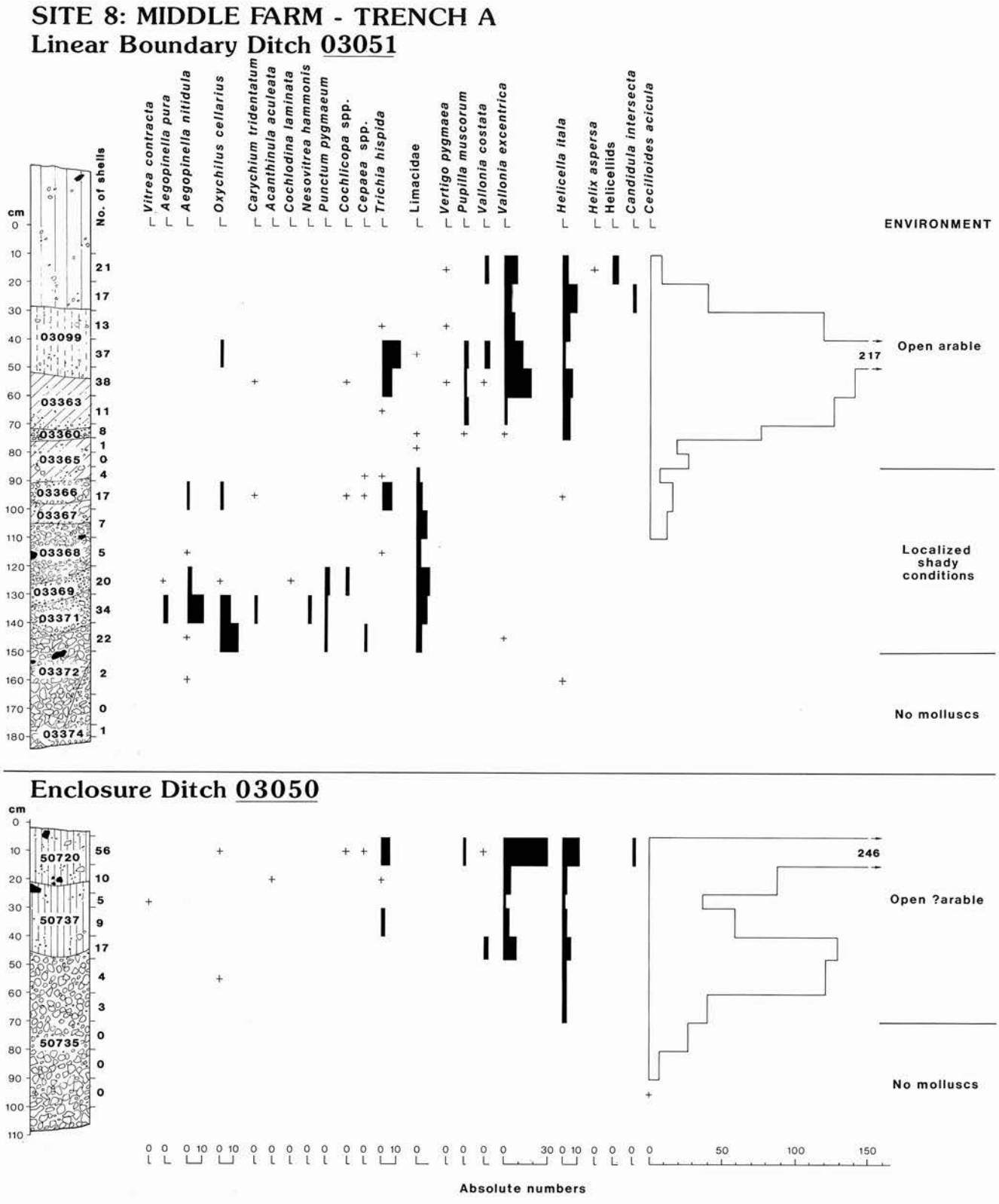


Figure 88 Land molluscs: Middle Farm trench A; sequences from the Bronze Age ditches 03050 and 03051

sequence. Clearance therefore, occurred some considerable time earlier than the Late Neolithic or Beaker occupation. After a short period of cultivation the valley bottom was, in the early Bronze Age returned to pasture and grassland. This however was superseded by cultivation of the valley slopes during the Bronze Age which led to severe erosion events. Fans of flint gravel were deposited in the valley bottom and the original thick acid soils on the valley sides were thinned. By the Romano-British period the soils had been thinned to such an extent that chalk was also being eroded. By the medieval/post-medieval periods a reduction in agricultural pressure can be seen and both grazed downland and more limited periods of cultivation occurred.

Discussion of the Molluscan Evidence

This discussion primarily confines itself to the recent evidence along the By-pass route and includes relevant and recent data from the Chalk ridge immediately to the south of Dorchester, eg. Alington Avenue, Fordington Barrow, and Greyhound Yard. A broader appraisal of the landscape appears later.

Within the project as a whole there was a lack of preserved buried old land surfaces, even beneath colluvial sequences at Middle Farm. When such contexts were preserved, at Maiden Castle for instance, they were almost devoid of shells (Evans and Rouse 1991b).

The molluscan data-set from which general statements of land-use can be made is now fairly comprehensive. It is, however, surprising that, despite the wealth of mollusc data from this project alone, even though relatively early contexts are included (eg. Early Neolithic pit at Flagstones), it is not possible to prove the existence of a former woodland on the basis of this evidence. From the entire area the existence of primary woodland has only been conclusively argued from a few samples from the recent work on the Maiden Castle project (Evans and Rouse 1991a; b). This is a testimony to both the incompleteness or our data-set (despite its size), but also to the intensity and extent of the early human activity within the landscape, but may also allow us to question whether woodland ever existed on these chalklands (cf. Bush and Flenley 1987; Bush 1988; 1989; Thomas 1989).

The lack of evidence for woodland from the molluscs is essentially the result of five factors:

i) the possibility that a full woodland community never became established in this area,
ii) a paucity of dated early Neolithic sites,
iii) a lack of suitable contexts and soils as a result of later activity and erosion,
iv) the probability of most of the area supporting typical brown earths or argillic (humic) brown earths which, even if supported mollusc life, are unlikely to preserve shells,
v) that all the sample sites are locations of human activity and are therefore likely to be in an open, possible cleared area (cf Allen 1994).

Early mollusc faunas are therefore only likely to be preserved in areas of activity and within features where the addition of chalk will increase the possibility of shell preservation. This is precisely the case at Maiden Castle (Evans and Rouse 1991b, 120) and Flagstones (pit *00221*).

Searching for the wildwood

It is evident that the earliest recorded activity at Maiden Castle, ie., the construction of the causewayed enclosure, is broadly contemporary with pit *00221* from Flagstones (Tables 1 and 79, and Fig. 120). Maiden Castle supported primary woodland, but at Flagstones a glade of long grassland existed. This variation does not seem to be chronological but reflects the status of the landscape and diversity of the local chalkland environment. The presence of the open grassy environment at Flagstones may indicate the continued human activity in the area prior to that associated with the Early Neolithic pit. Once woodland had been cleared locally the 'island' clearing was invaded (colonised) by both grasses and open country snails which may have travelled a relatively long distance from another open source environment through, presumably primary woodland (Thomas 1985). From this we might be able to infer that at least some clearance of the woodland at Flagstones occurred some considerable time prior to the activity associated with pit *00221* (3970–3540 cal. BC). This supports the hypothesis of early woodland clearance, possibly of relatively large areas, which can certainly be attributed to the Early Neolithic if not the Late Mesolithic, or the possibility that these areas were never colonised by early Flandrian woodland. However, if we assume that the woodland was felled locally, then differentiating between Early Neolithic and Late Mesolithic activity is a semantic, not an archaeological, argument. The possibility of limited and localised Mesolithic clearances can be entertained especially when discussing the data with the artefactual and other evidence.

Woodland clearance and pasture (4000–3350 cal. BC)

Clearance of the woodland, if it existed, may have been fairly early and large scale as shown by the open grassland from the early contexts from Flagstones (pre-3750 cal. BC) and Middle Farm (*c.* 3500 cal. BC). The impact of clearance seems to have been large erosion events washing soil from the hill slopes and removed soils from the valley bottoms, as seen by the truncation of early Holocene horizons at both Middle Farm and Fordington Bottom. Following clearance, stabilisation was established with the colonisation of long grasses (Flagstones pit *00221*) which were, by the later Neolithic, grazed to a typical short downland turf. There is no evidence for woodland copses, let alone extensive forests. The only exception to this is the evidence from Maiden Castle where clearance was only localised. By this time large tracts of downland were under intensive pasturage with limited, localised tillage. Even the limited cultivation of the typical to calcareous brown earth soils may have lead to erosion of these fragile soils (*see* Allen 1988; 1991b; Staines 1991; Macphail 1991) and the creation of thin calcareous soils (calcareous brown earths and rendzinas) over the hilltops in some areas (eg. Alington Avenue–Flagstones) and colluvial accumulation in the valley bottoms (Middle Farm and Fordington Bottom).

Pasture (3350–2500 cal. BC)
In the Middle Neolithic a tract of grazed grassland was established on the Alington Ridge. The monuments at Flagstones and the Alington long barrow (*c.* 3300–3000 cal. BC) were constructed, and existed, in grazed grassland. Unlike Maiden Castle, this grassland was long established and extensive. No evidence of woodland regeneration has been detected from Flagstones or Alington and the only evidence in the central lowland zone of woodland regeneration is at Maiden Castle at about 3000 cal. BC. Limited episodes of local tillage have been detected at both Alington and Flagstones.

A second phase of monument building, at the beginning of the later Neolithic (*c.* 2750 cal. BC), provides a series of molluscan sequences which show a predominantly pastoral landscape. At Maumbury and Mount Pleasant short grassland is evidenced and this pasture extended over Flagstones, but the localised tillage at Alington continued. The Dorchester timber monument at Greyhound Yard does, however, provide evidence for scrubby, regenerated open secondary woodland and lush grassland, but this is probably partially attributable to its position on the Frome floodplain. Interestingly this does occur when localised regeneration of woodland still existed at Maiden Castle. Nevertheless, the main picture is of clearance and established grassland prior to the construction of the monuments.

Pasture and tillage (2500–1800 cal. BC)
Evidence for localised tillage is recorded at Alington in the later Neolithic, but by the earlier Bronze Age large scale arable farming is indicated to both the east and west of Dorchester. Maiden Castle provides evidence of localised, but severe, cultivation in the Beaker period. Although few other Beaker contexts have been satisfactorily analysed within the central lowland zone, they are also primarily associated with tillage. It is likely, for instance, that the Beaker occupation site at Middle Farm was associated with tillage on the local slopes, which may have contributed to the truncation of earlier soils. The exception is Mount Pleasant, where, after an episode of woodland regeneration, dating to about 2500 cal. BC, the site was substantially reorganised by Beaker communities (*c.* 2000 cal. BC), and pasture rather than tillage is indicated.

By the earlier Bronze Age and the period of construction of a number of round barrows (Flagstones, Alington, Maiden Castle Farm, and the Conquer barrow) tillage was widespread; the only recorded exception being Fordington Farm which remained as localised pasture in to the Iron Age. At Alington, tillage was particularly intensive and it may have been from this environment that much of the wind blown silts recorded in the main enclosure ditch of Mount Pleasant originated.

In the Early Bronze Age, therefore, cultivation was both widespread and extensive. The landscape existed as a patchwork, or mosaic, of cultivated land and green pasture.

A ploughed landscape (1800–1000 cal. BC)
Throughout the Bronze Age, however, cultivation became more expansive, to such an extent that fields may have impinged upon earlier barrows enabling localised and limited erosion of the monuments even in prehistory. Extensive ploughed areas are indicated by the colluvial and molluscan sequences at Middle Farm and Fordington Bottom. There is a hint that manuring of the fields was not exclusively with domestic rubbish as is often asserted (Bowen 1961; Fenton 1981) but may have been augmented with vegetation and organic muds from the local rivers as seen by the incorporation of fresh and brackish water molluscs into open dry contexts (*see Flagstones, Conygar Hill, Alington, Fordington Farm, and Maiden Castle Farm).*

Widespread agriculture with open dry field boundary ditches, bounding fields with shallow, predominantly calcareous, rendzina soils existed throughout the Iron Age and Roman periods. Erosion even of relatively thin soils continued under the long term pressure of tillage; which by this time had occurred for several millennia. Both tillage and grazing are indicated, though the latter seems more prevalent. Some areas (eg. Flagstones) were less intensively used for a limited period enabling longer grass to grow temporarily.

Mixed farming (1000 cal. BC–>)
A mixed agrarian landscape existed in the medieval period with some of the previously dry open ditches being replaced by hedged ditch and banks. There is less evidence of the extensive tillage seen in prehistory, and probably more of the downland put down to pasture.

4 Charred Plant Remains, by Vanessa Straker

Plant remains were recovered from four sites: Flagstones, Maiden Castle Farm, Maiden Castle Road, and Middle Farm. The samples were sieved on site by standard flotation methods and residues collected on a 500 micron mesh and flots in a 250 micron sieve. All residues and flots were completely sorted.

The relatively few carbonised plant macrofossils recovered from the large sieving programme do not warrant a site by site appraisal, and thus a full discussion is presented below. The results are summarised in Table 39 (details are in archive) and in terms of composition of grain, chaff, and weeds in Figure 89. Nomenclature follows Clapham *et al.* (1989).

Period 1. Neolithic: Flagstones

The Early Neolithic, pre-enclosure contexts (Period 1A) were confined to two pits (Table 39). Cereals are represented by grains of wheat and barley (*Triticum* sp. and *Hordeum* sp.) which are too poorly preserved for more specific identification to be made and in some cases identification cannot be made to a single genus. No cereal chaff was preserved. A small number of seeds of plants, which probably grew with the crops as arable weeds, was identified and these include black bindweed (*Fallopia convolvulus*), ivy-leaved speedwell (*Veronica hederifolia*), cleavers (*Galium* sp.) and brome (*Bromus* sp.).

A single legume was present, but unfortunately did not retain its hilum and can only be classified as *Vicia, Lathyrus,* or *Pisum* sp. (vetch, tare, or pea). It falls within the size range for peas from some archaeological sites (3.9 x 3.9 x 3.8 mm; Renfrew 1973), but some of the larger vetches can overlap with them. Peas or beans have not been found on British sites of this period, although improved recovery techniques may alter this in the course of time. Beans (*Vicia faba*) are known from a number of Bronze Age sites and pulses would have been a valuable source of dietary protein.

The Period 1B (later Neolithic) contexts containing plant remains were the primary fill of the Neolithic enclosure, and a stabilisation layer above the chalk rubble in the ditch segments. As in the Early Neolithic, cereals are only represented by poorly preserved grains of wheat and barley with no chaff. Again, a small number of seeds of arable weeds was identified (*Fallopia convolvulus, Polygonum aviculare* group, *Galium cf aparine* and *Veronica hederifolia*) and a legume of *Vicia, Lathyrus,* or *Pisum* sp. of similar dimensions to that recorded above. The presence of *Galium aparine* might indicate that some crops were autumn sown (Reynolds 1981).

The Neolithic enclosure ditch was sampled from each of the segments excavated; a scatter of arable crops and associated weeds occurs with greater concentrations in some segments than others. Although, as with many Neolithic assemblages, the amount of plant remains is low, the fill of the pre-enclosure pits appears to contain a slightly greater concentration than the enclosure itself. This probably reflects the deliberate deposition of rubbish in the pits compared with, apart from ritual depositions, a more casual deposition in the enclosure ditches. The range of taxa is similar in all the contexts.

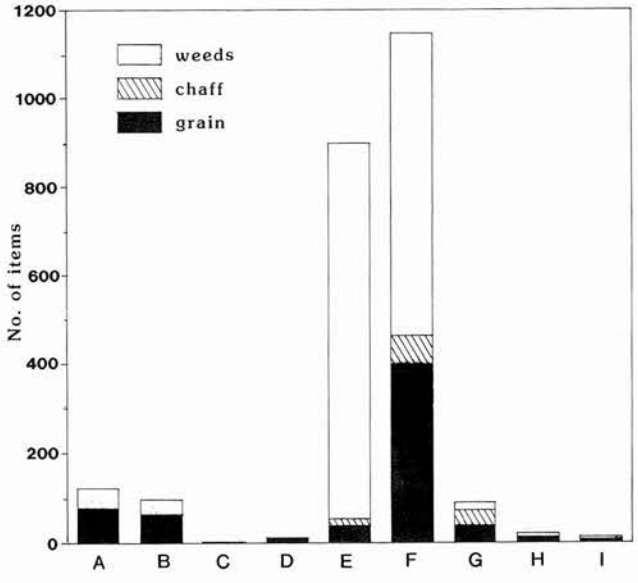


Figure 89 Summary of plant remains. A = Period 1, Flagstones; B = Period 2, Flagstones; C = Period 2, Maiden Castle Farm; D = Period 2: Middle Farm; E = Period 3, Flagstones; F = Period 4, Maiden Castle Road; G = Maiden Castle Road, Roman buildings; H = Period 6, Flagstones; I = Period 7, Flagstones

Small groups of plant remains have been studied from a number of other enclosures. At Abingdon, Oxfordshire, plant impressions in pottery were identified as emmer, barley, apple (*Malus sylvestris*), and sloe (*Prunus spinosa*) (Helbaek 1952; Murphy in Case and Whittle 1982). Helbaek (op. cit.) found that the 127 cereal impressions in the Windmill Hill pottery were dominated by emmer and naked and hulled barley with a minority of einkorn (*T. monococcum*) which he regarded as weeds in the emmer fields. At Briar Hill, a single grain of naked 6-row barley and two indeterminate cereals were accompanied by fragments of hazelnut shell and sloe (Moffett *et al.* 1989).

This evidence is brought together by Moffett *et al.* (1989) from a number of recently studied Neolithic assemblages and emphasises the importance of collected wild resources to the economy, possibly supplemented by the cultivation of cereals, rather than *vice versa*. All the evidence from Neolithic contexts at Greyhound Yard and Flagstones shows a low concentration of cereals and weeds but there are also virtually no scrub or woodland resources either (cf. Allen, *above*). If this implies the maintenance of an open landscape, it is perhaps surprising that we do not find a higher concentration of arable crop remains on these sites unless arable was considerably less important than animal husbandry.

Period 2. Bronze Age: Flagstones, Maiden Castle Farm, and Middle Farm

The sample from Maiden Castle Farm (Table 39 and Figure 89), which came from the primary fill of ring-ditch *02027*, contained only a single unidentified weed seed and those from the soils and boundary ditches at Middle Farm contained only a low concentration of cereals. More material came from the central ring-ditch at Flagstones and adjacent pits, but most of the Bronze Age plant remains were recovered from the layers representing the final silting of the Neolithic enclosure ditches.

Grains of wheat and barley are preserved but there is little chaff. Wheat is represented mainly by cereal grains which are too poorly preserved for them to be even tentatively assigned to species. There is no evidence for the use of spelt wheat but free threshing wheat (probably *T. aestivum* sl.) is present in the form of a single tough rachis internode.

The barley grains are not well enough preserved to see whether 2-row, 6-row or a mixture of the two was present and there are no rachis internodes to help with this determination. There are also a number of fragments of indeterminate cereal grains.

The weeds are of a similar range to those from the Neolithic levels with the exception of a bulbous basal internode of false oat-grass (*Arrhenatherum elatius* subsp. *bulbosum*) which can be characteristic of abandoned arable land or ungrazed grassland and has been found on a number of Neolithic and Bronze Age sites. The legumes could be vetches, tares, or even peas and their dimensions are given in archive.

Table 39 charred plant remains

Period	1A	1B		2		3	4	6	7	Unph
Site	Flagstones			Maiden Castle Farm	Middle Fm	Flag-stones	Maiden Castle Rd	Flagstones		
Triticum monococcum/dicoccum (einkorn/emmer, spikelet fork)	–	–	–	–	–	–	1	–	–	–
Triticum dicoccum (emmer, glume base)	–	–	–	–	–	–	4	–	–	–
Triticum cf. dicoccum (grain)	–	–	–	–	–	–	2	–	–	–
Triticum spelta (spelt, glume base)	–	–	–	–	–	2	17	–	–	–
Triticum dicoccum/spelta (grain)	–	–	–	–	–	–	8	–	–	–
Triticum dicoccum/spelta (glume base)	–	–	–	–	–	2	2	–	–	–
Triticum cf. dicoccum/spelta (grain)	–	–	–	–	–	–	2	–	–	–
Triticum cf. aestivum L. s.l. (bread/club wheat)	–	–	1	–	–	–	1	–	–	–
Triticum sp. (wheat grain)	10	8	17	–	–	5	165	–	2	7
Triticum sp. (sprouted grain)	–	–	–	–	1	–	–	–	–	–
Triticum sp. (spikelet fork)	–	–	–	–	–	–	5	–	–	–
Triticum sp. (glume base)	–	–	–	–	–	2	41	–	–	–
Triticum sp. (rachis)	–	–	–	–	1	–	19	–	–	–
Triticum sp. (tough internode)	–	–	1	–	–	5	–	–	–	–
Triticum/Secale sp. (wheat/rye grain)	–	–	–	–	–	–	–	–	–	1
Hordeum sativum (barley grain)	10	5	13	–	3	14	87	4	4	3
Hordeum sativum (straight grain)	–	–	–	–	–	2	4	–	–	–
Hordeum sativum (hulled straight grain)	–	–	–	–	–	–	7	–	–	–
Hordeum sativum (hulled twisted grain)	–	–	–	–	–	3	3	–	–	–
Hordeum sativum (rachis internode)	–	–	–	–	–	3	2	–	–	–
cf. Hordeum sativum (cf. barley, grain)	–	1	–	–	–	1	–	–	–	–
Hordeum/Triticum sp. (grain)	1	4	–	–	3	3	22	2	–	–
Avena sp. (oats, grain)	–	–	–	–	–	3	69	–	–	1
Avena fatua/ludoviciana (oats, grain)	–	–	–	–	–	1	–	–	–	–
Avena sp. (awn)	–	–	–	–	–	+	+	–	–	–
cf. Avena sp. (grain)	–	–	–	–	–	1	–	–	–	–
Cerealia (indet. cereal grain)	3	13	20	–	3	2+	65	7	2	8
Cerealia (culm node)	–	–	–	–	–	–	1	–	–	–
cf. Cerealia (grain)	–	–	–	–	–	–	–	–	1	–
Ranunculus acris/repens/bulbosus (buttercups)	–	–	–	–	–	1	–	–	–	–
Ranunculus flammula L. (lesser spearwort)	–	–	–	–	–	1	–	–	–	–
Papaver somniferum L. (opium poppy)	–	–	–	–	–	–	203	–	–	–
Papaver sp. (poppy)	–	–	–	–	–	–	2	–	–	–
Cerastium sp. (mouse-ear chickweed)	–	1	–	–	–	–	–	–	–	–
Stellaria media group (chickweed)	–	–	–	–	–	24	2	–	–	–
Chenopodium ficifolium Sm. (fig-leaved goosefoot)	–	–	–	–	–	1	–	–	–	–
Chenopodium cf. ficifolium Sm.	–	–	1	–	–	1	–	–	–	–
Chenopodium sp. (goosefoot etc)	–	–	–	–	–	2	7	–	–	–
Chenopodiaceae indet.	–	1	–	–	–	–	–	–	–	–
Vitis vinifera L. (vine)	–	–	3	–	–	–	–	2	1	–
Trifolium cf. pratense L. (red clover)	–	–	–	–	–	5	18	–	–	–
Trifolium sp. (clover)	–	–	–	–	–	–	65	–	–	–
cf. Trifolium sp.	–	–	–	–	–	7	–	–	–	–
Medicago/Trifolium sp. (medick/clover)	–	–	–	–	–	9	15	–	–	–
Vicia/Lathyrus sp. (vetch/tare/vetchling)	–	–	–	–	–	5	13	–	–	–
Vicia/Lathyrus/Pisum sp (/pea)	1	1	3	–	–	+	–	–	–	–

Table 39 (cont.)

Period	1A	1B		2		3	4	6	7	Unph
Site	Flagstones			Maiden Castle Farm	Middle Fm	Flag-stones	Maiden Castle Rd	Flagstones		
Leguminosae indet.	–	–	–	–	–	–	1	1	–	–
Poterium sanguisorba L. (salad burnet)	–	–	–	–	–	1	–	–	–	–
Polygonum aviculare group (knotgrass)	–	1	4	–	–	1	–	–	–	–
Fallopia convolvulus (L.) Dum. (black bindweed)	2	–	–	–	–	2	–	–	–	–
cf. Fallopia convolvulus (L.) Dum. (black bindweed)	–	1	–	–	–	–	–	–	–	–
Rumex sp. (dock)	–	2	1	–	–	34	5	1		
Rumex sp. (with perianth) (dock, sorrell)	–	–	–	–	–	1	–	–	–	–
Urtica urens L. (small nettle)	–	–	–	–	–	6	–	–	–	–
Urtica dioica L. (stinging nettle)	–	–	–	–	–	143	3	–	–	–
Lithospermum arvense L. (corn gromwell)	–	–	–	–	–	17	8	–	–	–
Atropa bella-donna L. (deadly nightshade)	–	–	–	–	–	–	1	–	–	–
Veronica hederifolia (ivy-leaved speedwell)	3	2	6	–	–	–	–	–	–	1
Euphrasia Oodontites verna (Bell.) Dum. (eyebright/red bartsia)	–	–	–	–	–	6	11	–	–	–
Labiatae indet.	–	–	–	–	–	1	–	–	–	–
Plantago lanceolata L. (ribwort plantain)	–	–	–	–	–	–	–	1	–	–
Sherardia arvensis L. (field madder)	–	–	–	–	–	3	2	–	–	–
Galium cf. aparine L. (cleavers)	–	2	1	–	–	2	8	–	–	–
Galium sp. (bedstraw)	1	–	1	–	–	3	5	–	–	–
Valerianella dentata (L.) Poll. (corn salad)	–	–	–	–	–	1	4	–	–	–
Tripleuospermum maritimum/inodorum (scentless mayweed)	–	–	–	–	–	–	1	–	–	–
Cirsium sp. (thistle)	–	–	–	–	–	1	–	–	–	–
Carduus/Cirsium sp. (thistles)	–	–	–	–	–	89	–	–	–	–
cf. Carduus/Cirsium	–	–	–	–	–	1	–	–	–	–
cf. Sparganium sp. (bur-reed)	–	–	–	–	–	–	1	–	–	–
Eleocharis palustris/uniglumis (spike-rush)	–	–	–	–	–	1	–	–	–	–
Carex sp. (sedge)	–	–	–	–	–	2	–	–	–	1
Danthonia decumbens (L.) DC. (heath grass)	–	–	–	–	–	2	–	–	–	–
Bromus sterilis L.	–	–	–	–	–	239	–	–	–	–
Bromus cf. hordeaceus/secalinus (rye-brome/lop-grass)	–	–	–	–	–	–	10	–	–	–
Bromus sp. (brome)	1	–	–	–	–	1	3	–	–	–
cf. Bromus sp.	–	–	–	–	–	5	–	1	–	–
Avena/Bromus sp (oat/brome grass)	–	–	–	–	–	1	52	–	–	–
cf. Arrhenatherum elatius subsp. *bulbosum* (Willd.) (false oat-grass basal internodes)	–	–	1	–	–	42	–	–	–	–
Gramineae indet.	1	–	1	–	–	55	185	–	–	–
Gramineae indet. (culm base)	–	–	–	–	–	1	–	–	–	–
Gramineae indet. (culm node)	–	–	–	–	–	30	–	–	–	–
Unidentified seeds	5	8	10	1	–	99	82	–	5	11
Total	38	51	84	1	11	895+	1234	19	15	33
Volume sample (litres)	218	89	78	20	61	216	140	40	20	80
Density/litre	0.17	0.57	1.07	0.05	0.18	4.14	8.81	0.48	0.75	0.41

A surprising find is three pips of *Vitis vinifera* (cultivated grape) from the final silting of the enclosure ditch. These appear to be burnt and one may also be partially mineralised. They are morphologically similar to the seeds of the modern domesticated grape (Jones and Legge 1987) but are small (4.5–4.7 x 2.5 mm), more comparable with the dimensions given for prehistoric than modern examples (Renfrew 1973). However, two were submitted for radiocarbon dating and the dates (205±600 BP; cal. AD 1420– 1960; OxA–2380, and cal. AD 1640–1950, 160±60 BP; OxA–2381, Table 1) prove them to be modern. They probably worked their way down earthworm burrows or even lined aestivation chambers.

Plant remains were also studied from a number of Bronze Age features excavated at nearby Alington Avenue (Jones and Straker forthcoming). Grains of wheat and barley, which could not be identified to species, were present in low numbers, but no chaff was preserved.

Period 3. Late Iron Age: Flagstones

The plant remains from this period come principally from pits cut by an east–west boundary ditch with a small amount from isolated pits with and without inhumations (Table 39). A much larger range of taxa, particularly weed species, is present

Poorly preserved wheat (*Triticum* sp.) grains have been identified. Glume bases of spelt wheat, however, confirm that *T. spelta* was definitely present. A small number of tough internodes of a free threshing form (probably hexaploid *T. aestivum* sl.) occur, but whether this was a crop in its own right or a minor contaminant of the spelt crop is not known. Grains and indeterminate rachis internodes of both hulled and twisted barley confirm that at least the hulled 6-row form was being used (*Hordeum* sp.). A single oat floret base preserves the horseshoe-shaped scar identifying it as *Avena fatua* or *ludoviciana*, a wild oat which was presumably a weed of the wheat and barley crops.

As well as arable taxa such as knotgrass, black bindweed, corn gromwell (*Lithospermum arvense*), and corn salad (*Valerianella dentata*) the weed flora includes a number of species associated with open ground and grassland. Some species such as salad burnet (*Poterium sanguisorba*) have a preference for calcareous ground, whereas heath bent grass (*Danthonia decumbens)* is now more common on acid soils. Today *Danthonia* is associated with heathland but is reported in cereal dominated assemblages from other parts of Britain and was found at Maiden Castle (Palmer and Jones 1991). It was commonly associated with cereal remains at Cefn Graeanog, Gwynedd, where Hillman (1981) considered that it continued as a weed of arable as a result of ard ploughing.

The largest number of plant macrofossils came from a single pit (pit *00018*) in which the weed seeds far outnumbered cereals and chaff (653:4:9). The weeds include a number of arable taxa such as black bindweed, field madder, and corn gromwell as well as many species which are now found in grassland. Clovers and medick (*Trifolium* spp. and *Medicago* sp.), salad burnet (*Poterium sanguisorba*), false oat-grass (*Arrhenatherum elatius* subsp. *bulbosum*), and many seeds of other grasses are examples. *Arrhenatherum elatius*, represented by bulbous basal internodes, can grow in abandoned arable land which is not, or is only lightly, grazed (Tansley 1939, 536). In general the taxa are characteristic of the *Alliance Mesobromion erecti* described by Shimwell (1971a; b) which contains most of the well known Chalk and Limestone grasslands in the British Isles.

Unfortunately, there is no phytosociological study known of surviving ancient Chalk grasslands but the Chalk pasture may have been similar to present-day unimproved grassland on Chalk. Robinson (1989) however, found good archaeological evidence for Chalk grassland in Wiltshire from waterlogged plant macrofossils in the Wilsford Shaft.

The ecological preferences of the weed taxa contrast strongly with the earlier prehistoric groups where the limited weeds are associated only with arable or disturbed land. The number of weeds is high in comparison with the cereal grains and chaff which suggests that the plant remains may originate from the fine cleanings from a late stage in the processing of the wheat and barley crops. This was probably done 'piecemeal' as the cleaned grain was required and the cleanings may have been thrown onto the fire or used as tinder and the ashes disposed of in pits or open ditches. The density of plant remains (4.12 per litre soil) is much greater than for the earlier prehistoric phases (Table 39).

Period 4. Romano-British Settlement: Maiden Castle Road.

The contexts in this group include quarries and pits (Table 39). The density of plant remains is high compared with earlier phases (8.81 per litre), but this is influenced in particular by the large numbers from the storage shaft. Emmer and spelt wheats, hulled 6-row and possibly also 2-row barley are the arable crops. Without the oat flower bases it is not possible to be sure whether the oats are wild or domesticated.

The following comments refer to the contents of the pit *02387* as this is representative of the range of taxa from this period as a whole. The ratio of grain:chaff: weeds is 306:42:633. Wheat is more common than barley and the number of oats is also quite high. It is not clear for what purpose the pit was originally used, but the composition of the charred plant remains is most like that of a rubbish deposit which includes a large element of waste from a late stage in the processing of cereals than a primary storage context. The proportion of wheat grains to glume bases (141:23) certainly does not suggest that the wheat represents a product that had been stored in spikelet form where a ratio of approaching one grain to one glume base would be likely. Also, the presence of barley and possibly oats makes it more likely that the contents of the pit are the result of accidental burning of crops, perhaps during drying, mixed with ashes from domestic fires which may have incorporated the finer crop processing waste (weed seeds and chaff) as tinder or other fuel.

Arable weeds include field madder, cleavers, corn gromwell, and corn salad and, like the Iron Age assem-

blage, there are also a number of grassland plants. These include clovers as well as many small seeded grasses.

The pit also included a large number of the seeds of opium poppy (*Papaver somniferum*). This is known from other Roman and earlier contexts such as the Bronze Age Wilsford Shaft (Robinson 1989). The seeds could have been eaten, used for their oil content, or used medicinally. A large number of henbane (*Hyoscyamus niger*) seeds came from a Roman deposit at the Dorchester County Hall site and it is possible that these too were intended for medicinal use (Ede 1993).

Immediately pre-Roman and Romano-British deposits from Alington Avenue (Jones and Straker forthcoming) and Greyhound Yard (Jones and Straker in Woodward *et al.* 1993) yielded a similar range of arable crop plants and also grassland plants such as *Trifolium* sp(p.), the latter particularly from Alington Avenue. There were also a few seeds of plants associated with damp ground at Greyhound Yard but these were not found at Flagstones or Alington Avenue, both of which are on the top of the Chalk ridge.

The charred seeds from the Dorchester County Hall site preserved a similar range of crop plants to the other Dorchester sites, but seeds preserved by mineralisation were also found (Ede 1993). The remains of fig (*Ficus carica*), apple or pear (*Malus / Pyrus*), and plum (*Prunus domestica*) emphasise that charred remains alone do not give a complete picture of the plants consumed.

A small number of samples was examined from the structures at Maiden Castle Road, and provided little information. Emmer or spelt wheat and barley were identified, but preservation was poor. The range of weeds was also limited and all are present in the other Roman and Iron Age groups.

Period 6. Medieval Boundary Ditches: Flagstones

Only a small number of samples was examined from this Period (Table 39). The cereals are too poorly preserved to be identified other than as barley and wheat or barley. Two grape pips were recovered (dimensions 4.5 x 2.5 mm and 4.1 x 3.2 mm) and some legumes which could be vetches, tares, or even peas (*see* Periods 1 and 2). Seeds of dock and ribwort plantain (*Rumex* sp. and *Plantago lanceolata*) may represent a disturbed ground element and arable weeds include ivy-leaved speedwell (*Veronica hederifolia*) and probably brome (cf. *Bromus* sp.).

Period 7. Post-Medieval: Flagstones

The plant remains are scanty and poorly preserved and could well have survived as contaminants from earlier deposits (Table 39). They include some unidentifiable weed seeds and a grape pip (4.1 x 2.8 mm).

Discussion

The composition of the crops from the By-pass (emmer, spelt, hulled barley, and breadwheat) does not seem to alter much through the periods represented, except for spelt which does not occur until the Iron Age. The late Roman, medieval, and post-medieval periods are poorly represented and thus it is not possible to identify when the change in the cultivation of wheat from hulled to free threshing forms took place or whether there was a change in the weed flora resulting from deeper ploughing.

The larger grasses, notably *Bromus* species, including *B. sterilis* are common during and after the Iron Age, possibly encouraged by the lack of deep ploughing (Jones 1988), but it is also possible that they may have been regarded as a means of bulking up the crop in years of poor harvest.

The weed flora does show a marked increase in diversity from the Iron Age onwards with the arable and disturbed ground taxa being joined by other open ground plants such as clovers (*Trifolium* spp.). There are many more grasses including the bulbous basal internodes of false oat-grass which could have infested abandoned arable land or ungrazed grassland. The large amounts of *Urtica dioica* (stinging nettle) suggest disturbed, phosphorus enriched conditions often found on compost heaps and where domestic waste has accumulated. The Roman deposits also show a mixture of arable and grassland plants which suggests the burning of grass as tinder or even the burning of small amounts of hay.

Remains of collected wild resources such as hazelnuts, sloes, and apples are absent in all the periods which might suggest that local scrub or woodland was not common (Period 1b). It is conceivable that large scale clearance had taken place by the time that the Neolithic enclosure was in use, but any evidence for this would be much more reliably addressed from the study of the mollusc fauna.

In contrast, Palmer and Jones (1991) did note a reasonable number of fragments of hazelnut shell in the Neolithic samples from Maiden Castle, and hazelnuts were noticeably less common in the Iron Age samples. This pattern is similar to that noted from a number of other recent studies (Moffett *et al.* 1989).

Undoubtedly the most important comparative local site from which plant remains have been examined is Maiden Castle where charred plant remains were recovered from Neolithic, Iron Age, and Roman deposits (Palmer and Jones 1991). Certain contrasts between this and the By-pass sites are evident and some have already been noted above. Palmer and Jones note little evidence of nitrogen depletion in the soils from which the Maiden Castle crops derive as indicated by abundant seeds of nitrophiles such as *Stellaria media* agg. and *Chenopodium album*. These groups are also common on the By-pass sites but here there are also a number of leguminous plants in all the phases. These plants, owing to their ability to utilise atmospheric nitrogen, compete well in conditions of decreasing soil nitrogen. The evidence for soil fertility on the By-pass sites is therefore somewhat contradictory. Jones and Palmer also note the lack of weeds associated with the cultivation of heavy ground and suggest shallow ard cultivation which is also likely for the soils which grew the crops found at Flagstones, Middle Farm, and Maiden Castle Road.

Triangular scattergrams were drawn for the Iron Age and Roman phases (Flagstones and Maiden Castle

Road, archive). These confirm that the composition of the assemblages shown in Figure 89 is consistent with that for individual samples and not distorted by the particularly rich samples in each phase. That for Flagstones shows that the concentration of plant remains is low in the Iron Age and dominated by grain and, more particularly, weeds. This contrasts with the relevant diagram from Maiden Castle where chaff rich samples suggest grain dehusking and cleaning. Until we have more data from Iron Age sites in the area, no informed interpretation can be made of the distribution of plant remains at Flagstones.

There are only a few samples from the Roman phase (Maiden Castle Road), but the concentration of plant remains is slightly greater. It too is dominated by weeds and grain with no evidence for large scale dehusking and is more consistent with fine cleanings from a later stage of crop processing possibly before food preparation.

Robinson (1989) has described the advantages, problems and methods of using a phytosociological approach, such as the Zurich-Montpellier system of vegetation classification in trying to interpret species lists from archaeological sites. He uses the work of Silverside (1977), the only study which has attempted to classify British arable weed communities, in his report on the chalkland flora from the Bronze Age Wilsford Shaft, where both waterlogged and charred plant remains survived.

While it is not appropriate to apply Silverside's criteria too rigidly to the Dorchester data where only charred seeds survive, many of the Dorchester taxa are classified within Silverside's Class *Stellarietea mediae* which includes present-day British arable weeds. The Order *Centauretalia cyani* which is typical of weeds associated with the cultivation of cereals and some legumes has a number of character species such as *Lithospermum arvense*, *Sherardia arvensis*, *Valerianella dentata*, and possibly *Veronica* sp. which were found on the By-pass sites. These taxa were also noted at Maiden Castle (Palmer and Jones 1991), about 1 km from Maiden Castle Road.

No arable weed taxa were identified which could not readily have grown on the chalk soils or in pockets of more acid drift deposits in the chalk, inferring that the crops were grown locally.

5 **Animal Bones**, by Andrea E. Bullock and Michael J. Allen

Five of the nine sites (St Georges Road, Flagstones, Conygar Hill, Maiden Castle Road, and Middle Farm) produced sufficient bone to warrant analysis. These were examined at the Faunal Remains Unit (FRU), University of Southampton. The bones from each site were identified using the FRU's modern reference collection and recorded following the Ancient Monuments Laboratory osteometry system (Jones *et al.* 1981). Information concerning the state of preservation, association of bones, and evidence of butchery and gnawing was tabulated separately. All measurements presented were made in accordance with the recommendations of von den Driesch (1976). Summary information for each site is presented (Tables 40–5), and the detailed results are retained in the archive. These results are discussed and general patterns for the Dorchester area presented.

Preservation and Taphonomy

In general, the preservation of bones was better in pits than in shallow features such as ditches, gullies, and soil deposits, as demonstrated elsewhere by Maltby (1985a). Pits produced fewer eroded fragments and a higher proportion of ivoried bones. However, much of the material in the pits was gnawed. Many of the bones must have been accessible to dogs and possibly other carnivores prior to final disposal. It is possible that the bones were dumped in middens before being deposited during the backfilling of the pits and a great number of the bones originally deposited now have been completely destroyed by gnawing. This will have biased the surviving assemblage toward the sturdier parts of the skeleton, the bones of older animals, and probably the bones of cattle and horse in comparison with the smaller species.

The quality of preservation is also reflected by the quantity of identified material. Highly eroded assemblages were more fragmented and included a higher proportion of unidentified fragments. At Flagstones, in particular, the material from the Neolithic features was poorly preserved and highly fragmentary which contrasted with the bone from the Middle Farm ditches, in an area of clay-with-flints, which were in a good state of preservation with few signs of erosion.

The condition of the bone and variability between features is typical of that encountered on rural chalkland sites in Wessex. Similar patterns were observed at Alington Avenue (Maltby forthcoming). There is no guarantee, however, that the limited number of bone-producing features on any of the By-pass sites contained a representative sample of the bones of the animals originally exploited in the area.

St Georges Road

The majority of animal bone was from Romano-British deposits (Table 40). The remainder was medieval bone which comprised a complete skeleton of a horse and two boxes of other bones of which only the horse was recorded in detail (archive).

Period 4. Romano-British features

Pits

One hundred and sixty-five fragments were recovered from five pits and a graindrier along the eastern edge of the site (Table 40). The preservation of the material was good with only two of the bones collected by hand showing any signs of erosion. Four of these pits cut the rectangular enclosure along the eastern edge. Remains of cattle and sheep/goat were recovered with equal frequency and represent the majority of the collection. Remains of pig, horse, and dog are present in the assemblage.

The most significant feature in this group was an isolated pit (*01079*) midway along the eastern edge and just within the enclosure ditch. This pit contained the butchered remains of the paired limbs of a juvenile sheep. It also produced remains of at least three fully mature domestic fowl. The tarsometatarsi are without spurs and none of the broken bones reveal any medullary tissue; it is likely that these remains are

Table 40 St Georges Road: Romano-British animal bones (No. frags)

	Pits		*Enclosure ditch*	
	Hand	*Sieved*	*Hand*	*Sieved*
Cattle	23	1	47	–
Sheep/goat	38	7	59	2
Pig	7	–	14	–
Horse	2	–	6	–
Dog	2	–	1	–
Large mammal	26	1	67	7
Small mammal	19	4	78	23
Unident. mammal	3	16	13	3
Domestic fowl	24	5	–	–
Greylag goose	1	–	–	–
Unident. bird	1	2	5	–
Mole	3	–	–	–
Frog/Toad	16	2	–	–
Total	165	38	290	35

from females that were not in lay. An interesting aspect of these remains is that although they were recovered from the same feature, and are equally well preserved, the fowl bones are covered with a concretion which is not present on any of the sheep bones.

Enclosure ditches

A total of 320 bones was collected (Table 40). As with the pits, the majority was recovered from the eastern edge of the site with others from the southern portion of the rectangular enclosure A and the curvilinear enclosure ditch (*01010*) (Fig. 12). Nine per cent comprised loose teeth and tooth fragments and 17% of the hand-collected bones were gnawed by dogs. Sheep/goat remains comprised a slightly higher proportion of the bones recovered from these features, although cattle bones were present in substantial amounts.

Period 6: medieval horse burial

The bones of a male, adult horse (SF10) were excavated from feature *01083*. The skeleton was complete and well preserved (the ossified remains of the intercostal cartilage were present but highly fragmented). The skeleton was orientated north–south with the head at the north end. The horse was placed on its right side and its left hindlimb placed at the northern end alongside the head. This limb was removed in order to fit the animal in the hole. Butchery marks on the ischium support this.

Crown height measurements from the cheek teeth (after Levine 1982) provide an estimate of age at 7–10 years (Codrington 1966; Rose 1972). Two other noteworthy characteristics are the evidence of a well developed musculature on the scapula and a curious bifurcated spinous process on the axis. The only other bone recovered from this feature was a third phalanx belonging to sheep or goat.

Flagstones

A total of 4757 fragments was collected from prehistoric features at Flagstones (Table 41), though most (91%) of the material came from Late Iron Age features.

Period 1. Neolithic

A series of pits and the Neolithic enclosure produced a total of 153 bone fragments amongst which red deer remains were dominant, thought only one third of the bones could be identified to species because they were poorly preserved and in a highly fragmentary. Cattle, pig, and dog/fox were also represented.

Pre-enclosure Pits (Period 1a)

The two pre-enclosure pits produced 50 bones. Most were poorly preserved and not identified to species. However, cattle predominates but fragments of small and large mammal were recovered, as well as evidence of small ungulate.

The Neolithic monument (Period 1b)

Forty-nine per cent of the material was recovered from the lowest group primary fills of the Neolithic enclosure. Fragments of red deer antler were predominant in the assemblage. The bulk of these are beam and tine fragments but includes two fragments of shed and one unshed antler. The only two post-cranial elements recovered are an axis of a large, possibly male, individual and a fragment of lumbar vertebra. The common domesticated animals (cattle, sheep/goat, pig, and horse) are not represented in the main body of the fill. The charred remains of a cast antler fragment (context 00541) and a small artiodactyl long-bone fragment (context 00370) were recovered from this phase of activity. An axis of red deer from segment *10* is much larger than the rest of the red deer bones in the assemblage and it is thought that it may be from a larger, possibly male deer.

Period 2. Bronze Age ring-ditch and peripheral pit

The largest proportion of bones in this period was of canid, probably dog/fox, including 12 skull fragments and three post-cranial elements. The identification is tentative and the skull bones recovered from context 00174 are possibly wolf. This species is over-represented as most of the fragments recovered are probably of a single individual. In contrast to the previous period a few bones of cattle (including a butchered vertebra), sheep/ goat, pig and horse were recovered as well as fragments of small artiodactyl size and a single frog bone.

Soil infilling of the Neolithic enclosure and the central ring-ditch

Most of the material from this phase was collected from the final silting of the enclosure ditch segments (Table 41). Cattle bones represented a third of this identified assemblage with red deer antler fragments and the bones of sheep/goat also commonly represented. The remains of a cattle skull recovered from segment *8* and a cattle ischium from segment *30* were recovered in an unusually good state of preservation and appear to be contamination from later features. The articulated remains of a left forelimb (radius, ulna, metacarpal, and 1st phalanx) of a horse were also recovered from segment *8*, the first phalanx of which has a gross exostosis akin to that caused by ring bone disease (Baker and Brothwell 1980). A series of unphased, presumably

Table 41 Flagstones: animal bones (No. frags)

	Period 1A		*Period 1B*		*Period 2*				*Period 3*				Unphased	
	Pits		*Enclosure*		*ring-ditch/ pits*		*Soil infill*		*LIA ditches*		*LIA pits*			
	H	*S*	*H*	*S*	*H*	*S*	*H*	*S*	*H*	*S*	*H*	*S*	*H*	*S*
Cattle	4	10	–	–	3	–	19	1	72	1	327	71	–	–
Sheep/goat	–	–	–	–	2	–	12	3	150	29	540	233	–	–
Pig	–	–	–	–	4	–	6	–	17	2	34	7	–	–
Horse	–	–	–	–	2	–	8	–	36	1	164	22	1	3
Red deer	–	–	16	–	–	–	12	6	–	–	1	–	–	–
Roe deer	–	–	–	–	–	–	–	–	–	–	–	–	2	–
Dog/fox	–	–	3	–	–	–	–	–	–	–	–	–	–	–
Canid	–	–	–	–	15	–	1	1	91	–	351	239	–	–
LM	4	–	4	–	5	–	28	4	31	6	95	38	–	–
SM	3	–	–	–	–	–	15	4	117	78	144	77	–	–
Unid M	–	21	1	30	7	3	42	26	50	6	39	77	3	–
LU	–	–	10	3	–	–	1	–	–	–	–	–	–	–
SU	–	7	5	8	3	1	–	–	–	–	–	–	–	–
Bat	–	–	–	–	–	–	–	1	–	–	–	–	–	–
Weasel	–	–	–	–	–	–	–	–	–	–	–	8	–	–
Unid SM	–	–	–	–	–	–	–	–	–	–	298	18	–	–
Woodcock	–	–	–	–	–	–	–	–	1	–	–	–	–	–
Unid bird	–	–	–	–	–	–	–	1	–	–	–	1	–	–
Vole	–	–	22	–	–	–	1	–	–	–	61	7	–	–
Shrew	–	–	–	–	–	–	–	–	–	–	9	1	–	–
Mouse	–	–	–	–	–	–	–	–	–	–	34	3	–	–
Mole	–	–	–	–	–	–	–	–	–	1	7	–	–	–
Unid rodent	–	–	–	–	–	–	–	–	–	–	10	40	–	–
Frog/toad	–	–	–	–	–	1	–	–	2	–	674	34	–	–
Total	11	38	61	41	41	5	155	46	627	124	2788	603	6	3

H = hand retrieval; S = sieved sample; LM = large mammal; SM = small mammal; LU = large ungulate; SU = small undulate; Unid = unidentified

prehistoric features produced a few bones of horse and unidentified mammal, but also include two roe deer bones; left and right femur fragments.

Period 3. Late Iron Age

An assemblage of over 4000 fragments of bone was recovered from Late Iron Age features, predominantly from pits (83%). Sheep/goat predominates over cattle and horse in this period, but pig was only poorly represented. Dog bones and a relatively large number of frog/toad bones were also recovered.

Ditches

The articulated remains of the left hindlimb of a horse were recovered from the primary fill of ditch *00011*. Another group of associated horse bones, from a different individual, including the right tibia and astragalus and a ?tarsal bone were recovered from the upper fill of ditch *00011*.

Pits

Over 3500 animal bones were recovered from ten pits of Late Iron Age date (Table 41). Bones of sheep/goat were predominant (25%). Cattle was fairly well represented while typically both horse and pig were poorly represented. Dog was present. Two pits (*00305* and *00019*) contained a number of small rodents and amphibians, pit fall victims indicating that these pits at least were left open whilst others may have been largely backfilled or covered.

Some of the pit refuse had obviously been discarded elsewhere and had been butchered, eroded, and gnawed by dogs before being thrown into the pits. However, the occurrence of a large number of associated bones in basal fills in particular indicates that carcasses, or partially gnawed and dog chewed carcasses, were ultimately disposed of in the pits. A butchered calf was recovered from pit *00045* and the base of pit *00018* produced a number of associated groups of bone. These included the remains of juvenile and neonatal sheep as well as the remains of at least three adult dogs. One of the groups

of associated dog bones comprises a near complete skeleton of a stocky, short-legged male, the astragalus of which is butchered.

Pit *00019* produced eight groups of associated remains and includes a high percentage of puppy bones. The mandibles of a juvenile dog and the hindlimbs of a juvenile sheep/goat were recovered from the upper fill. The middle of the pit produced the partial skeleton of a juvenile sheep and the lower fill produced two groups of associated cattle bones; a partial right hindlimb and a pair of mandibles, and the near complete skeleton of a butchered female sheep.

Eighteen groups of associated bones came from pit *00302*, most of them articulated fore- and hindlimbs of cattle and horse, found in two successive layers in the middle fills of the pit, as were two horse mandibles and a dog skull. Three cattle skulls, two with their cervical vertebrae, lay with other bone on the base of the pit (Fig. 34).

Conygar Hill

Two pit-rings of Late Neolithic date on the north slope of Conygar Hill produced a total of 155 fragments of animal bone recovered from hand excavation of pits from both rings. The data from these features are summarised in Table 42. Most (65%) of the identified bone (cattle) was recovered from feature *52100* of the easternmost ring. The remaining fragments were recovered from feature *52118* of the western pit-ring which included 40 bones of pig from pit *52119*. The pig remains are in a good state of preservation and comprise long-bones and skull fragments of at least two individuals.

Table 42 Conygar Hill: animal bones from the pit-rings (No. frags)

	Primary fill	*Soil infill*	*Total*
Cattle	9	12	21
Pig	40*	–	40
Unid mammal	30	64	94
Total	79	76	155

* all pig bones from pit *52119*

Maiden Castle Road

Of the 1162 fragments of animal bone recovered from this site (Table 43) 97% are from features of Romano-British date.

Period 4. Romano-British

Most of the material came from a pit, feature *02387* and the remainder from ditches, graves, quarrying features, and soil layers. Most of the bone (70%) from trackway ditches was unidentified, and only cattle and sheep/goat were identified, occurring in equal proportions while fewer than 175 bones were recovered from quarries, of which many (54%) were eroded. Nearly 40% was identified and sheep/goat, predominate (61%) with cattle, pig, horse, and dog (1%) also present. A group of associated cattle vertebrae was recovered from context 2306, the fill of quarry scoop *23080*. A small

Table 43 Maiden Castle Road: animal bones

	Period 1		*Period 4*									
			Pit 02387		*Ditches*		*Graves*		*Quarries*		*02310*	
	H	*S*	*H*	*S*	*H*	*S*	*H*	*S*	*H*	*S*	*H*	*S*
Cattle	–	–	19	1	6	–	6	–	28	–	5	–
Sheep/goat	–	–	83	11	6	–	44	–	35	2	5	–
Pig	–	–	2	–	–	–	2	–	5	–	–	–
Horse	–	–	3	–	–	–	4	–	5	–	–	–
Dog	–	–	158	77	–	–	3	–	1	–	–	–
LM	2	–	1	–	13	3	22	2	35	–	9	–
SM	–	–	40	16	7	8	44	4	46	3	2	–
Unid mammal	–	–	6	37	7	2	6	11	6	5	–	–
LU	–	–	7	–	–	–	–	–	–	–	–	–
Hare	–	–	22	–	–	–	1	–	–	–	–	–
Domestic fowl	–	–	8	–	–	–	30	–	–	–	–	–
Pigeon	–	–	21	–	–	–	–	–	–	–	–	–
Crow/rook	–	–	3	–	–	–	–	–	–	–	–	–
Starling	–	–	–	1	–	–	–	–	–	–	–	–
Unid bird	–	–	14	5	–	–	–	1	–	–	–	–
Vole	–	–	–	4	–	–	1	–	–	–	–	–
Mole	–	–	–	–	–	–	1	–	–	–	–	–
Unid rodent	–	–	–	10	–	–	–	1	–	1	–	1
Frog/toad	–	–	11	36	–	–	36	54	–	1	–	–
Unid fish	–	–	–	6	–	–	–	–	–	–	–	–
Total	2	–	398	204	39	13	200	73	161	12	21	1

For key see Table 40

group of 22 fragments of bone from structure *02310* included both sheep/goat and cattle.

Pit 02387
A total of 602 bones was collected from this pit. Preservation is good with loose teeth representing less than 3% of the unsieved bone. Only 1% is eroded and 11% ivoried. Seven per cent of the hand collected bone is gnawed and 4% butchered. The good state of preservation is also indicated by the amount of identified material, in this case 86% of the hand collected bone. The majority of the identified material is dog bones (45%), however, this includes 100 bones of neonatal animals. Bones of sheep/goat are, in fact, predominant, comprising 24% of the identified material, which includes 36 of sheep and one goat metatarsal. The rest is cattle (5%) and horse (1%). Pig is only represented by two bones. Domestic fowl account for 2% of the identified material and hare bones 6%. Remains of amphibians and other birds are also represented.

Most of the material was recovered from the lower fills of the pit. Two groups of associated remains were recovered from context 02486. A butchered sheep jaw with periodontal disease, the remains of a sheep forelimb, and a juvenile dog skull and mandibles were also recovered from this context. Context 02388 produced the remains of the butchered left hindlimb of a sheep and a pair of butchered cattle hind limbs. A partial skeleton of a pigeon was also recovered, from context 02388.

The inhumation cemetery
Seventeen of the 23 excavated graves or possible graves produced a total of 274 bone fragments. The bones of sheep/goat, predominate (34%); the remainder comprise bones of domestic fowl (23%), cattle (5%), horse (3%), dog (2%), and pig (1%).

Three of the graves produced associated groups of bone which may have been grave goods. An immature chicken was recovered from the fill of grave *02202*. The remains of two sheep, the lower forelimbs of a juvenile sheep from grave *02367* and the skull, mandibles, atlas, and axis of a juvenile sheep from grave *02230*, were also recovered. None of these are butchered and it is difficult to determine whether they were incorporated into the gravefills during the backfilling or placed as joints of meat.

Middle Farm

The majority of bone was collected from Bronze Age contexts (Table 44), with a small amount from trench B, and a single bone from a post-medieval context.

Period 2. Trench A: Middle–Late Bronze Age

The two main features excavated were a linear boundary ditch, *03051* and an enclosure ditch, *03050*. Eighty-six percent of the bone was recovered from features associated with *03051* which post-dates the enclosure ditch.

In linear boundary ditch 03051the bones of sheep/ goat predominate (35%); cattle bones represent 29% and the remainder is comprised largely of unidentified fragments and a few bones of pig, horse, dog, and goose. Associated groups were recorded including three severely eroded cattle cervical vertebrae from context 50790, and the butchered remains of the left forelimb of a cow from context 03099.

Table 44 Middle Farm: animal bones (No. frags)

	Trench B		*Trench A*			
	Period 3		*Period 2A*		*Period 2C*	
	H	*S*	*H*	*S*	*H*	*S*
Cattle	2	–	11	1	170	18
Sheep/goat	2	–	9	1	210	22
Pig	–	–	–	–	3	–
Horse	–	–	–	–	1	–
Dog	–	–	–	–	7	1
Large mammal	–	–	14	–	140	13
Small mammal	–	–	7	3	56	7
Unid mammal	6	–	1	9	13	–
Goose	–	–	–	–	1	–
Total	10	–	42	14	601	61

For key see Table 40

Only sheep/goat and cattle were identified, in equal quantities from enclosure ditch 03050.

Trench B

Ten bones were recovered from scoop *03009*, cut by Beaker period post-holes. They include cattle and sheep/goat.

Discussion

Associated groups of bones

A major feature of the faunal remains is the frequency of occurrence of associated groups of bones. Such groups include complete skeletons, partial skeletons, small articulated groups of limb bones or vertebrae, and multiple burials of neonatal dogs. These groups have been summarised by site (*above*) and are discussed in archive.

The total of 341 associated dog bones includes 102 puppy bones. The explanations for the presence of these groups varies. The neonatal skeletons of all species are probably from natural mortalities of breeding stock (Maltby pers. comm.), although the possibility of controlling dog populations by culling some newborn litters cannot be ruled out (Harcourt 1974). Some of the smaller groups of associated bones, such as articulated limbs, are considered to have been parts of carcasses, deposited after skinning and/or butchery. It is more difficult to explain the presence of other groups of associated bones simply in functional terms.

There is a possibility that some of the bones were deliberate depositions of ceremonial or ritual significance. The existence of such 'special' deposits has suggested at Danebury (Grant 1984) and the presence of such groups in contexts that also produced human bones may be of significance. This does not occur with the By-pass sites, except in the Late Iron Age and Romano-British graves, which often included animal bone, especially chicken. The presence of associated groups of animal bones has been encountered on most Iron Age and rural Romano-British sites investigated in recent years.

Sheep/goat

Bones of sheep/goat are predominant throughout the post-Neolithic assemblages (Table 45). Although bones of these two species are differentiated where possible, only a single metatarsal of a goat has been recognised from a Romano-British pit (*02387*) at Maiden Castle Road. The majority of the ovicaprid sample are therefore believed to be sheep.

Overall the remains recovered indicate that most sheep were culled between 18 months and 4 years throughout the periods covered by these assemblages, and thus many were of a size and age suitable for slaughter for meat. This pattern does not change substantially over time and there is little evidence for neonatal mortalities or for older animals with heavy wear on their molars (Stages 6–7). This restricted age range, particularly in the Late Iron Age pits at Flagstones, is not typical of other sites in southern England and may suggest some bias in disposal practices. The mortality pattern displayed by the sheep mandibles suggests that live young animals were not present at Flagstones in the Iron Age. If sheep were kept and lambs raised on or near the settlement, one would have expected more neonatal mortalities to be represented (cf. Fordington Bottom, *below*). There is sufficient butchery evidence to suggest that the bias reflects the disposal of food waste.

A large Bronze Age sheep from the linear boundary ditch *03051* at Middle Farm is represented by a metacarpal bone and gives an estimated height of 69.4 cm. This large size is confirmed by measurements of Bronze Age material from the maximum proximal breadth of two radii and is larger than the estimated size of Early Iron Age sheep from La Sagesse, Romsey, Hampshire (Bourdillon 1990).

The presence of such a large sheep in the Bronze Age is unusual. There is little comparable, well dated Middle–Late Bronze Age material from Dorset. However, the contrast between the size of the Middle–Late Bronze Age sheep represented at Middle Farm and those from the earlier Iron Age at Flagstones is most marked. Withers height estimates for the Iron Age sheep (41.0–49.8 cm, mean = 45.1 cm) represent animals that were smaller than those from Iron Age samples at Gussage All Saints (Harcourt 1979a), Viables Farm, Hampshire (Maltby 1982), and Winnall Down, Hampshire (Maltby 1985b). In fact, although the sample size is small, the mean estimate falls well below the lower limit of the range in sheep sizes from southern English Iron Age settlements. This may question the assumption that little morphological change occurred in sheep in Britain between the Neolithic and the Iron Age (O'Connor 1982). It is also possible that animals represented by this bone were not bred on the site but imported presumably for the inhabitants of the Middle Farm site.

Cattle

Cattle bones represent a significant element of the domesticate assemblages, particularly in the Neolithic and Bronze Age. Overall the cattle are predominantly adults (wear stage 6), although a few younger animals are represented in the Bronze Age deposits at Middle Farm.

A Bronze Age metacarpal from Middle Farm represents an animal with a withers height (104.1 cm) well within the range of sizes calculated from measurements presented by Jewell (1962, fig. 1) for material from Boscombe Down, Wiltshire and Minnis Bay, Kent. Withers height estimates from long-bones from the Late Iron Age pits at Flagstones are comparable to the estimated size of Iron Age material from All Cannings Cross and Glastonbury, and are slightly larger than the estimated sizes of the early material from Roman Dorchester (Maltby 1993).

Fewer than 10% of the cattle remains bear cutmarks. The high incidence of canid gnawing suggests that some butchery evidence has been destroyed and that this figure is under-representative of the butchered material. Most of the butchered bones came from the Late Iron Age pits at Flagstones. The pattern recorded from these bones includes mostly knifecuts on the shaft of long-bones toward the articulating ends and a few superficial chopmarks. It is likely that these marks were made during the dismembering of joints of meat and the filleting process.

Pig

Remains of pigs were recovered in small numbers from all five sites. They are reasonably well represented in the later Neolithic and earlier Bronze Age assemblages (Table 45), but are virtually absent from the Middle Bronze Age assemblages and only poorly represented in Iron Age and Romano-British contexts. Flagstones produced the largest assemblage (51 out of 94 pig bones (54.3%)) in which skull fragments and limb-bones were found in roughly equal numbers. Most of the bone is from immature animals.

The Romano-British assemblages from St Georges Road and Maiden Castle Road appear to resemble King's (1978) pattern (higher proportions of skull fragments, mandibles, and loose teeth) but the assemblages here are too small to confirm this. The measurements show that they fell within the range of domestic pigs. It seems that pig was not exploited in large numbers during the later prehistoric periods in these rural locations.

Ageing data from two mandibles from Neolithic and Late Iron Age contexts indicate that the animals were about two-and-a-half years old (Bull and Payne 1982). Some younger pigs, with unerupted 3rd molars; and one fairly aged animal, with relatively heavy wear on all molars, are also recorded from Late Iron Age contexts.

Horse

Horse bones are present in small numbers in the Neolithic and Bronze Age deposits. Thereafter they occur more frequently. Analysis of the tooth eruption data reveal that most of the horses are adults. No bones of neonatal or juvenile horses were recovered. This is typical of the pattern noted by Harcourt (1979a) at Gussage All Saints, which prompted him to suggest that horses were not bred in captivity but captured from wild populations. Most of the Iron Age and early Romano-British horses were of small stature comparable to that of a modern New Forest Pony. The buried medieval horse from St Georges Road has an estimated withers

Table 45 percentage composition of main domestic species by period (hand collected only)

	Early Neo	*Later Neo.*	*EBA*	*M–LBA*	*LIA*	*RB*
Red deer	–	20.8	22.0	3.4	>0.1	–
Cattle	100	27.3	30.5	44.8	27.6	28.4
Sheep/goat	–	–	23.2	54.3	55.8	61.1
Pig	–	51.9	12.2	0.7	3.5	6.3
Horse	–	–	12.2	0.2	13.1	4.2
Total bones	14	77	82	446	1707	478

height (Kiesewalter 1888) of 145.8–151.9 cm (14.1–14.3 hands).

Red deer

Red deer were mainly represented in the Neolithic and earlier Bronze Age by antler fragments. Exploitation of red deer antler for use as tools has been encountered on many Neolithic sites, including, in the local area, Maiden Castle (Armour-Chelu 1991), and the Neolithic post-pits at Dorchester Greyhound Yard (Maltby 1993). The presence of such material at the enclosure at Flagstones is consistent with the pattern established for sites of this period in southern England. Red deer antler picks recovered from the enclosure at Flagstones are discussed elsewhere. Few post-cranial elements were recovered from the Neolithic features at Flagstones and, coupled with the fact that two of the antler bases recovered were shed prior to collection, it is not clear whether the animals were exploited as a food source. It is possible that deer were hunted and butchered at the kill site and their bones may not have been encountered at the settlement sites. Red deer bones were not found in the later samples from Flagstones or any of the other sites.

Dogs

Most of the dog remains were recovered in associated groups (ie articulated). Some of these are the bones of neonatal animals presumably discarded as unwanted litters. Other canid remains include groups of adult dogs some of which had been butchered. Evidence for the exploitation of dogs for their meat has been encountered on Iron Age sites in southern England (Harcourt 1974; Maltby 1981; Grant 1984). Although the pattern of cutmarks recorded from the astragalus of two dogs from distinct features at Flagstones suggests dismembering activity (Binford 1981), it is difficult to ascertain whether dogs were exploited as a food resource in the Romano-British period on the By-pass sites. Dogs were probably kept for a variety of purposes and it is likely that they were considered to be of particular value as herding animals (Harcourt 1974; Ryder 1985).

Domestic fowl

Domestic fowl were not exploited in southern England until the Late Iron Age (Coy 1989; Maltby 1981). Although they were present in Late Iron Age deposits at Gussage All Saints (Harcourt 1979a), they are absent in the Late Iron Age deposits in the By-pass, appearing in small numbers by the Romano-British period.

All of the bones recovered are from adult birds except for the remains of a juvenile limb from a Romano-British grave fill. There is no evidence to support the exploitation of these creatures for food, though it is assumed that they contributed to the diet as an occasional source. None of the tarso-metatarsi possess spurs or spur scars, suggesting that all those recovered are female and none of the femora had medullary tissue, suggesting that the animals were not in lay (Driver 1982), but were presumably kept for eggs.

The birds are substantially smaller than those recorded from the Romano-British cemetery at Alington Avenue (Maltby forthcoming) and the lengths of all the bones are at the lower end of the measurements from Romano-British deposits at Dorchester Greyhound Yard (Maltby 1993, table mf. 54). This again, suggests that the remains recovered from the By-pass sites were from hens.

Other species

Hare bones were found in small numbers in Romano-British contexts at Maiden Castle Road. These represent an occasional meat resource, as do the remains of woodcock and pigeon also recovered from the Romano-British deposits at Maiden Castle Road. Corvid species may have been attracted as scavengers to the settlements. The rook/crow remains recovered from these layers are likely the result of accidental deaths and are not considered to represent a food source. The only fish bones recovered, a few fin ray fragments of indeterminate species, were also recovered from these layers.

Amphibians and small mammals

The remains of frogs and toads were encountered in substantial numbers in the Late Iron Age pits. Amphibian remains are generally considered to be the result of incidental death, however, it is likely that these remains are contemporary with the rest of the deposit suggesting that the pits remained open.

Species Representation: Economy and Exploitation

The project provided animal bones from five of the excavated sites. Although the samples are relatively small, the major value of their study lies in the cumulative information that they can provide concerning the developments in animal exploitation during the Neolithic to Romano-British periods in the south Dorchester area. The results have been compared directly with those from Alington Avenue (Maltby forthcoming) and the Roman deposits in the town of Dorchester itself (Maltby 1993; Hamilton-Dyer 1993), and also with material from Maiden Castle (Armour-Chelu 1991) and Poundbury (Buckland-Wright 1987).

The chronological distribution of bone is far from uniform and unfortunately the number of bones from earlier prehistoric deposits is small (308 from Neolithic contexts; 257 from earlier Bronze Age contexts) and their preservation poor. However, Middle Farm did

produce a better preserved sample, albeit from only two ditches, of later Bronze Age date (718 fragments). Numbers of bones from the Late Iron Age and Romano-British periods is higher. Reasonable samples were obtained from St Georges Road (528 from Romano-British contexts), Flagstones (4142 Iron Age), and Maiden Castle Road (1114 Romano-British) and bone was recovered from a wider range of features allowing intra-site comparison and providing an opportunity to examine the variability between different feature types.

Some chronological variation can be seen and statements about exploitation and economy can certainly be made of the later prehistoric and Romano-British periods for which there is also more comparative material.

Earlier Neolithic

The assemblages of earlier Neolithic bones are extremely limited and few interpretative statements can be generated from this data. Nevertheless, all the identified bones are cattle although unidentified small mammal and small ungulate are present.

Later Neolithic

The majority of the main species from the small assemblage of Late Neolithic bones were possibly hunted or captured from the wild (Table 45). Red deer antlers were certainly collected, and it is possible that they were hunted and butchered at the kill site as few of their bones have been encountered at the settlement sites. Pigs would predominantly have run free within the woodland and the cattle could have either browsed woodland or grazed grassland. Pigs are abundant during this period and although they have been interpreted as an indication of woodland (Smith 1984), the molluscan evidence indicates that this was limited. Pig would probably benefit from clearances and increase in food diversity (Coy 1982).

The lack of sheep is surprising in view of their relative significance in other later Neolithic environments (Smith 1984) and they have certainly been recorded as a significant proportion from Maiden Castle (Armour-Chelu 1991), but are less well represented at both Greyhound Yard (Maltby 1993) and Mount Pleasant (Harcourt 1979 b). There is little doubt, however, that the small sample size and possible taphonomic effects may have played a role in their paucity here.

Earlier Bronze Age

Although red deer is still significant (22%), indicating that hunting may have played an important role in the earlier Bronze Age economy, the domesticates, cattle and sheep/goat, become dominant. Pig is also still fairly common, possibly indicating pannage. Here the indication is that larger areas of grassland were available to accommodate grazing for the sheep.

Cattle are still better represented and would have been well suited to a mixed woodland and grassland environment being both browsers and grazers. Horse is relatively significant (Table 45) but occurrs as weathered remains and may have been caught from the wild (Harcourt 1979a). Although the small size of the assemblages is restrictive, the evidence might indicate a more progressive step towards a substantial organised farming practice and possibly an agricultural consolidation and expansion.

Middle–Later Bronze Age

During the Bronze Age several major developments seem to have occurred. The numbers of red deer diminish significantly and represent less than 4% of the main species (Table 45); horse too is insignificant. By contrast the percentages of both sheep/goat and cattle rise. For the first time sheep are the most common species (54%). They seem to have been relatively large in size. The dominance of sheep and cattle indicate an organised, and larger scale, pastoral farming economy. The large size of the sheep may be an indication that specific breeds might have been imported into the area rather than bred locally. If so, this provides evidence of planned animal husbandry and stock control.

Late Iron Age

The considerably larger assemblages and the greater quantity of comparative data from this period make interpretative statements about farming, trade, and economy in the later prehistoric and Romano-British periods considerably easier.

In the later Iron Age sheep increase in predominance while cattle are less well represented. Livestock farming continues to expand broadly in the trends outlined through the Bronze Age. However, the broader economy and other specific cultural factors can also be seen to play a role. Horse, although representing 13% of the main domestic animals, is shown to contribute more by the presence of at least three individuals from a single pit.

Neonatal sheep, indicative of a breeding population, are missing from the By-pass assemblages. Furthermore, the culling age of the sheep seems to indicate that they were primarily a meat stock and the butchery techniques are consistent with those recorded from other Iron Age sites. The high proportion of sheep aged between 18 months and 4 years is, however, unusual on Iron Age sites in southern England, where, more commonly, the remains of younger lambs, neonatal mortalities, and older animals are encountered (Grant 1984; Maltby 1981). In contrast to the By-pass, the ageing data from Maiden Castle (Armour-Chelu 1991) indicates that the majority of sheep survived to at least 5 years and, thus were not likely to have been specifically raised for meat. Further, the By-pass sheep were particularly small. Perhaps this pattern of small sheep shows poor nutrition (Müller pers. comm.) and thus might be taken to indicate over grazing and competition for pasture. Certainly the size of sheep from the Late Iron Age deposits at Flagstones is not typical of other southern England sites.

Despite the lower representation of cattle, in comparison with sheep/goat, these animals would have provided most of the meat for consumption by virtue of their much greater carcass weight. Cattle may have been largely herded for their meat. Although less than 10% of the cattle remains bore cutmarks, the high incidence of canid gnawing suggests that this figure is not representative of the butchered material and some of this evidence has been destroyed by gnawing. These bones included mostly knifecuts on the shaft of long-

bones toward the articulating ends and a few superficial chopmarks. It is likely that these marks were made during the dismembering of joints of meat and the filleting process. The dairy role of these herds may be under-estimated on the basis of faunal remains, but some indication of the presence and use of dairy products can be seen in the occurrence of perforated bowls from Late Iron Age contexts at Flagstones and Poundbury (Evans *et al.* 1987).

The composition and age of the faunal material, especially the high proportion of remains from sheep of an age suitable for culling for meat, indicate that the population was exploiting their flocks with efficiency for meat production. However, since the evidence thus far from Maiden Castle indicates a lack of sheep of this age, one would expect there to be some sort of relationship between the two sites.

A large, consistent, and typical pastoral economy is portrayed in the Late Iron Age and the development of rural economy which presumably occupied large areas of downland surrounding Dorchester and extended to areas including Maiden Castle itself. However, the reduction in quality of grassland and the competition for prime grazing land may be invoked for poor nutrition and small sizes in the sheep.

Romano-British

Cattle and sheep farming continue in prominence. The occurrence of pig and domestic fowl is seen to rise indicating a real increase in the diversity of livestock. An increase in rural production may reflect the increased consumption and requirement of the urban centre of Dorchester.

The virtual absence of goat from the Romano-British deposits contrasts with assemblages from Alington Avenue and Greyhound Yard where there is evidence of their use as an occasional food source. Goats were not exploited in the area in the Late Iron Age and their use does not appear to have developed on rural sites after the Roman conquest, although they may have been kept by the inhabitants of Roman Dorchester for their milk (Maltby 1989).

The livestock can be seen to be comparable to those recorded previously. The sizes of sheep, for instance, at both Alington Avenue (Maltby forthcoming) and Greyhound Yard (Maltby 1993) are comparable with those from the By-pass. However, significant differences between rural and urban deposits, such as butchery patterns, can now be recognised indicating variation in the use and requirements of these two contemporaneous populations.

Although sheep butchery is typical of the period, a practice not observed on any of the limb-bones was the chopping of the shaft of the radius and tibia made during the removal of the lower limbs from the dressed carcass. Such marks were common at Greyhound Yard (Maltby 1993) and may have been an innovation introduced during this period in such urban centres. Furthermore, there is no evidence from the rural sites on the By-pass of any splitting of cattle limb-bones nor is there evidence of marks made by running the knife blade along the shaft during filleting. Such butchery evidence was also common at Greyhound Yard (Maltby 1993) and is typical of practices carried out, presumably by specialists, on other Romano-British urban and, especially, military sites (Maltby 1989). Only one example of filleting was recorded at Alington Avenue (Maltby forthcoming). It is clear from this that inhabitants on rural sites practised more traditional butchery techniques, probably as a result of the smaller volume of material consumed, and they continued to do so after development of techniques in Romano-British urban centres. A similar phenomenon was observed at Owslebury, Hampshire (Maltby 1987).

The relative abundance of horse on rural sites contrasts with Dorchester and other Romano-British urban sites (cf. Maltby 1993). Counting cattle and horse fragments only, and excluding associated bones, horse fragments contribute 10–17% to the Romano-British assemblages from the By-pass sites. In Dorchester itself, this figure did not exceed 8% in any sample and formed less than 5% in the majority of deposits (Maltby 1993). Horses may not have been valued for their meat by the inhabitants of towns; whereas cattle formed the most important component of the meat diet and, therefore, their bones comprised the majority amongst urban refuse (ibid.). Horse appears to have been of greater importance in the Iron Age and this tradition seems to have continued on rural Romano-British sites. The patterns of fragmentation and butchery encountered on the By-pass confirm this.

Pig too can be seen to produce an urban/rural dichotomy. The results from all the Iron Age and Romano-British rural sites in the Dorchester area are in marked contrast with the evidence provided from the Roman deposits in the town itself. Greyhound Yard produced a much higher proportion of pig bones, where they provided over 20% of the identified fragments in each period (ibid.). Pigs were a more significant part of the diet of the inhabitants of the town yet probably not farmed, or discarded, in any great numbers in the surrounding countryside.

The Romano-British period does not show any real change in the local animal husbandry and farming except perhaps a general increase in numbers. It does however reveal the dichotomy between urban and rural populations. While most of the animals from the town can be seen to originate from local farms, the urban requirements were significantly different. The town cannot be seen to dictate the farming regime but the proportions of specific animals and the use and preparation of meat cuts can be seen to be at variance with those in the rural areas.

It is possible that farm produce for the town is destined for a more 'Roman' market, while the local farmers are more traditional native Britons, farming and butchering their animals in a more conservative and time-honoured way.

Summary and Conclusions

The results from faunal analysis should be seen as part of a wider study of animal exploitation in the Dorchester environs. Together with major samples from the Iron Age hillfort at Maiden Castle and the Roman deposits from Dorchester, the information from these excavations provides a basis for understanding animal hus-

bandry, exploitation and economy, which can only be understood, in regional terms, by inter-site comparisons.

The results presented here demonstrate variations diachronically and between settlement types. Unfortunately, the amount of material available for the earlier periods is noticeably lacking. There is, however, sufficient information available to discern variations between sites of later periods. For example, species representation on the rural Romano-British sites in the area appears significantly different from that in the Roman town of Dorchester. Samples from these rural sites contain more horse and significantly less pig than contemporaneous urban deposits.

The limited Neolithic evidence provides information of mixed farming and hunting economy. However, during the Bronze Age significant large scale pastoral farming is seen to develop and to expand and continue throughout the Late Iron Age and into the Romano-British period. Fairly extensive and efficient exploitation of flocks for meat production is demonstrated and the potential for dairying indicated by the ceramic/residue data. Further, during the Late Iron Age there is evidence for sheep as a meat stock on the By-pass, which is lacking from Maiden Castle. The relationship between these two sites is therefore of paramount importance in understanding the farming economy of the Late Iron Age landscape around Dorchester.

Furthermore, although the Late Iron Age remains from Flagstones reveal interesting patterns of occupation, we cannot understand the function of this site until we have more complete information from other Iron Age sites in the area. Romano-British farming seems to have continued the traits set in the Bronze Age to Iron Age, but the variation in consumption and preparation between the 'Romanised' urban population and the traditional 'native' farming population is marked and is indicative of the reliance of urban centres upon the rural communities.

Despite the limited nature of some of the assemblages it has been possible to recognise variations between the main species over time (Table 45) and determine some of the bases of animal exploitation and farming in the southern Dorchester landscape.

Part 3: A37 Western Link Road

5. Fordington Bottom: Site Description

by Ian Barnes

The topographical and archaeological background and history of work carried out along the line of the A37 Western Link Road are described in Chapter 1, above. The position of trenches is shown in Figures 5 and 6 and a plan of all features is in Microfiche (Mf 14).

1 Period 1. Possible Pre–Later Bronze Age

The earliest activity recorded consisted of field ditches in the coombe floor sealed below a flint gravel fan and colluvium. Small collections of struck flint and Early Bronze Age pottery were also recovered.

Two ditches, towards the base of the coombe and sealed below the earliest colluvial deposits, may represent early prehistoric, possibly Early Bronze Age, activity. Neither can be dated by artefacts but both were sealed by Period 2 colluvium. A sherd of Collared Urn (Fig. 107, 1) was also recovered from an area of decayed natural. In addition a small number of finds, including a discoidal flint knife of Late Neolithic character and a single sherd of Beaker, was recovered as residual material in later features. A series of amorphous hollows above the coombe, adjacent to the clay-with-flints outcrop, was stratigraphically earlier than the Period 2 ditched field system. These features may represent pits for the extraction of chalk for marling the acidic soils derived from the clay-with-flints subsoil.

Ditch 262

Ditch *262* (Fig. 90) was the most substantial of the two ditches in the base of the coombe and was identified over a length of 30 m in trenches F and G. It ran parallel to the coombe side contour cutting into the natural chalk. In trench F two fills were recorded; a chalky primary fill and a yellowish brown silty clay upper fill (Fig. 93). Nine pieces of struck flint were found within the fills which were sealed by Period 2 flint gravel fan *238*. Molluscan evidence showed that the ditch had been cut into a pre-existing, open landscape.

West and downslope of *262* was ditch *462*. This was seen only in the section of a machine-excavated transect in trench G and is not indicated on Figure 90. Only the top of the ditch was recorded, though the edge could be discerned descending steeply to the south-west. No artefacts were recovered, although the upper ditch fills were sealed by Period 2 colluvium.

Decayed Natural Chalk 399

An area of disturbance in trench G east of ditch *262* (Fig. 90) was identified as decayed natural Chalk. It contained two struck flakes and a sherd of Collared Urn (Fig. 107, 1).

Hollows 146

A complex of 11 intercutting scoops and hollows, *146*, cut into the chalk bedrock, covering an area of 28 m^2 and a maximum of 0.7 m deep, was excavated in the centre of trench B. These stratigraphically pre-dated the Period 2 ditch *114*. They were filled with a series of yellowish brown silty clay loams in which 46 pieces of worked flint were found including a fabricator. They may represent chalk quarries, located on the edge of the outcrop of clay-with-flints deposit, for marling the acidic soils associated with this subsoil.

2 Period 2. Later Bronze Age

A series of features and deposits, probably of Bronze Age date, was found along the length of the route, with the majority in trenches G/H and K (Fig. 90). The Bronze Age activity included the establishment of a ditched field system on Fordington Down, the creation of a substantial lynchet along the coombe side and the construction of two huts terraced into the coombe side. Few datable artefacts were preserved. The features of this Period may represent activity over several centuries.

Ditches 6, 53, 55, and 114

The greatest quantity of Bronze Age pottery, albeit small, was recovered from four parallel ditches excavated in trenches A and B, to the south and above Fordington Bottom (Fig. 5). All probably represent field boundary ditches. Ditch *6* was cut through clay-with-flints, the three others lay at the junction of this deposit with the chalk outcrop.

Ditch *6*, 0.8 m wide, steep sided with a flat base 0.2 m wide, ran east–west across the south of trench A. This had a single yellowish brown silty clay fill which included a line of large flint nodules along and to one side of the ditch base. Seven sherds (49 g) of Early–Middle Bronze Age pottery were recovered with 29 pieces of worked flint including a discoidal knife.

Some 96 m to the north, ditch *114*, ran near parallel to *6*. This had a U-shaped profile 0.7–0.9 m wide and 0.43 m deep. It was filled with a series of yellowish brown silty loams which contained one sherd (3 g) of Early Bronze Age and one (4 g) of Early–Middle Bronze Age pottery. The ditch had been recut at least once.

Parallel ditches *53* and *55* were 15 m north of *114*. Both were shallow, U-profiled ditches no greater than 0.3 m deep. Two joining sherds of Late Bronze Age pottery were recovered from ditch *55*.

Colluvial Deposits

In the coombe floor the earliest deposits from this period comprised colluvium found in trench F and G. Layer *238*, composed almost entirely of flint nodules and, in places, chalk rubble, overlay chalk bedrock and the Period 1 ditches (Fig. 92). This (Fig. 93) varied in thickness, between 0.3 m and 0.05 m. The molluscan assemblage was typical of open country, probably arable, conditions and it probably derives from a rapid phase of erosion upslope. As the flint deposit seals the Chalk bedrock, the original soils of the coombe floor (and any

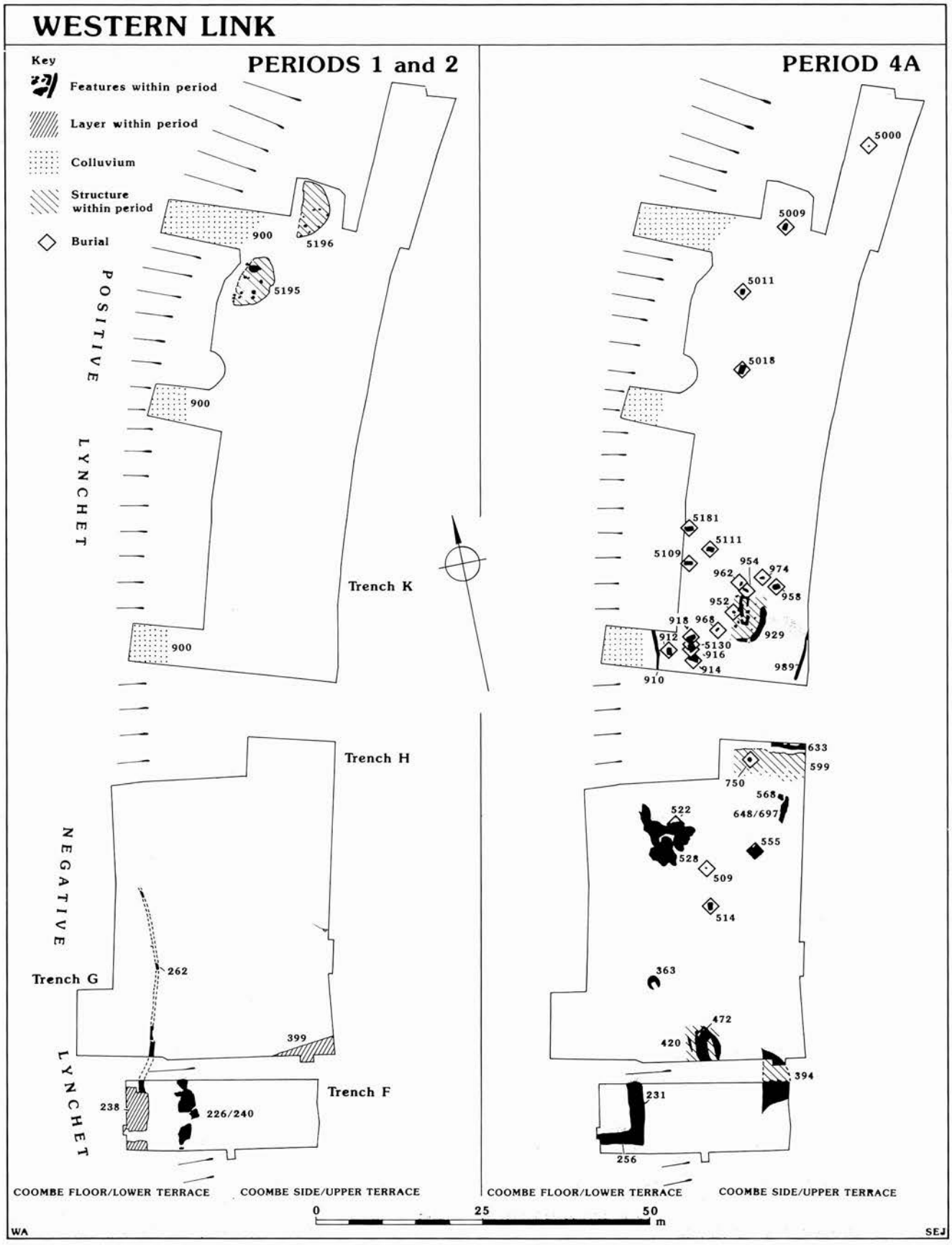


Figure 90 Fordington Bottom: Periods 1 and 2 (Bronze Age) and Period 4A (Late Iron Age / early Romano-British)

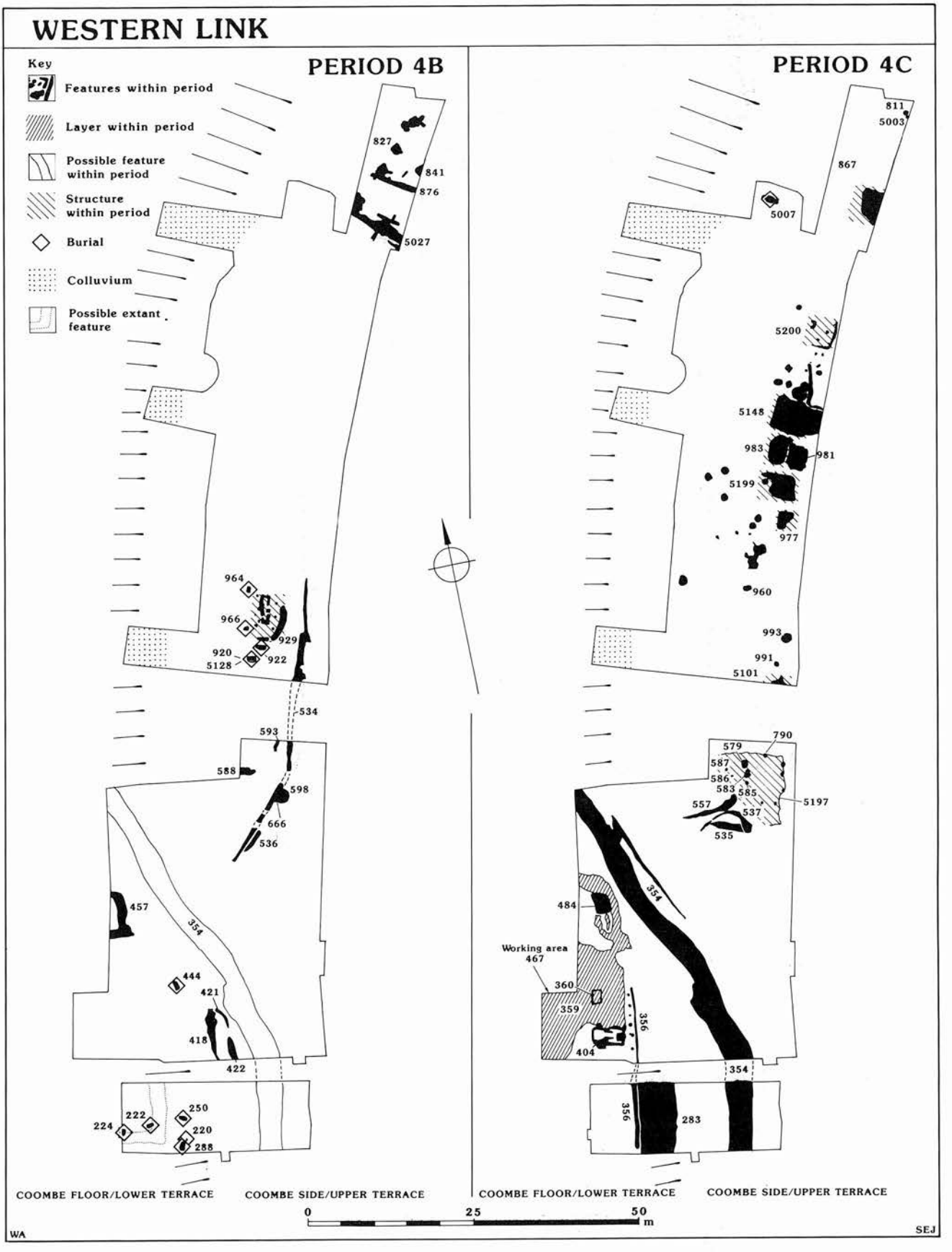


Figure 91 Fordington Bottom: Periods 4B and 4C (earlier and later Romano-British)

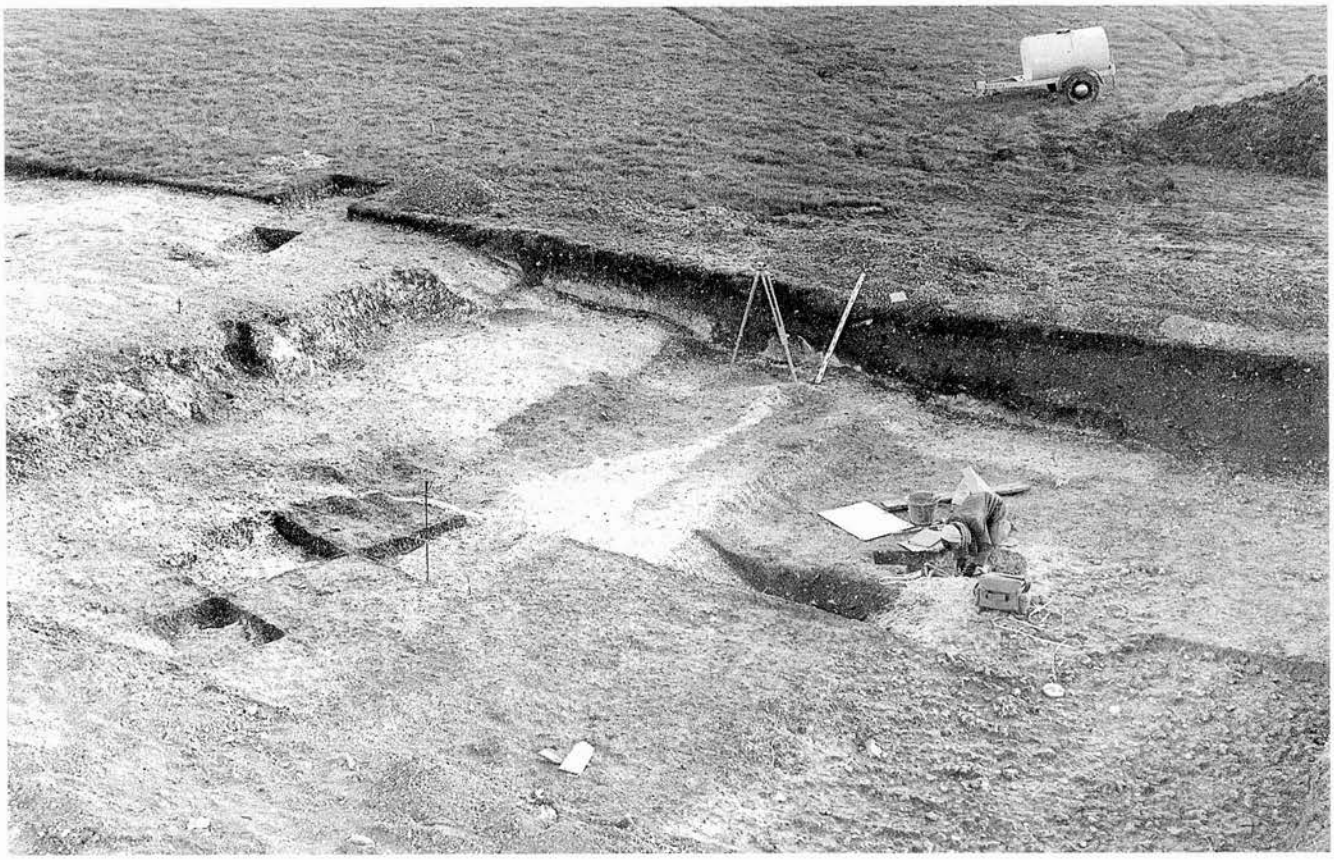


Figure 92 Fordington Bottom: coombe floor deposits in trench F, showing Period 2 flint fan 238 and hollows 226/240, and Period 4A ditch 231. Excavator stands in Period 4A grave 222

intermediary colluvium) have also been eroded away during an unknown period prior to the deposition of layer *238*.

This deposit was sealed by a finer dark yellowish brown silty clay *230*, 0.18–0.83 m deep (Fig. 93). This contained three flint flakes and two sherds (4 g) of probable Late Bronze Age sand and flint-gritted pottery. Mollusca were of mixed species with a high proportion of shade loving varieties. The base of the coombe at this time was probably under grass but was regularly inundated with colluvium from arable fields upslope. This deposit probably accumulated gradually, over centuries. The presence of prehistoric pottery likely to be Late Bronze Age in date and the absence of Roman material, where features of this date are recorded immediately upslope, suggests the deposit accumulated sometime between these periods.

Lynchet 900

In trench F colluvium 230 was deposited on the floor of the dry valley. It was not possible to establish the presence, extent, or nature of any boundaries or lynchets associated with the deposition of this material. It has been assumed that the colluvium is infilling a negative lynchet cut into the lower east-facing slope of the coombe. The negative lynchet was subsequently recut at least twice by Romano-British activity (Fig. 90), removing all traces of any Bronze Age features other than the truncated colluvium recorded in section on the floor of the coombe (Fig. 93).

It has therefore been assumed that the Romano-British developments, for example the creation of the Period 4C working area 467, re-established a pre-existing Bronze Age lynchet alignment. The date of the creation of the lynchet cannot be determined, other than broadly within the Bronze Age. The Period 1 ditch, 262, may represent an early marking-out feature.

In trench F the negative lynchet created two fairly level terraces (indicated as upper and lower on Figs 90 and 91). In neither case were the full widths of the terraces revealed. Further along the coombe and the contour, in trench K, the two are separated by a substantial positive lynchet, presumably partly reflecting the change from edge of valley floor in trench F to steeper, east-facing slope in K. Stratigraphic evidence associated with the two Bronze Age buildings in trench K, *5195* and *5196*, and described below, suggests the colluvium of the positive lynchet may be broadly contemporary with the Period 2 colluvium identified in trench F.

Bronze Age Structures 5195 and 5196

Bronze Age activity above the lynchet was represented by structures *5195* and *5196* in trench K. Both buildings were constructed on a moderately steep slope, with terraces cut into the coombe side. The western portions of the buildings were set out over colluvial material making up the positive lynchet. Although no material was recovered from this colluvium, stratigraphically it implies that the positive lynchet was created sometime during or prior to the Bronze Age.

Structure 5195

The southernmost of the two structures, *5195*, was situated to the east of the lynchet on the upper terrace in the north-west of trench K (Fig. 94). It consisted of a semicircular terrace, at most 8.6 m in diameter and 0.7 m deep, cut into the chalk. The lower face of the terrace was near vertical, but weathering of

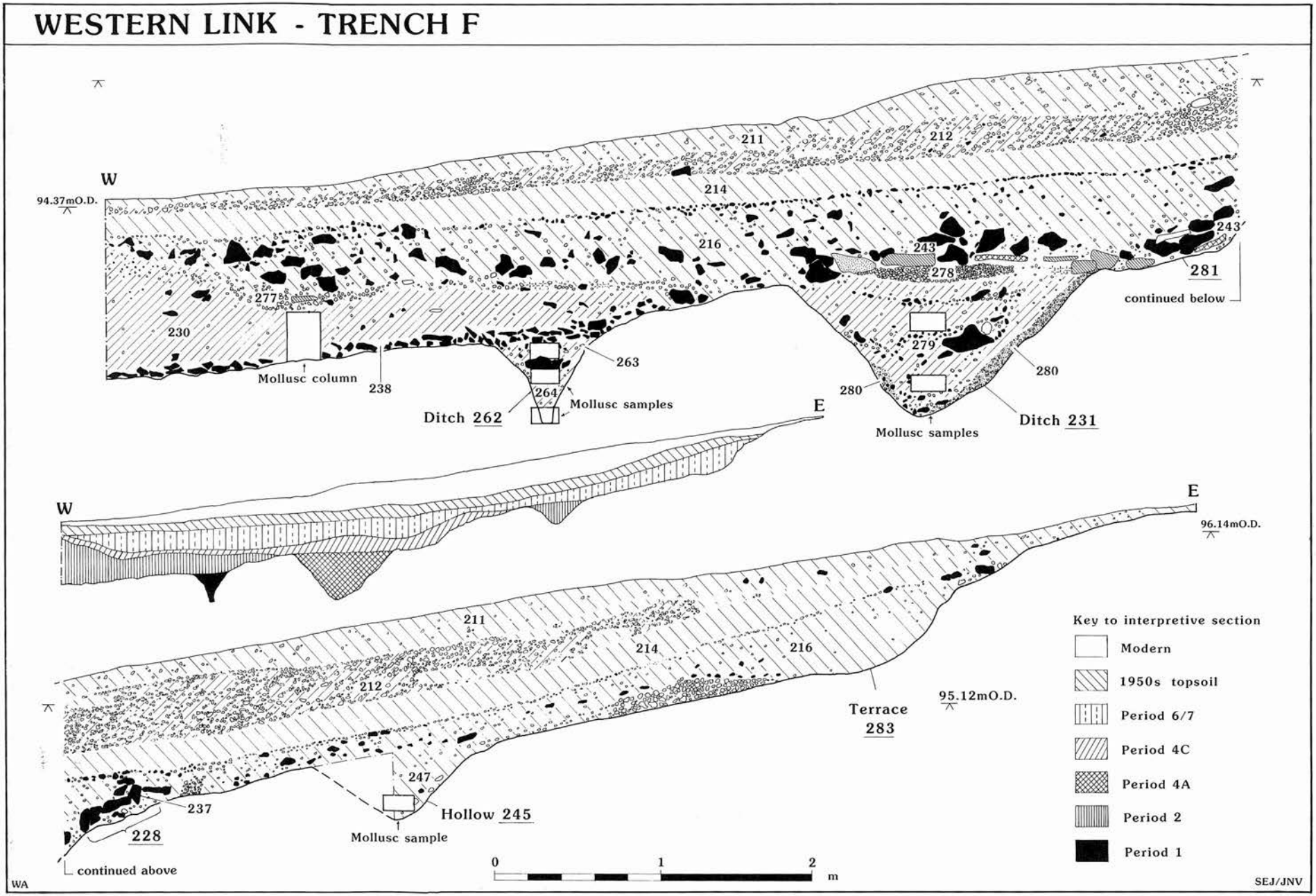


Figure 93 Fordington Bottom: section of trench F

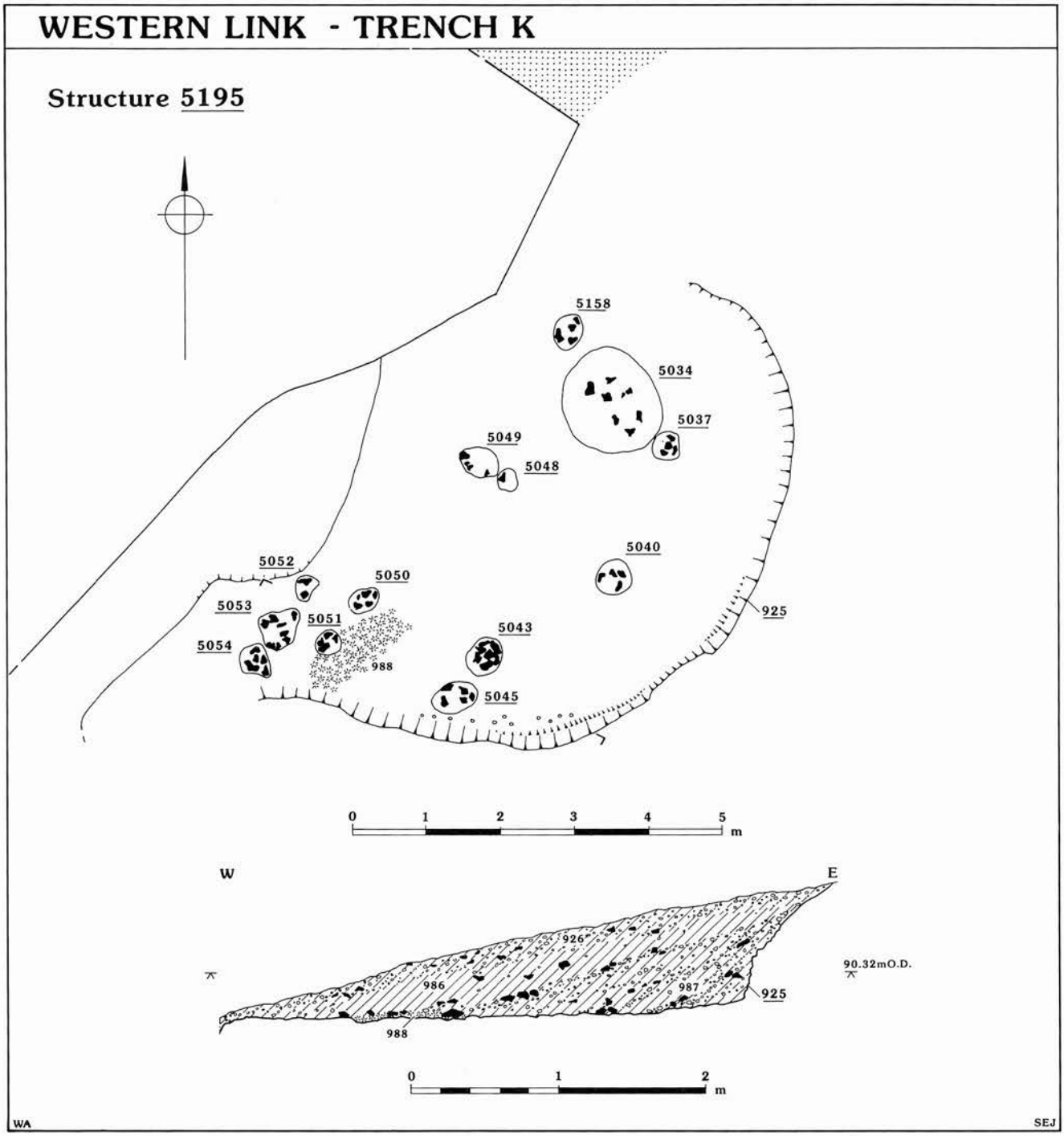


Figure 94 Fordington Bottom: Bronze Age structure 5195

the upper edge had produced a less steep face. There was no indication of a retaining wall set against the terrace face.

An arc of five post-holes was found within the terrace. This may have comprised the surviving elements of an internal post-ring, 5 m in diameter, providing the internal supports for a roof. The post-holes were generally circular with an average diameter of 0.45 m and depth of 0.31 m with clear chalk packing and silty clay fills. A second, contiguous arc of posts was suggested by the position of a number of post-holes on the southern edges of the structure. The continuation of these possible post-rings to the west could not be confirmed.

Within the structure a thin layer of ash, *988*, was excavated. The underlying deposits showed no signs of burning, implying that it was derived from elsewhere. Several associated features were recorded including two shallow post-holes in the centre of the structure (*5048*), possibly to support internal features. Also within the structure was pit *5034*, 1.28 m in diameter and 0.2 m deep. It was filled with a deposit of large flint nodules and a silty clay, along with flint knapping debris of Bronze Age character.

No occupation material was recovered from the base of the terrace. After the abandonment and collapse of the structure, the terrace became covered with a series of silty clay colluvial deposits containing much worked flint, of the same industry as that found in pit *5034* beneath it, and six sherds (54 g) of Early–Middle Bronze Age pottery from at least three different

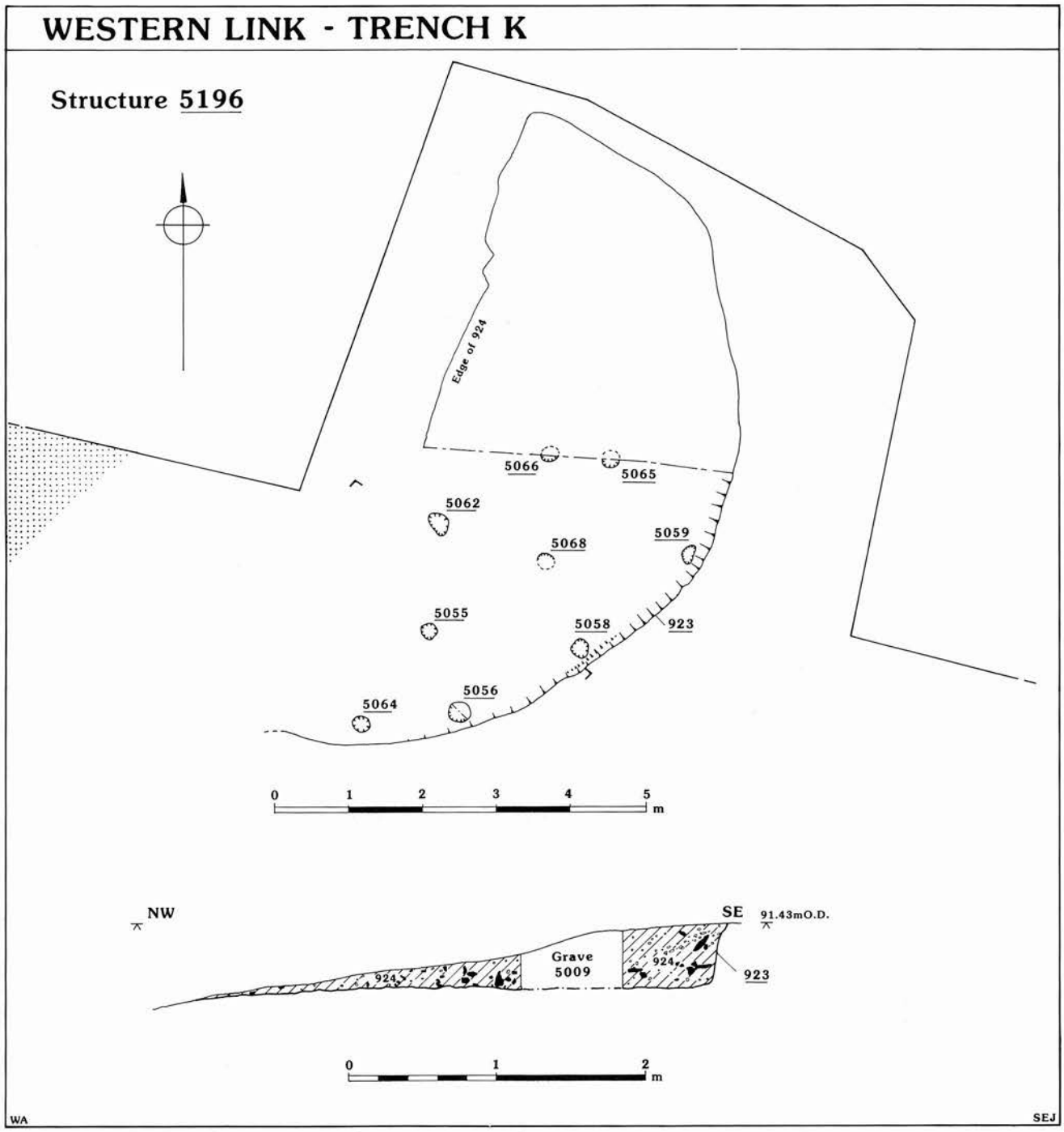


Figure 95 Fordington Bottom: Bronze Age structure 5196

vessels. In addition a fragment of possible clay weight was found, and a fragment of shale working waste.

The south-west of the building had been destroyed by two large pits, only observed in the section of a machine trench. No dating evidence was recovered from these pits which must have post-dated the abandonment of the structure.

Structure 5196

Structure *5196*, north of structure *5195* was also situated to the east of the positive lynchet on the upper terrace (Fig. 95). The structure was built in a semicircular terrace, 9 m in diameter and 0.6 m deep, with a near vertical face. Only the southern half of the terrace was examined. This revealed an arc of four post-holes which, if extrapolated, would have formed a post-ring 8 m in diameter, set close to the inner edge of the terrace. The post-holes were generally 0.26 m in diameter and 0.44 m deep. Chalk post-packing was in evidence. As with structure *5195*, it is assumed that the building was probably circular and that structural features of the western portion of the building either lie outside the excavated area or were not recognised as cut features in the colluvial subsoil.

The internal post-holes may represent roof supports or supports for furniture or partitions. No occupation material was recovered from the base of the terrace of the building and after it was abandoned a single deposit of silty clay colluvium covered the terrace. Much worked flint of possible Middle–Late

Figure 96 Fordington Bottom: early Romano-British cemetery structure 929

Bronze Age date and one sherd (6 g) of Early– Middle Bronze Age pottery was found in this deposit.

Hollows 226/240

The only other features possibly of prehistoric date comprised 13 amorphous hollows, *226/240*, cut into the Chalk to the west of and parallel to the negative lynchet at the west end of trench F (Fig. 92). These had irregular sides and bases with a maximum width of 0.83 m and a maximum depth of 0.4 m, they were filled with yellowish–brown clay loam with moderate chalk and flint inclusions. On site they were interpreted variously as 'working hollows' or 'shrub holes' (S. Staines pers. comm.). Only a small amount of undiagnostic worked flint was recovered.

3 Period 4. Romano-British

There was no recognisable activity on the site during the Early and Middle Iron Age. The coombe was reoccupied during the Late Iron Age/early Roman period. There followed over four centuries of unbroken occupation. The occupation falls into three broad periods of activity summarised below (Fig. 90–91, 4A, 4B, and 4C). Features are dated on artefactual, stratigraphic, or association grounds. Those subsequently still unphased are not described.

Period 4A. Late Iron Age / Early Roman, 1st Century BC / AD

Evidence from this Period was confined to trenches F, G/H, and K (Fig. 90). Three areas of activity could be identified; a substantial ditch *231*, enclosing an area of undetermined size and character in the coombe floor (trench F); an inhumation cemetery and cemetery structure set out along the coombe side in trench K; and, between these two areas, a working area comprising two sunken-floored structures, pits and ovens/driers (trench H). Details of the burials are summarised in Table 46; the locations of all recovered human remains is shown in Mf 14 and details are in archive.

Ditch *231*

Ditch *231* comprised a substantial V-profiled ditch on the lower terrace at the west end of trench F (Fig. 92). There was no evidence of the ditch continuing into trench G/H; it must have terminated or turned through a right-angle to the west under the baulk between the two trenches. The ditch was filled with brown silty clays (Fig. 93) of colluvial origin, of which only the upper two contained artefacts. These comprised 19 sherds (308 g) of Black Burnished ware, including a 1st century BC/AD form. Mollusca from the fills imply that the ditch was often overgrown with vegetation. A complete Black Burnished ware

Figure 97 Fordington Bottom: 'Durotrigian' burial in grave 914 (Period 4A) with Black Burnished ware vessel (Fig. 108, 7 and 8)

'Maiden Castle War Cemetery Bowl' dated to the 1st century BC/AD was buried in a small pit, *256*, in the top of the ditch.

The ditch displayed none of the characteristics of a foundation or robber trench. It does not appear to continue to the north, and encloses too small an area to have been a settlement enclosure ditch. It may have surrounded a single structure or plot, evidence of which was destroyed by later activity.

Late Iron Age/early Roman inhumation cemetery

Twenty-four graves or possible graves are assigned to this period, from which the remains of 15 skeletons were recovered. The graves and skeletons are summarised in Table 46 and in the human remains report. All are considered to be of Late Iron Age/early Roman date on the basis of associated grave goods, finds accidentally incorporated into their fills, or because of the form of burial, following the criteria used at Poundbury (Farwell and Molleson 1993).

The cemetery area

The graves were spread over a distance of *c.* 150 m through trenches G/H and K along the coombe side. Fourteen graves were concentrated around structure *929* in trench K, the remainder occurred as isolated graves. The burials were made at a time when the coombe was relatively unoccupied, and only burials or associated structures are represented during this period in trench K. Here two narrow gullies, *910* and *989* which ran almost parallel, may have formed a cemetery boundary. Both gullies ran out of the trench to the south and were not identified in trench G/H. The line of these gullies respected the alignment of the graves and enclosed an area around structure *929*.

Cemetery structure 929

This comprised a rectangular structure aligned north-east–south-west along the coombe side (Fig. 96). The main structure measured 4.6 x 2 m defined by a series of beam slots and surrounded by seven post-holes, four to the front, assumed to be the north-west facing side, and three to the rear. These post-holes probably supported the roof and possibly a veranda. A gully was excavated behind and to the south of the structure which would have been used for drainage.

All the components of the structure were shallow, the deepest being only 0.2 m in depth and all were disturbed by ploughing. Pottery from the beam slot fills also implies that the structure stood for some considerable time. Pottery included 2nd century Black Burnished ware and later Romano-British wares.

This structure was surrounded by at least 14 burials, which appear to have been deliberately set around it, most of them to the west. It does not disturb any grave and likewise, no later graves encroach upon it. This implies that the structure was built for a funerary purpose and that it remained in use until at least the latter part of the 2nd century, at which time the area ceased to be used for burial.

Burials

Fifteen skeletons were recovered from 24 graves, representing 5 male adults, 5 female adults, and 2 adults and 3 infants of unknown sex. There was no apparent fixed pattern of grave orientation except in the area of structure *929* where an east–west alignment predominated, signifying an element of planning. All five male skeletons were aligned east–west, head to the east, facing north. The five female skeletons displayed less regimentation but there was some suggestion of a south-west–north-east orientation, but with no pattern in the position of the head. Thirteen of the skeletons were crouched (Figs 97–8). There was no particular grouping or differentiation in body position between the sexes or age groups.

There appeared to be no specific areas assigned for the burial of each sex but none of the infants were buried in the cemetery group adjacent to structure *929*. Two were buried within features other than graves, keyhole oven *750* on terrace *599*, and sunken-featured building *420*. The third infant, in grave *5000*, was at the extreme north of trench K.

Grave goods

Eleven of the 12 adult burials were accompanied by grave goods (Table 46). None occurred with the infant burials. There was no pattern of grave good type or position within the grave, between the sexes, or by distribution across the site.

Four graves contained Black Burnished ware bowls (Fig. 108, 5–11; Fig. 97) of 1st century BC/AD date. Grave *916* contained a cluster of sherds to the north-west of the skull, possibly representing a grave good (Fig. 98). A Southern Gaulish Drag. 15/17 samian platter (Fig. 108, 4) of 1st century AD date, was found in grave *514*. Eight graves were accompanied by an animal offering, including three which also had pottery vessels, most commonly the left foreleg of a foetal sheep/goat (5 examples).

One item of jewellery, an iron finger ring (Fig. 111, 16) of Iron Age date, was found on the right hand of a young female adult in grave *5011*. Two large iron rings, each with double spiked loops (Fig. 111, 14 and 15) were found in the upper fills of grave *555* in trench H. Significantly there was also a post-hole at the centre of either side of the grave, stratigraphically contemporary with the grave cut. It is likely that the two iron rings were part of a timber structure set in the two post-holes, and that this comprised a grave marker, or memorial. Stray

Table 46 Fordington Bottom: Period 4A and 4B cemeteries, grave summary

Grave	*Trench*	*Dimensions L,W,D (m)*			*Align-ment*	*Sex*	*Age*	*Position*	*Grave goods*					
									A	B	C	D	E	F
Period 4A. Graves adjacent to structure 929 and other burials														
472	G	0.50	0.30	0.12	E-W	?	pn	cr/l/S	–	–	–	–	–	–
509	H	0.80	0.80	0.08	?	?	adult	?	1 (Type 14)	–	–	–	–	–
514	H	1.30	0.75	0.10	N-S	?	adult	cr/r/W	1 (Type 15)	1	1	–	–	–
522	H	2.59	1.65	0.30	E-W	M	35+	cr/r/N	–	–	–	–	–	–
555	H	2.16	1.46	0.80	E-W	M	35-45	cr/f/N	–	–	–	–	–	2 rings
750	H	n/a			E-W	?	pn	cr/r/S	–	–	–	–	–	–
912	K	0.95	0.80	unex	N-S	–	–	–	–	–	–	–	–	–
914	K	1.44	0.95	0.45	E-W	M	30-35	cr/b/N	2 (Type 15)	–	–	–	1P	–
916	K	1.58	1.10	0.45	N-S	F	65+	cr/b/up	–	–	1	–	1C	–
918	K	1.45	0.75	0.28	E-W	M		cr	–	–	–	–	–	–
952	K	0.55	0.40	0.06	E-W	No surviving body			–	–	–	1	–	–
954	K	0.83	0.30	0.22	NW-SE	No surviving body			–	–	–	–	–	–
958	K	1.30	0.80	unex	E-W	–	–	–	–	–	–	–	–	–
962	K	0.70	0.45	unex	N-S	–	–	–	–	–	–	–	–	–
968	K	0.50	0.40	unex	SW-NE	–	–	–	–	–	–	–	–	–
974	K	0.80	0.50	unex	E-W	–	–	–	–	–	–	–	–	–
5000	K	0.25	0.15	0.05	?	?	pn	?	–	–	–	–	–	–
5009	K	1.20	0.65	0.64	NE-SW	F	65+	cr/b/NW	–	–	1	–	–	–
5011	K	0.88	0.63	0.28	NE-SW	F	17-20	cr/r/NW	–	–	–	–	–	1 finger ring
5018	K	1.50	0.95	0.15	SW-NE	F	30-40	cr/r/SE	2 (Type 15) 1 (Type 86)	–	–	–	1P	–
5109	K	1.30	0.70	unex	E-W	–	–	–	–	–	–	–	–	–
5111	K	1.03	0.80	0.15	E-W	M	25-35	cr/r/N	–	–	–	1	–	–
5130	K	1.10	0.75	0.20	N-S	F	65+	cr/f/down	–	–	1	–	–	–
5181	K	1.40	0.75	unex	E-W	–	–	–	–	–	–	–	–	–
Period 4B. Graves adjacent to ditch 231														
220	F	0.30	0.30	0.20	?	?	18-24 months	?	–	–	–	–	–	–
222	F	1.15	0.60	0.20	W-E	F	17-20	cr/b	–	–	–	–	–	8hobnails
224	F	1.04	0.46	0.15	SSW-NNE	?	3-7	cr/l/E	–	–	–	–	–	9 coffin nails
250	F	1.30	0.70	0.19	E-W	?	65+	cr/r/N	–	–	1	–	–	–
288	F	1.40	0.90	0.50	NE-SW	?	10-14 months	?	–	–	–	–	–	11 coffin nails
Graves in trench G														
444	H	1.20	0.86	0.85	N-S	M	35-45	cr/bE	–	–	–	–	–	–
Graves adjacent to structure 929														
920	K	1.54	0.90	0.08	SE-NW	?	17-25	cr/r	–	–	–	–	–	1 brooch frag.
922	K	1.65	0.75	0.24	SE-NW	F	25-45	fl/r/NE	–	–	–	–	–	87 hobnails
964	K	1.10	0.60	0.06	N-S	No surviving body			–	–	–	–	1C	–
966	K	0.96	0.70	0.10	E-W	?	25-35	cr/r/N	–	–	–	–	–	–
5128	K	1.43	0.88	0.45	SE-NW	F	35+	cr/r/S	–	–	–	–	–	–

Key:
Grave goods: A = Black Burnished ware bowls; B = samian platter; C = foetal sheep/goat left foreleg; D = sheep vertebra; E = joint of (P) pig or (C) cow; F = iron object

pn = perinatal

Position = cr = crouched; fl = flexed; r = right; l = left; b = back /N,E,W, etc = facing

Figure 98 Fordington Bottom: 'Durotrigian' burial in grave 916 (Period 4A)

sherds of pottery, mostly Black Burnished ware were found in the fills of most of the graves, along with smaller amounts of other artefact types. These were probably accidentally incorporated into the grave at the time of backfilling.

Working area and associated features

A series of features was recorded in trenches F and G/H south of the main area of burial in trench K. Most are poorly dated by artefacts but were stratigraphically early and they may represent sporadic activity during the 1st century AD.

Hollows *528*

A group of eight, badly plough-damaged, amorphous, and apparently intercutting features, *528*, was recorded on the upper terrace in trench H. These covered an area of 60 m^2 and were filled with a dark brown silty clay loam, on the surface of which a number of artefacts were found including four sherds of Black Burnished ware and two fragments of copper alloy pins. Period 4A grave *522*, cut through the fill of one of the northernmost hollows.

Structures *394* and *420*

Two structures were found on the coombe side on the upper terrace in trenches G and F. Structure *394* extended over the corners of trenches F and G. It was sub-rectangular, *c.* 8 m long and 4 m wide. To the east it ran under the baulk and to the west had been destroyed by the later Period 4C hollow-way. The surviving edges to north and south were steep sided and cut into the chalk to a maximum depth of 0.5 m to create a sunken floor. No features were identified on the floor surface and no occupation debris was recovered. There was no indication of function. After abandonment the structure was sealed by an orange–brown silty clay colluvium containing a sherd (27 g) of late 1st/early 2nd century samian.

Downslope and to the west of *394* was a second structure, *420*. This was sub-rectangular, 3.2 m wide, 4 m long, and 0.45 m deep (Fig. 99). The sunken floor was worn smooth. Several features cut it; two post-holes, a gully *468* in which was the partial skeleton of a mature cow, a hearth, and the terminal of a linear feature. A single infant burial *472* was also cut into the floor. Although the hearth suggests at least a partly domestic function, no occupation debris was recovered from the floor of the building and, after its abandonment, the remains of 35 sheep were dumped on the floor. The bones were in good condition showing no signs of butchery or animal gnawing, suggesting that the carcasses were not uncovered for any length of time and must have been quickly, presumably deliberately, covered. They were sealed by a deposit of silty clay. The structure was subsequently covered by yellowish–brown silty clay colluvium and disturbed by a series of Period 4B gullies *418*.

Terrace *599*

The northern edge of a terrace was cut into the coombe side in the north-east corner of trench H. This terrace was 11 m long and 0.45 m deep. It was presumably cut to create a level surface for a structure or building. However, the construction of the Period 4C structure *5197* directly over this terrace destroyed most associated structural features and no clear building or structure plan could be defined. A number of undated post-holes, oven *750*, and shallow pits on this terrace may, however, be contemporaneous.

Gully *633*, 0.3 m deep, ran above and parallel with the terrace edge. This was flat based with steep sides, 0.9 m wide and 4.1 m long. It was probably designed to deflect run-off water from the terrace edge. Two sherds of undiagnostic Black Burnished ware, and two pieces of tile were found in the greyish brown clay loam fill.

Drier/oven *648* was 1.7 m long, 0.9 m wide, and 0.28 m deep. This cut was lined with faced chalk blocks, mortar bonded, of which a single course had survived around the edge. This feature was filled with mixed silty clay loams in which a single sherd of Black Burnished ware was found. Though no signs of burning were evident, its elongated bowl shape suggested it had been constructed as a corndrier.

The oven was subsequently rebuilt, *697*, and was 2.25 m long, 0.95 m wide, and 0.26 m deep. It was lined with rectangular unbonded limestone blocks and the occasional flint nodule. The remains of a central pillar running up the spine of the cut were evident. The internal faces of the limestone blocks were burnt, direct evidence of the use of the feature as an oven or drier. The rear of the limestone blocks and the chalk natural shielded by the lining were also burnt suggesting that the feature underwent several adaptations during its working life. The fills contained much burnt material.

Another oven, *750*, was of 'keyhole' shape and was situated in the north-western corner of terrace *599*. This measured 1.14 m in length, 0.6 m wide and 0.45 m deep. The Chalk natural showed signs of burning as did the brown silty clay loam lower fills, in which a partial juvenile sheep skeleton and several sherds of Black Burnished ware were found. Within the upper fill was an infant inhumation. This oven was truncated by Period 4C building *5197* and disturbed by Period 4C pit *579*.

Post-abandonment, terrace *599* was sealed by a deposit of brown silty clay colluvium, in which four sherds of Black Burnished ware and a sherd of Oxfordshire White Ware mortarium of 3rd/4th century date, were found. This deposit

Figure 99 Fordington Bottom: early Romano-British sunken-floored building 420 (Period 4A) fully excavated

was largely removed by the construction of Period 4C building *5197*.

Pit *363*

An isolated storage pit was excavated in trench G. This was circular, 1.9 m in diameter and 2.28 m deep with vertical sides and a flat base, filled with a series of brown silty clays and a mineralised deposit with much charcoal near the base. The top of the silted up pit was disturbed by Period 4B grave *444*. Only the upper fills contained finds. Several sherds of 1st century BC/AD Black Burnished ware were recovered as well as one 2nd century form, the remains of two partial sheep skeletons and a small piece of tile.

Period 4B. Early–Middle Roman, 1st–2nd Century AD

Period 4B is represented by continued, sporadic, and disjointed activity primarily on the coombe side. Activity was restricted to trenches F, G/H, and K and was represented by the continued use of the Period 4A cemetery building *929*, with new graves added around it; a group of five burials adjacent to and showing respect for the earlier boundary *231* in trench F; the possible construction of a building of unknown function in the floor of the coombe; and a series of shallow ditches and pits of undetermined function. A number of partly excavated features in the north of trench K produced a large quantity of artefacts, including personal objects, and may be associated with domestic occupation. The pottery assemblage suggests no break in occupation from the Late Iron Age/early Roman period into the 2nd century.

Continued use of the Late Iron Age/early Romano-British cemetery

Eleven graves are assigned to this period; five aligned on boundary *231* in trench F, five added to the cemetery area around structure *929* in trench K, and an isolated burial in trench G. These are summarised in Table 46 and details are available in the archive. Of the four skeletons positioned around *929*, two were female adults and two were adults of unknown sex. The burials were laid out with respect for structure *929* and for the Period 4A graves, suggesting an ordered and planned cemetery area. The graves were aligned south-east–north-west or east–west. Grave *920* was cut entirely into the top of grave *5128* and they may represent the burial of members of the same family group.

Graves adjacent to ditch 231

The five graves were dug at a time when the ditch was almost completely infilled, graves *222* and *224* cutting the upper ditch fills, and probably representing a separate cemetery group. The presence of one adult female and four infants or young adults of unknown sex may be of significance and represent a preferred burial location for this age group.

Burials

All the bodies were in a crouched position (Fig. 100), except grave *922* where the skeleton lay on the right side with the legs flexed and with the arms in front of the chest. Three skeletons were probably buried in wooden coffins, a minimum of nine

Figure 100 Fordington Bottom: burial in grave 250 (Period 4B)

coffin nails being recovered from each of graves *224*, *288*, and *922*.

Grave goods

Grave goods, represented by hobnails at the feet or joints of meat, were found in three graves (Table 46).

Pit and gully complex *534*

These features occur on the upper terrace in the north-east corner of trench G/H and the south-east corner of trench K. They cut through the colluvium sealing the Period 4A terrace *599* but pre-date the construction of Period 4C structure *5197*. The areas defined by these discontinuous, shallow, features are unclear, nowhere were their full lengths identified, and their function is obscure.

Gully, *534*, ran for *c.* 44 m from the south end of trench K to the centre of trench G/H. It was 0.73 m wide, 0.34 m deep, and had a U-shaped profile. Black Burnished ware of 2nd century form was found in the fills. A sherd of late Roman New Forest ware indented beaker is probably intrusive. Gully *536*, ran parallel in trench G/H. This was 4 m long, 0.7 m wide, and 0.17 m deep with a shallow U-shaped profile. The fills contained pottery of the same type as found in the larger gully. A fragment of possible iron horseshoe was also found.

Two further segments of linear features were excavated in trench H. Gully *593*, 0.4 m wide, ran south for 2 m from the northern baulk before being truncated by the later structure *5197*. To the west of this was a rounded terminal of a ditch, *588*, 1.02 m wide and 0.64 m deep with a steep U-shaped profile. This protruded 2.4 m east into the trench and probably ran directly down slope to the west. Black Burnished ware and samian of 2nd century date was found, as well as some intrusive late Roman sherds.

A large circular pit *598* was cut by gully *534*. The clay-lined pit measured 2.35 m in diameter and was 0.55 m deep with steep sides and a flat base. Black Burnished ware of 2nd century form, sherds of amphora and samian, and an abundance of ceramic building material were recovered. Sherds of late Roman New Forest ware are probably intrusive.

Possible robber trench *457*

This rectangular feature was recorded in the coombe floor and consisted of a trench 1.2 m deep with a U-shaped profile, 2 m wide at the top and 0.5 m at the base. It extended 3 m east into the trench and measured 7 m long north-south. It contained a band of large flint nodules 0.45 m thick towards the base, presumed on excavation to be a wall foundation. Black Burnished ware of 1st–3rd century date was recovered from the upper fills. The ditch was partially sealed by Period 4C yard surface *359*.

The plan and profile of this feature suggested it was a robbed out building foundation though there was a lack of floor deposits or general building debris. It is possible that it was the foundation trench for the wall of a square or rectangular structure built early in this period or even late in Period 4A and subsequently thoroughly demolished during or shortly after the construction of the Period 4C working area *467*. This is implied by the manner in which the Period 4C yard surface respects much of the ditch line but yet no late Romano-British artefacts were found in the fills.

Gully sequence *418*

Four gullies, aligned north–south along the upper terrace were excavated in the south of trench G/H. Three of these cut fills of Period 4A structure *420*, disturbing the mass of sheep buried on the floor of the structure. These gullies of unknown length were on average 1.02 m wide and 0.21 m deep. None extended more than *c.* 9 m into the trench. The features were dated by Black Burnished ware and mortaria sherds of 2nd century date.

Features in the north of trench K

A group of features, on the upper terrace in the north of trench K, is tentatively assigned to this period on ceramic and stratigraphic grounds. In the limited time available few of these features were examined in detail.

Subcircular pit *827* was 1.85 m in diameter, 0.5 m deep with steep sides and a flat base, and was clay lined. Two hundred and seventy-three sherds of Black Burnished ware and six of samian of 1st–2nd century date were recovered. Items of personal jewellery were also found, comprising a fragment of shale armlet (Fig. 115, 2), a fragment of an iron penannular brooch and two fragments of copper alloy, one of a pin and the other of a 1st century AD strip brooch.

To the east of the pit, an irregular feature, *841*, was partially excavated. This was 1.8 m wide with uneven sides 0.35 m deep and filled with a dark brown loam. Fifty-five sherds of 2nd century Black Burnished ware were recovered. A number of other features was cursorily investigated, indicated but not numbered on Figure 91 and a number of artefacts recovered from their upper fills. The pottery consisted mostly of Black Burnished ware of 1st–2nd century date. Three pieces of copper alloy included a chatelaine brooch (Fig. 109, 4), a 2nd century T-shaped head stud brooch (Fig. 109, 1), and a fragment of pin shank. The density of features and artefacts in this area is indicative of domestic occupation. Indeed unexcavated linear features *876* and *5027* may represent boundary ditches delimiting a settlement area to the north and extending beyond the limits of excavation.

Period 4C. Late Roman, 3rd–4th Century

Like the transition from Period 4A to 4B there was no discernible break in occupation into the 3rd and 4th centuries but a distinct change in emphasis and scale. The settlement spread over trenches F, G/H, and K (Fig. 91) and as far south as trenches D and E. For the first time the coombe floor/lower terrace was intensively utilised as a working area with associated features. At least nine new buildings, probably serving a variety of functions, were constructed along the coombe side. The increased occupation is also reflected in the finds assemblages. Sixty-four per cent of the pottery from Roman contexts is of 3rd–4th century date as are many of the coins, glass, and worked bone objects.

In trench D two burials, set out along a boundary ditch, probably mark the limit of the settlement; its northern, western, and eastern extent was not determined but it presumably continued along the coombe side, rather than along the coombe floor. No trace of settlement features were recorded in trenches L and M. The aqueduct for the town of *Durnovaria*, probably at its most substantial by the 4th century (Green 1987), probably acted as a northern boundary for settlement. To the east, contemporaneous settlement further upslope is implied by quantities of late Roman material recovered from colluvium sealing Period 4C features (*see* Period 6/7). There are recorded Iron Age/ Romano-British settlement remains upslope (Farrar 1956). To the west a watching brief on the opposite coombe side (Fig. 5, S) suggested that settlement did not extend much beyond the valley floor. A second Iron Age/Romano-British settlement was recorded in 1950 (Farrar 1950) on the opposite side of the coombe, but is sufficiently far removed to suggest this represents a separate settlement of undetermined nature and origin.

Working area *467*

An extensive working area, *467*, was cut into the floor of the coombe in trenches G and F. It consisted of a yard surface *359* and revetment wall *356*, set against the coombe side. A cistern *360* and a drying oven *404* were constructed in the yard surface.

The working area *467* was at least 26 x 15 m and was cut 0.5 m deep across the coombe floor and into the coombe side (Fig. 93, *281* and Fig. 101). To protect the working area from hillwash, a timber and masonry revetment wall, *356*, was built along its east edge. The wall, surviving to two courses, was of flint nodules and occasional limestone blocks bonded with mortar and was built on a slight ledge above the working area. The wall continued into trench F (Fig. 93, *228*) and terminated 1 m north of the southern baulk.

A line of six post-holes lay in front of this wall in trench G. They were circular with an average diameter of 0.42 m and depth of 0.22 m and displayed signs of post-packing. The post-holes were generally 1.16 m apart and formed a line 8.8 m in length. The line did not appear to continue to either the north or south and the post-holes may represent a reinforcement of the revetment to reduce the possibility of hillwash being deposited around drying oven *404*.

After the construction of the revetment wall there was a build up of colluvium upslope behind it to the east. Pottery, predominantly of late Roman fabric and form, including the base of a small Rhenish ware beaker of 2nd–3rd century date, was found within this.

Figure 101 Fordington Bottom: Period 4C working area 467, revetment wall 356, and yard surface 359, with cistern 360 under excavation and drier 404 before excavation

Figure 102 Fordington Bottom: Period 4C drier 404 fully excavated with revetment wall 356

The working area was floored with a yard surface, *359*. To the north the surface skirted around, and partially sealed, Period 4B feature *457*. Remnants of yard surfaces were also found in trench F (Fig. 93, *277* and *278*). The surface was constructed of several deposits of packed flint and chalk rubble, on average 0.1 m thick, in which surface repairs were evident. Black Burnished ware from the surface was dated to the 2nd century AD onwards.

Contemporary with the laying of the yard surface was the construction of cistern *360* (Fig. 101). This was rectangular, 2.05 x 1.05 x 0.85 m, lined by a mortared flint wall, 0.3 m wide, faced with *opus signinum* on the sides and base, possibly to render it watertight. The *opus signinum* may originally have been stained with red ochre. The base was well worn with a large oval depression in its centre. A soil sample from the floor produced charred grain.

To the south of the cistern a drying oven, *404*, was added to the working area, its foundation trench cutting through the yard surface (Fig. 102). The drier, 5.10 x 3.0 x 0.9 m, was H-shaped in plan with a rectangular stokehole to the west. It was lined with mortared flint walls, surviving to eight courses. Unfaced limestone blocks were used to construct the flue, 0.5 m wide, 0.9 m long.

At the western end of the drier the stokehole was almost square, measuring 1.8 x 1.9 m and displayed signs of having been corbelled. A small oven (*433*) had also been constructed on the north side of the stokehole, presumably designed to be used in tandem with it. The drying chamber was rectangular 3.0 x 3.2 m with an internal H-shaped chamber formed by the two flue walls protruding east from the stokehole and by a pilaster directly opposite the flue, against the east wall. The pilaster measured 1.22 x 0.82 m, survived to a height of 0.75 m and was of mortared flint with an occasional limestone block. The external walls, flue, and pilaster would have supported the raised floor of the drying oven. Limestone blocks in the fill of the chamber may represent remnants of that floor. Carbonised grain from the backfill of the drier indicate that its last use had been for the drying/roasting of malted grain.

Collapse of Working Area Structures

After the working area was abandoned, the revetment wall collapsed over the yard surface in trenches G and F (Fig. 93, *243*). The collapse material contained abundant artefacts, including a residual sestertius of Lucius Verus of AD 168. Seventy-one sherds (1168 g) of 3rd–5th century pottery included the remains of at least eight Black Burnished ware dropped flange bowl/dishes. A fragment of 2nd–3rd century glass beaker, a broken iron ploughshare (Fig. 110, 3), and two fragments of Upper Greensand millstone possibly from the same stone (Fig. 116, 10) were recovered. The collapse material was then sealed by colluvium.

The base of the cistern was sealed with a thin layer of brownish yellow clay containing the remains of two sheep and at least three dogs and Black Burnished and New Forest wares forms of 3rd–5th century date. The remainder of the fill consisted of flint rubble also containing pottery of 3rd–5th century date. The abandoned cistern was finally sealed by a brown silty clay colluvial deposit in which only a few pieces of ceramic tile, *opus signinum,* and a burnt fragment of Upper Greensand millstone were found.

Two deposits were found on the floor of the drying oven which were thought to date to shortly after its abandonment. A black silty clay containing charcoal and carbonised grain was found in the main drying chamber and a brown silty clay in the stokehole. This was followed by the total collapse of the structure. The drying chamber and stokehole filled with collapsed masonry, including limestone blocks from the raised floor. Within these deposits eighty-two sherds (1509 g) of Black Burnished and New Forest Parchment ware of 3rd–5th century date were found as well as a fragment of stone mortar (Fig. 116, 8) and a perforated chalk object, possibly a weight (Fig. 116, 9). The collapsed structure was then sealed by a brown silty clay colluvium in which several fragments of *opus signinum*, wall plaster, further sherds of similar pottery and a whetstone (Fig. 116, 4). The contemporaneity of the collapse of the oven and revetment wall is illustrated by the presence of conjoining sherds found in the rubble of both.

Terraces *283* and *484*

Two terraces were excavated. Both may have been associated with the working area. Terrace *283* had been cut upslope and directly to the east of the working area in trench F. This was rectangular, cut 0.84 m into the coombe side and measured 9.0 x 5.6 m. There was no evidence for any structures on the terrace. A second shallow terrace, *484*, was constructed over the eastern edge of the Period 4B robber trench *457* in trench G and disturbed the working area yard surface. This was 4.6 x 2.2 m, cut a maximum of 0.15 m into the coombe floor . There was no evidence of a structure but a hearth was found towards the southern end.

Hollow-way *354*

A hollow-way ran approximately north–south across trenches F and G/H. This ran along the coombe side contours in trench F, but veered downslope towards the coombe base in trench G/H, cutting across the lynchet running along the coombe side. The hollow-way had a shallow U-profile, on average 3.67 m wide and 0.4 m deep. It cut across the Period 4A structure *394*, but no other earlier features were disturbed. It was filled with brown, silty clay colluvium containing a shale spindle-whorl.

In the absence of other dating evidence, the hollow-way is assigned to Period 4C because it seems to respect working area *467*. It is possible, however, that this relationship was reversed and the hollow-way in fact dates to both Period 4B and Period 4C.

Structure *5197*

A large stone and timber structure was built upslope of the hollow-way in the north-east corner of trench H. Its construction removed the colluvium sealing Period 4A terrace *599* and truncated the Period 4B pit and gullies set out in this area. This suggests a date of construction sometime after the 2nd century.

A terrace, rectangular in shape and measuring 11.0 x 9.0 m, was cut into the coombe side to a depth of 0.65 m (Fig. 103).

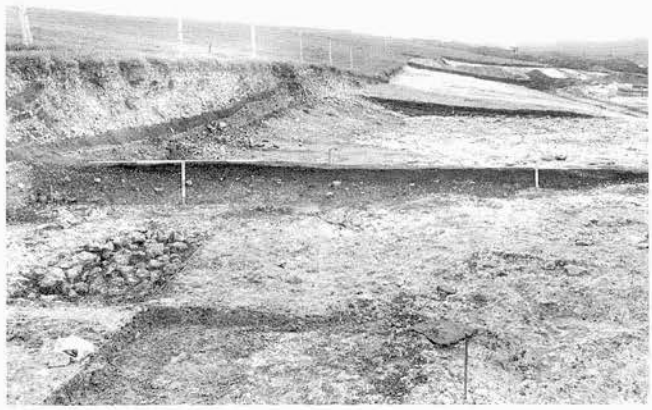


Figure 103 Fordington Bottom: structure 5197 (Period 4C) emerging from below post-Roman colluvium (bottom right), the 'stonefree', long term pasture soil and 1950s bulldozed lynchet material can be seen in section

Once a level surface had been created, a rectangular structure 9.0 x 7.0 m, aligned east–west, was constructed. This used both low masonry walls to support a timber frame and earthfast posts. It is possible that the structure was longer than 9 m as the west end was badly disturbed by ploughing.

Two sections of single course masonry survived. A 5 m length, 0.5 m thick, along the northern side and a short length, 0.65 m thick, around the angle of the north-east corner. These were of unbonded flint nodules with occasional limestone and sandstone blocks. The wall probably acted both as a revetment against the terrace edges and as a footing for a timber frame. Seven post-holes were found around the outside of the structure. Four were cut above the terrace edge, two of which were incorporated into the masonry wall. The other three defined the south side of the structure. The post-holes were on average 0.51 m in diameter and 0.25 m deep. Post-hole *790* contained three partial sheep skeletons. Part of an Upper Greensand millstone (Fig. 116, 13) was found in post-hole *666*.

Features probably internal to structure *5197*

Five features were found within structure *5197*. The largest was an ovoid pit, *579* cut through the south end of Period 4A oven *750*. This measured 1.4 x 1.2 m and was 0.4 m deep. A variety of Black Burnished ware forms of 3rd–5th century forms was recovered. In addition fragments of a shale chopping board and an iron collar from a wooden implement were found.

Two hearths were recognised. Hearth *583* was a shallow, irregular scoop 1.54 x 1.17 m and 0.1 m deep filled with brownish–grey silty loams, containing a circle of four flint nodules. The Chalk bedrock in the base of the feature was burnt, and an iron spike was hammered into it at the north end. Fragments of a large Black Burnished ware jar of a 3rd–5th century fabric were found on the surface of the feature as well as a sherd of New Forest Colour-Coated ware. The remains of a minimum of seven sheep were also found in the hearth.

Hearth *587*, to the west, was smaller, measuring 0.51 m in diameter and 0.12 m deep. It contained fragments of burnt clay, with the underlying Chalk showing signs of burning. An iron hearth fitting, a Greensand rotary quern stone (Fig. 116, 12) and two sherds of New Forest Colour-Coated ware were also recovered. Two small features were dated to this period by the presence of Black Burnished Ware of 3rd–5th century date. One was a shallow trapezoidal scoop, *585*, of undetermined function, measuring 0.69 x 0.67 x 0.08 m. The other was a circular post-hole, *586*, with vertical sides and a flat base, 0.33 m in diameter and 0.25 m deep.

Gullies *535*, *537*, and *557*

Three gullies were excavated adjacent to structure *5197*. Two of these may represent structural elements of otherwise totally destroyed structures, while *535* may represent part of structure *5197*, although no precise relationship was determined. All overlay and disturbed Period 4B pit and gully complex *534*. Gully *535* was 6.20 m long, 1 m wide, and 0.3 m deep, with steep sides and a flat base. It was filled with a chalk rubble and a dark greyish brown sandy silt loam. Fifty-eight sherds (836 g) of pottery including New Forest Colour-Coated and Red Slipped ware and Black Burnished ware of 3rd–5th century date were recovered. Fragments of a Kentish or Gallic mortarium dating to the 1st century AD were considered residual.

Gully *535* was cut by gully *537*. This comprised a curvilinear gully, steep-sided with a flat base, 7 m long, 0.7 m wide and 0.6 m deep. The gully contained five post-settings, towards the eastern end of the feature and unequally spaced. These were generally oval in shape, 0.5 x 0.3 m, and an average depth of 0.19 m. They were defined by concentrations of flint packing around dark brown silt loam post-pipe fills. A number of artefacts was found; a follis of Constans (AD 347–348), 34 sherds (165 g) of 3rd–5th century Black Burnished and New Forest Colour-Coated wares, and an iron latch lifter of Romano-British type. Gully *537* may represent the remnants of a circular or possibly apsidal timber structure.

To the north of and similar to gully *537*, feature *557* was a slightly curved gully, 9 m long, 0.8 m wide, 0.48 m deep, with steep sides and a flat base. It was filled with brown silty clay loam with two post-settings represented by flint packing at its east end. These were later sealed by a dark brown silt loam. A large amount of 3rd–5th century Black Burnished and New Forest wares and a copper alloy spoon-probe (Fig. 109, 9) of 3rd–4th century date were recovered.

Settlement structures and associated activity in trench K

Eight structures were excavated along the contour of the upper terrace in trench K. All were badly plough damaged, and only a limited sample of each was excavated. They are all considered to represent the remains of buildings. As so little of each was excavated, their precise function was not identified, but they probably represent a range of activities. Most produced, or were sealed by, colluvium containing pottery, principally 3rd–5th century Black Burnished ware. Most consisted of shallow terraces cut into the west-facing slope. Low unmortared walls, presumably supporting a timber frame, were set against the edges of the terraces, while, in all cases, evidence for the west walls had been removed by subsequent erosion. In no case was evidence for floors, partitions, or internal features recorded.

The southernmost structure, *5101*, lay mostly beyond the limits of excavation. It consisted of a short length of unmortared flint and chalk wall, 0.3 m wide and 0.25 m high. No other structural features were recorded.

Two pits of undetermined function, *991* and *993*, were thought to be associated with the structure. Pit *991* was unexcavated. Pit *993* was circular, 1.37 m in diameter, 0.66 m deep with steep sides and a flat base. A flint and chalk cob revetment wall had been built into the western side to support the area where the pit had cut the Period 4B feature *534*.

In the centre of trench K were five structures. The smallest and southernmost of these, *977*, was sub-rectangular, 3.05 x 1.9 x 0.12 m. Traces of a possible flint wall against the terrace edge were evident. After abandonment the terrace filled with brown silty clay colluvium.

Structure *5199* was the most complete. It was sub-rectangular, 4.0 x 3.8 m and cut 0.3 m into the coombe side. An

unmortared flint and limestone wall, 0.25 m wide and 0.2 m high was set against the edge of the terrace. A dark brown silty clay deposit in the centre may have constituted a floor. Seventy sherds (623 g) of pottery were found, mostly Black Burnished ware of the late 2nd century onwards. In addition 14 hobnails and a cleat were recovered. When abandoned the terrace was filled with dark greyish–brown silty clay loam colluvium. The disarticulated remains of an adult male, perhaps a disturbed burial from upslope, were also found in this deposit.

Two, presumably contemporaneous, structures, *981* and *983*, were separated by a boundary wall. Structure *981* was sub-rectangular, 4.1 x 2.4 m. To its west was a structure *983*, sub-rectangular and measuring 4.2 x 2.8 m, and cut 0.3 m into the coombe side. A possible post-hole was identified in the centre of the south edge of this structure. The dividing wall between the buildings consisted of a band of unmortared chalk lumps. Both structures were covered with a dark greyish–brown silty clay loam colluvium.

The largest structure, *5148*, was mostly unexcavated. It was sub-rectangular, 7.4 m long, 5.4 m wide, and of unrecorded depth, but presumably consisted of a shallow terrace cut into the slope. Three deposits filled the terrace, two brown silty clay loams and a flint rubble layer interpreted on site as wall collapse.

Structure *5200* was of different construction and consisted of the remnants of a rectangular timber building at least 4.7 m long and 3 m wide. It had been badly plough-damaged. Three post-holes formed the eastern wall and a possible drip gully ran external to this on the east and south sides of the building. Two internal post-holes were recorded.

The northernmost structure, *867*, was only partially in the trench. It was at least 5.2 m long and 3 m wide, and consisted of a spread of colluvium from which 371 sherds of pottery, mostly Black Burnished ware but with some New Forest Colour-Coated and Oxfordshire Slipped wares, were recovered, as well as three pieces of iron binding and a pintle.

Also assigned to this period in trench K were a further 28 features. In most cases small quantities of late Roman pottery were recovered from the upper fills of these unexcavated features and they are assigned to this period on that basis. Most comprised pits and gullies, not illustrated on Figure 91. These were spread over the central areas of the trench, to the west of the structures. Three pits, *811*, *5003*, and *960*, were excavated. On average they were 1 m in diameter and 0.5 m deep.

One late Roman inhumation was recorded in trench K. Grave *5007* was rectangular, 2.03 x 0.65 x 0.31 m, aligned north-west–south-east. The grave had been cut through the fills of the Period 2 Bronze Age structure *5196*. It contained the skeleton of a male aged 35–45, in an extended supine position with the right arm flexed over the chest and the left arm lying down by the side. The head was towards the north-west. The body was buried in a wooden coffin defined by 16 iron nails displaying mineralised wood derived from radially split oak planks. The grave was filled with a brown silty clay loam deposit in which only a few undiagnostic Black Burnished ware body sherds were found. This was one of only three extended inhumations found on the site.

Period 4C. Activity in trenches D, E, and S

Structure 5198 trench E

This comprised a rectangular structure *c.* 6 m long and 4.8 m wide (Fig. 104). It was built in a terrace cut into the coombe side at the east end of trench E (Fig. 5). A portion of dressed limestone and flint mortared wall survived against the south-east corner of the terrace, to three courses and was 0.4 m wide. Flat limestone blocks had been incorporated into the top of the wall as post-pads, implying a timber frame for the structure. Colluvium behind the wall, thought to date to shortly after its construction, contained 44 sherds of 2nd century or later Black Burnished ware with fragments of at least two fired clay slabs and six fragments of wall plaster.

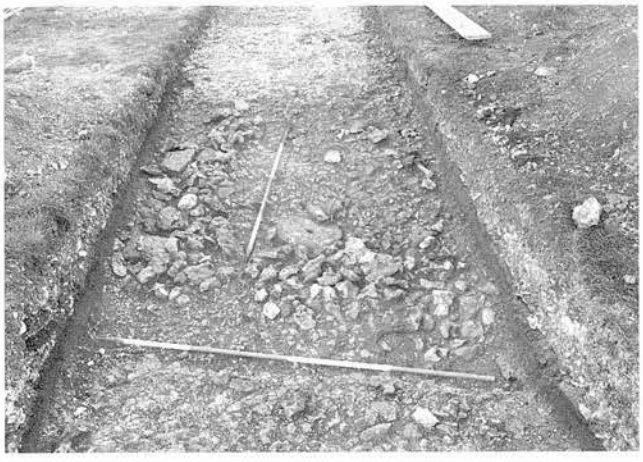


Figure 104 Fordington Bottom: Period 4C structure 5198 before extension of trench E

A floor surface and a hearth were found within the structure. The hearth, *728*, was rectangular 1.2 m in diameter and 0.1 m deep, and was situated towards the centre of the structure. Black Burnished ware of 3rd–5th century date was recovered, including an unusual perforated vessel (Fig. 108, 13). Fragments of a colourless glass cylindrical beaker and of a blue/green glass bowl and a broken iron bar share (Fig. 110, 2) were also found. Around the north and east of the hearth was a compacted chalk surface, *725*. Four other features, irregular shallow scoops of no definable function, were also recorded within the structure. These contained Black Burnished ware, glass fragments, and a broken bone pin (Fig. 114, 1), the latter of 1st–2nd century AD date.

A second chalk rubble floor surface *717* was laid. The base of this layer comprised a silty clay loam deposited as a deliberate floor foundation and contained many artefacts, including 3rd–5th century Black Burnished ware, New Forest Colour-Coated, and Rhenish wares. Sherds of the perforated vessel (Fig. 108, 13) found in the underlying hearth, *728*, were also found in this deposit. Eight pieces of ironwork were recovered, including a scythe or bill, a pair of wool shears and a drill bit (Fig. 110, 7). Fragments of 1st–3rd century glass vessels, a 3rd–4th century bone pin fragment (Fig. 114, 2), a shale spindle-whorl, and four conjoining fragments of a sharpening stone were also found.

The renewed floor surface, composed of chalk rubble up to 0.25 m thick, was strewn with artefacts, including a bill (Fig. 110, 5), a knife (Fig. 110, 12), the toe (Fig. 110, 11) and a separate fragment of a hipposandal, and a lower rotary quern stone (Fig. 116, 11).

The later floor was disturbed at the western extreme of the structure by two irregular features, *336* and *338*, both very shallow and without any obvious function. A very worn sestertius of Hadrian minted in AD 117, but deposited considerably later, was found in the fill of *336*.

After the abandonment of the structure the walls collapsed over the floor surface. Within this collapse 30 sherds (417 g) of 3rd–5th century Black Burnished ware were recovered and a piece of amphora carefully worked and drilled to form a spindle-whorl. Three iron objects, ceramic building material, remnants of at least one fired clay slab, a fragment of millstone, and the complete base of a colourless glass cylindrical cup of 2nd–3rd century date (Fig. 112, 4) were also found. The surviving evidence suggests that the structure originally comprised a timber framed building on masonry footings and a chalk rubble floor with perhaps a stone or ceramic tile roof and may have served as both a domestic and working area.

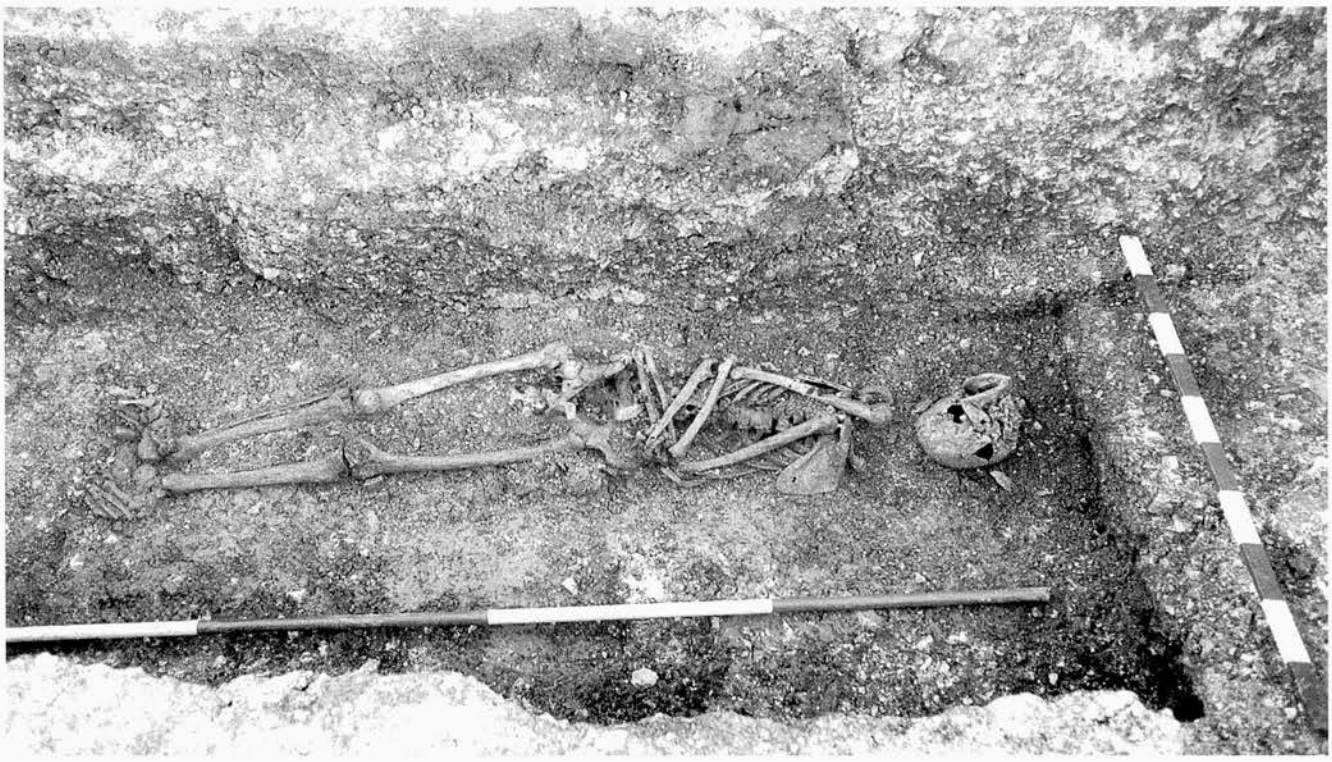


Figure 105 Fordington Bottom: Period 4C burial in 'over-sized' grave 167

To the west of the building was a yard surface *716*, comprising a chalk rubble deposit 0.25 m thick. This stratigraphically post-dated the laying of the two internal floor surfaces *717*. The yard lay to the north of a keyhole shaped oven *722*, also outside the building. This was 1 m long, 0.75 m wide, and 0.32 m deep and comprised a mortared wall of undressed flint surviving to five courses. The oven was filled with degraded chalk and a silty clay deposit containing much charcoal, possibly contemporary with the final use of the oven.

Trench D. Extended inhumations and field boundaries

Two late Roman graves were found in trench D (Fig. 5). Both were aligned on contemporaneous field boundaries and may mark the southern limit of the late Roman settlement. They were aligned north-east–south-west and lay on either side of ditch *169*. Grave *154* was rectangular 2.0 x 0.58 x 0.3 m with vertical sides and a flat base. The skeleton, a male of more than 45 years, lay in an extended supine position with the left arm over the pelvis and the right arm bent over the chest, head to the north-east. Thirty iron nails around the body indicate a wooden coffin. Mineralised wood on the nails showed that the coffin had been made of radially split oak planks. The presence of 99 hobnails around the feet represent boots. A few sherds of undiagnostic Black Burnished ware were recovered from the grave fill.

Grave *167* was also rectangular, 3.3 x 1.66 m for the upper 0.75 m of the grave. From this depth the grave narrowed to 2.3 x 0.95 m in the south-west corner. It was 0.2 m deep at its north end and 0.65 m deep at the south end, and had vertical sides and an uneven base. The grave contained 232 iron nails, some displaying mineralised wood derived from radially split and flat sawn oak planks. The nails were three dimensionally recorded during excavation and indicated three separate timber elements within the grave. Initially a wooden lining was constructed within the narrow grave. Then the coffin, measuring 1.8 x 0.5 m, was placed inside. Finally an apparently empty wooden box, 1.0 x 0.5 m was placed in the larger grave cut to the north of the head. The body, a male of 25–45 years of age, was buried in an extended supine position with the arms crossed over the pelvis with the head to the north-east (Fig. 105). The tightly compressed skeleton suggests that the body had been wrapped in a shroud.

Throughout the grave the fills were indistinguishable from each other, comprising a dark yellowish brown silt clay in which the excavator claims to have been able to distinguish 'plank impressions'. A few sherds of undiagnostic Black Burnished ware were found in these fills and a thin piece of iron plate.

Three linear field boundaries were recorded. Ditch *169* ran north–south along the contour between graves *167* and *154*, which were aligned on it. Two further short ditch segments formed right-angles with this ditch at its north end. They averaged 1 m wide and 0.3 m deep, with shallow U-profiles.

Trench S: Fordington Farm track

An area to the west of trenches G/H and K (Fig. 5) was briefly examined during farm track improvements in spring 1990. Three Romano-British features were recorded. A sub-rectangular slot, *5191*, 0.8 x 0.4 x 0.35 m, with vertical sides and a flat base, was recorded. This was filled with flint nodules and chalk rubble and contained a bronze penannular brooch (Fig. 109, 5) of 2nd–3rd century date. A second sub-rectangular slot, *5193*, 1.0 x 0.5 x 0.6 m, with vertical sides and a flat base, was also recorded. Both features may represent building foundations. A yard surface of compacted chalk 0.1 m thick was also recorded but had no clear relationship with the two slots. Though offering limited information these features indicate that the later Romano-British settlement spread over the floor of the coombe and onto the lower slopes of its west side.

4 Period 6/7. Medieval/Post-Medieval

The Period 4C Roman settlement was abandoned sometime in the late 4th or early 5th centuries. After that time no events, apart from an episode of bulldozing in the 1950s (Farrar 1950), could be securely dated and the site was returned to agriculture. After abandonment much of the previously occupied area (trenches D, E, F, G/H, and K) was sealed by colluvium, washed down from the upper coombe slope (Fig. 93, 216; Fig. 103). These deposits, up to 0.62 m deep, contained large amounts of predominantly Roman material (mostly 3rd–4th century), presumably derived from additional Roman settlement features to the east and upslope of the excavated elements of the site. As the finds from this colluvium provide an opportunity to examine the nature of the unexcavated portions of the settlement further up the valley side, they are described in greater detail below.

The finds provide a *terminus post quem* for the deposition of this colluvium which could have been accumulating over centuries. It does indicate that arable activity and considerable soil erosion was taking place further upslope sometime during the post-Roman and medieval periods. A small number of post-medieval finds from this deposit, including fragments of clay pipe stem, may be intrusive. In addition the survival of the major lynchet across the site up to the 1950s (Wheeler 1943, pl. lxxb) indicates that this arable activity was undertaken within and with some respect for the existing field boundary arrangements.

The post-Roman colluvium was sealed below a stonefree, non-calcareous soil indicative of a period of long term pasture (Fig. 93, 214) on the coombe side until the creation of the present-day farming regime. No artefacts were recorded from this deposit, which was sealed below lynchet material bulldozed in the 1950s.

Post-Roman Colluvium: Trench G/H

The stonefree pastureland soil (context 500) and the post-Roman colluvium (contexts 513, 533, and 580) in trench G/H were gridded out in metre squares and the deposits removed in 0.1 m spits, artefacts being recorded per spit/square. Full details are available in archive. In total *c.* 10,683 artefacts were recovered from these deposits including 7473 sherds of pottery and 2294 pieces of animal bone. No spatial analysis of these artefacts was undertaken. Bulk finds were scanned and spot-dated (details in archive) while intrinsically interesting objects have been identified and catalogued in the relevant finds reports.

The pottery from the colluvium included four sherds (36 g) of indeterminate prehistoric pottery. The Roman pottery was represented by wares, fabrics, and forms covering the whole Romano-British period although there was a marked concentration of 3rd–5th century types. Other finds also spanned the full period of Romano-British occupation and included items of personal ornament (for example Fig. 109, 2, 3, 6–8), coinage, iron fittings, glass vessel fragments, and an intaglio (Fig. 113), fragments from at least two shale chopping boards, and stone tools (for example Fig. 116, 6 and 7). A fragment of a bone gouge of a type known from the Bronze Age onwards was also recovered along with a shale spacer bead.

5 The Roman Road from Dorchester to Ilchester

The A37 Western Link bridges the Dorchester to Bradford Peverell road south-west of the River Frome. This road is thought to mirror the line of the Roman road from Dorchester to Ilchester (RCHM(E) 1970, 541). Two trenches were excavated adjacent to the Bradford Peverell road (Fig. 5, I and J) to search for traces of the former Roman road. Two, shallow, gullies were recorded in trench I, 1.2 m apart, running parallel and 5 m north of the present-day roadline. Neither contained artefacts, but their position and alignment suggests that they may represent flanking ditches of a Roman road lying under or to the north of the present Bradford Peverell road.

6 Excavations on the A37 Western Link Road: a Summary, by Roland Smith and Ian Barnes

A summary interpretation of the landscape developments in Fordington Bottom and on Fordington Down is presented in Figure 106. The earliest activity recorded on the site occurred within a pre-existing open environment (Fig. 90, Period 1). Ditch *262* was constructed in a landscape that had already been cleared and undergone some level of land management. Small collections of struck flint and Early Bronze Age pottery suggest some limited activity around and above the coombe during this period.

No datable material was recovered from ditch *262*. As it was sealed below colluvium probably of later Bronze Age date, an earlier Bronze Age date might be suggested. The ditch probably represents a field boundary associated with some arable activity in an otherwise predominantly pasture environment. Ditch *262* was subsequently sealed below a flint gravel fan and colluvium, indicating continued and probably increased arable activity on the coombe sides during the later Bronze Age. Grassland was probably maintained on the coombe floor. The flint gravel fan lay directly on chalk bedrock in the coombe floor indicating that the pre-existing soils and any earlier colluviation had already been eroded away.

The response to this major erosion of soils on the coombe sides was the formation of a lynchet along the contour of the coombe, presumably part of a series of such features laid out over the coombe side (Fig. 106, Period 2). The date of this event can not be precisely identified, although two later Bronze Age buildings, *5195* and *5196*, were constructed over a positive lynchet and within this field arrangement. Both buildings were also partly terraced into the coombe side. Little occupation debris was recovered. Either they were occupied for only a short period or erosion after their abandonment, as suggested by the colluvium infilling the terrace structures, had displaced this material downslope. Also during the later Bronze Age a ditched field system was established above the coombe, on the clay-with-flints deposits on Fordington Down.

There was no recognisable activity during the Early and Middle Iron Age (Fig. 106, Period 3). Although colluvium of these periods may have been eroded from

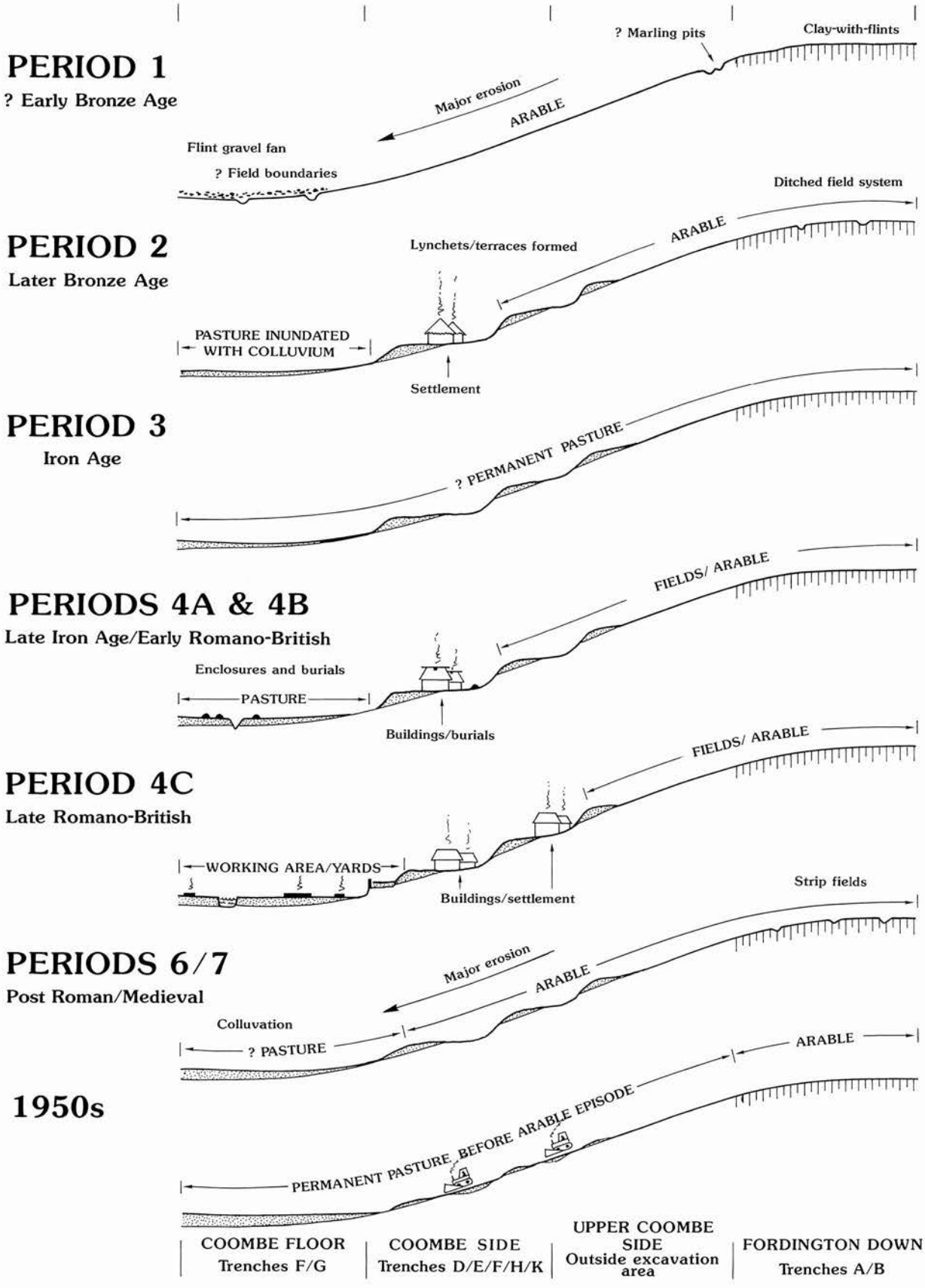


Figure 106 Fordington Down and Bottom: summary of landscape developments

the sequence, it is more likely that there was a real hiatus in arable activity and the area was returned to long term pasture.

The coombe was reoccupied during the 1st century AD (Fig. 106, Periods 4A and 4B). Sporadic activity was recorded in the coombe floor and on the coombe side, consisting of an inhumation cemetery and associated building *929* on the coombe side, an enclosure ditch *231*, and a working area between the two. Two ovens/driers and two sunken-featured buildings were recorded within the working area. None was certainly associated with domestic activity. The large quantity of sheep bones recovered from one of the buildings suggests it was last used for the disposal of animal carcasses. There was presumably an associated settlement in the vicinity and probably upslope (Farrar 1956).

The aqueduct for the emerging Roman town of *Durnovaria* was probably constructed in the later 1st century AD (Green 1987, 51) and passes across the valley floor around the 79 m OD contour (Fig. 5). The feature remained in use to the 4th century. It is unlikely that the aqueduct channel was covered in Fordington Bottom so far from the town. The feature must have provided a north limit to the 1st century AD settlement in this coombe and had a similar influence on the subsequent phases of occupation in the valley.

Continuity of activity into the 1st–2nd centuries AD was indicated by the continuation of burials within the same cemetery surrounding structure *929*, while the area of burial was extended onto the coombe floor, adjacent to the infilled enclosure ditch *231*. A building, of unknown function and subsequently substantially robbed of material, was also probably constructed in the coombe floor. A poorly examined group of features in the north of trench K may represent an area of occupation associated with this period of activity.

By the late Roman period the scale and density of activity was greatly increased (Fig. 106, Period 4C). Activity was now spread across the coombe floor and further up the side; these areas being linked by a hollow-way cutting across the contours of the valley. A working area, comprising a yard surface, cistern, and corndrier, was established in the coombe floor. At least eight timber framed structures were built along and terraced into the coombe side. The layout of the buildings in trench K suggests some level of planning and organisation. All of the structures and related features were domestic and/or agricultural in function.

Three graves were excavated. Two in trench D, set out along a field boundary probably at the edge of the settlement, gave the impression of being part of a larger cemetery.

The greatest number and range of artefacts was recovered from this period. The floors and rubble fills of the buildings, especially *5198* in trench E, produced much pottery, worked stone, and other finds, including an impressive collection of iron agriculture tools, including bar shares, bills, a scythe, hooks, shears, and knives.

The late Roman settlement was abandoned sometime towards the end of the 4th century or at the very latest the early 5th century. Many of the settlement features on the coombe side and in the coombe floor were subsequently sealed by colluvium (Fig. 106, Period 6/7). This deposit contained substantial quantities of predominantly late Roman material, presumably derived from contemporaneous features upslope (Farrar 1956). The date of the deposition of the colluvium and of the arable episode that caused the erosion of the late Roman settlement remains cannot be determined from excavated evidence. The laying out of strip fields on Fordington Down to the south and east of the coombe (RCHM(E) 1970, 624), still recognisable from soilmarks (Fig. 6), and in the valley bottom (ibid., 588) where they survive as earthworks, may suggest this event occurred sometime during the medieval period. Prior to levelling and ploughing in the 1950s, the coombe side and floor had been in permanent pasture for at least 100 years and possibly for centuries.

6. Finds From the A37 Western Link Road

edited by Elaine L. Morris

1 Earlier Prehistoric Pottery, by Rosamund M.J. Cleal

Twenty-five sherds of earlier prehistoric pottery, weighing 159 g, were identified. None is certainly earlier than the Early Bronze Age, and it is likely that most belong to the use of the landscape in the 2nd millennium cal. BC. Counts and weights for all sherds are given by period in Table 47. Fabrics are described in microfiche (Mf 15). Only the fabric codes (eg G4) are utilised in this text. Full details are in archive.

Early Bronze Age

A single sherd from a comb-decorated Beaker (not illustrated) and a sherd from the collar of a Collared Urn (Fig. 107, 1) must date to the Early Bronze Age or, in the case of the Beaker sherd, to the Late Neolithic at the earliest. Neither show enough of the profile nor decoration of the vessels to enable their classification. The fabrics of each (G2 and G4) contain grog, that of the Beaker also containing flint.

Early or Middle Bronze Age

At least twenty sherds, those in fabrics G1 and G5, are likely to be of late Early Bronze Age or Middle Bronze Age date. These fabrics, and the featured sherds which occur in them (Fig. 107, 2–4), show considerable similarity to the pottery assemblage from the Middle Farm enclosure, the Middle Farm ditched field systems (Davies and Pearce 1990), and Poundbury (Smith 1987). Both fingernail rustication and lugs are known from Poundbury (ibid., fig. 83, nos 51 and 66) and the Middle Farm field system also contained a large, fingernail rusticated sherd (Morris pers. comm.), while the similarities with the material from Middle Farm enclosure are less striking, but sufficient to indicate that the potting traditions are likely to be broadly contemporaneous. Fabric G1 in particular would not be out of place within the range of fabric G1 at Middle Farm.

Indeterminate

The remaining undiagnostic early prehistoric material (fabrics G3 and G6) is assumed to be earlier than the Early Bronze Age.

2 Later Prehistoric Pottery, by Elaine L. Morris

A small quantity of later prehistoric pottery was recognised (22 sherds, 137 g). The fabrics are described in microfiche (Mf 15) and the quantification by fabric is provided in Table 48 by period with further details in archive.

Late Bronze Age

Sherds from two fabrics can be assigned to the Late Bronze Age on the basis of a single diagnostic sherd in each fabric, one a shoulder sherd originating from a thin-walled, shouldered vessel (F1) and the other a rim from an ovoid jar (F2) (not illustrated). Similar examples were identified at Chalbury Camp (Whitley 1943, fig. 4, 14), Poundbury (Smith 1987, fig. 83, 68–9), Rope Lake Hole (Davies 1987a, fig. 79, 21, 22), and Quarry Lodden (Bailey and Flatters 1971, fig. 4, 2). Such vessels are known to characterise Late Bronze Age pottery (Barrett 1980) but cannot be dated more precisely within this broad range.

Late Iron Age

Three sherds (Q1), including one rim (Fig. 107, 5) and a flat base, belong to a high-shouldered burnished jar of Durotrigian type. A similar vessel was recovered from phase 6F occupation at Maiden Castle (Brown 1991, fig. 27, 7), dated to the late 2nd century BC. This finer sandy fabric is very similar to a Late Iron Age fabric type identified from excavations during the Wytch Farm Project (Lancley and Morris 1991).

Table 47 earlier prehistoric pottery (No. sherds) and weight (g) by fabric and period

			Fabrics						
Period	*Trench*	*Context*	*G1*	*G2*	*G3*	*G4*	*G5*	*G6*	*Total*
1	G	Decayed natural 399	–	1/3	–	–	–	–	1/3
	A/B	Ditch *114*	1/4	1/3	–	–	–	–	2/7
2	A	Ditch *6*	5/26	–	–	–	2/23	–	7/49
		Gravel patch *14*	–	–	–	1/2	1/13	–	2/15
	K	Structure *5195*	4/38	–	–	–	1/5	1/11	6/54
		Structure *5196*	1/6	–	–	–	–	–	1/6
4C	G	Collapse of drier	–	–	1/5	–	–	–	1/5
		Colluvial deposit	2/8	–	–	–	–	–	2/8
6/7	H	Colluvium (post-Roman)	2/3	–	–	–	1/9	–	2/12
Total			15/85	2/6	1/5	1/2	5/50	1/11	25/159

Later Prehistoric

Several sherds in a shelly fabric (S1) did not include diagnostic forms. The fabric is similar to material at Maiden Castle (Brown 1991), Eldon's Seat (Cunliffe and Phillipson 1968), Rope Lake Hole (Davies 1987a), Hengistbury Head (Brown 1987), and Gussage All Saints (Gale 1979), but a more precise date is not achievable. The lack of such material at Coburg Road (Cleal 1992) suggests that the Western Link material is most likely to be late within the Late Bronze Age, if not Iron Age in date. Other sherds lacking diagnostic examples occur in other calcareous fabrics. A beef calcite sherd (C1) may well be Late Bronze Age in date by comparison with fabrics from from Coburg Road. The single limestone fabric (L1) would not be out of place within such an assemblage.

Discussion

The significance of the later prehistoric pottery lies in its distribution. The diagnostic Late Bronze Age shoulder sherd provides the only dating evidence for ditch *55* in Trench A (Fig. 6). The Late Iron Age vessel was recovered from a Period 4b context, pit *841*, dated to the Early Roman period (1st–2nd century AD). This vessel may well represent the continued use of such Late Iron Age pottery types into the Early Roman period since the vessel is unlikely to be redeposited in the absence of any Late Iron Age occupation along the route of the Western Link. The earliest occurrence of the shelly fabric sherds in similar Period 4A and 4B contexts or later phases supports this interpretation.

List of illustrated prehistoric pottery

Fig. 107

1. Sherd from the lower part of the collar of an urn, decorated with round-toothed comb impressions; fabric G2; Collared Urn; Trench G, 399, Period 1.
2. Rim sherd; fabric G1; probably Early or Middle Bronze Age; Trench G, 368, Period 4C.
3. Body sherd with plastic fingernail decoration; fabric G5; Early or Middle Bronze Age; Trench A, 14, Period 2.
4. Body sherd with an oval unperforated lug, applied horizontally; fabric G5; probably Early or Middle Bronze Age; Trench A, 5, Period 2.
5. Rim from a high-shouldered jar; fabric Q1; Late Iron Age; Trench K, 842, Period 4B.

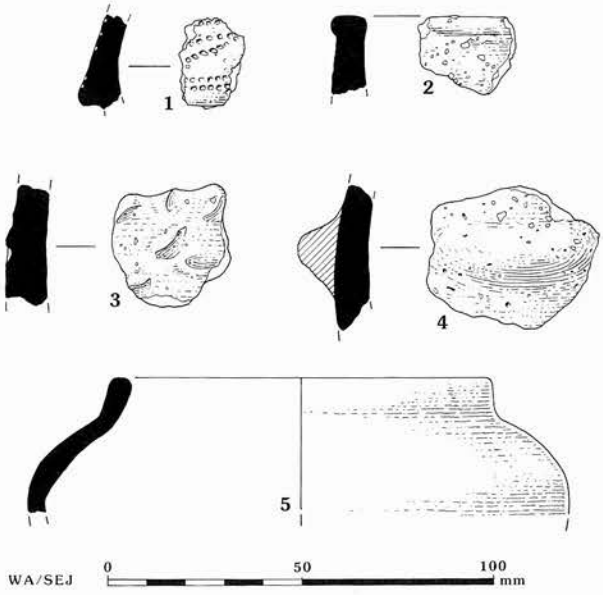


Figure 107 Fordington Bottom: prehistoric pottery. Scale 1:2

3 **Roman Pottery**, by Rachael Seager Smith with contributions from M. Corney, B. Dickinson, D.F. Williams, and R.S.O. Tomlin

In total, 13,511 sherds of Roman pottery were recovered (Table 49). The assemblage is predominantly late Roman (3rd–late 4th or early 5th century) in date although some earlier (1st–2nd century) material is present. It is dominated by the Black Burnished wares (BB1) while the remainder of the assemblage consists of a small range of other local fine- and coarsewares, as well as regional and continental imports.

The Assemblage

The total number of sherds recovered by period is shown in Table 49. Only 34% was found in Romano-British

Table 48 later prehistoric pottery (No. sherds) and weight (g) by fabric and period

			Fabric						
Period	*Trench*		*C1*	*F1*	*F2*	*L1*	*Q1*	*S1*	*Total*
2	A	Ditch *55*	–	2/5	–	–	–	–	2/5
	G	Colluvium 230	–	–	2/4	–	–	–	2/4
4A	K	Grave *914*	–	2/4	–	–	–	–	2/4
4B	G	Grave *444*	–	–	–	–	–	2/27	2/27
	K	Pit *964*	–	1/1	–	–	–	–	1/1
		Pit *841*	–	–	–	–	3/33	–	3/33
6/7	E	Colluvium (post-Roman)	1/5	–	–	–	–	–	1/5
	H	Colluvium (post-Roman)	–	–	2/21	1/6	–	–	3/27
Unphased			–	–	5/26	–	–	1/5	6/31
Total			1/5	5/10	9/51	1/6	3/33	3/32	22/137

Table 49 Roman pottery: No. of sherds by period

Period	*R-B coarse*	*R-B fine*	*Sam.*	*Imp. fine*	*Amp.*	*Mort.*	*Total*
1	36	–	–	–	–	–	36
2	15	–	–	–	–	–	15
4A	398	5	10	–	1	–	414
4B	1205	9	14	–	7	2	1237
4C	2864	79	31	6	3	3	2986
6/7	7205	260	67	–	15	5	7552
Unph/ mod	1209	39	19	–	4	–	1271
Total	12932	392	141	6	30	10	13511

contexts (Periods 4A–4C) and in general, the condition of the assemblage is very poor, the majority of sherds being severely abraded.

Methods

The samian and amphorae assemblages were examined in their entirety but, for the rest of the assemblage, only the material from Romano-British contexts (Periods 4A–4C) was examined in detail. The remaining material was scanned and quantified by sherd count, to establish the date and range of products present. Details of this scan can be found in the archive. The material from Periods 4A–C was recorded as for the Southern By-pass assemblage. As for the By-pass assemblage, summary descriptions of fabrics and vessel forms which are additional to the established series and not present on the By-pass sites are included in microfiche (Mf 16).

Imported Finewares

This group includes samian and six sherds of Rhenish ware (Greene 1978, 18) only, the predominantly late Roman date of the assemblage being beyond that of the commonly imported fineware fabrics. The Rhenish ware sherds are all from a Period 4C context and probably belong to the same vessel. The samian and Rhenish ware represent 1% of both the total number of sherds recovered and of the sherds from Periods 4A–4C specifically.

Samian, by R.H. Seager Smith and M. Corney

A total of 141 sherds of samian (1671 g) was recovered. Of these, 55 sherds (879 g) were recovered from Period 4A–4C contexts, with the remainder from post-Roman (Period 6/7) or other deposits. The entire collection was examined in detail and the results are presented Tables 50 and 51. Additional details can be found in the archive. In common with the rest of the ceramic assemblage from this site, the samian is badly abraded although of high mean sherd size (12 g).

Table 50 samian fabrics (%) by period compared with other Dorchester sites

	No. sherds	*South Gaulish*	*Central Gaulish*	*East Gaulish*
Western Link				
Period 4A	10	100	–	–
Period 4B	14	86	14	–
Period 4C	31	32	48	19
Period 6/7	67	12	58	30
Unph/modern	19	21	58	21
Total	141	31	47	21
Other sites				
Southern By-pass	62	56	43	–
County Hall	252	51	46	2
Alington Avenue	242	27	70	2.5
Greyhound Yard	4946	66	33	*1
Poundbury	608#	18	66	**16

= vessels; * = estimates based on no. of identifiable vessels; ** = 8% of total assigned to CG/EG combined)

Fabrics

Samian of immediately post-Conquest date through to the late 2nd–3rd century is present. Southern Gaulish fabrics represent 31% of the total collection (Table 50) while the Central and Eastern Gaulish regions account for 47% and 21% respectively. Even when only the stratified Roman material is considered, Eastern Gaulish wares represent 11%. Clearly the proportion of Eastern Gaulish samian is far in excess of that from any of the other Dorchester sites and is of particular interest, especially considering the location of Dorchester on the western extreme of the area covered by the Eastern Gaulish samian supply.

Although the proportion of Southern Gaulish samian is somewhat low when compared to figures from other Dorchester sites (Table 50), these wares account for all the sherds from Period 4A contexts and 86% of those from Period 4B. The majority of sherds appear to be from La Graufesenque and are of Claudian or early Neronian to Flavian–Trajanic date. Central Gaulish samian dominates the assemblage from Period 4C onwards.

Fabrics include examples from Lezoux and Les Martres-de-Veyre while in general, these sherds date from the Trajanic–Hadrianic to Antonine periods. The Eastern Gaulish samian includes sherds from Rheinzabern, the range of forms indicating its continuance into the late 2nd and first half of the 3rd century.

Forms

Of the 141 sherds recovered, 110 could be identified to vessel form, representing *c.* 91 vessels (Table 51). The range of forms includes platters, cups, dishes, and bowls as well as closed forms and a few Eastern Gaulish 'exotica' such as an externally corrugated sherd. However, cups appear to be poorly represented amongst the assemblage and decorated forms account for only 21 of the 91 identifiable vessels. None of the decorated forms occurred in Period 4A or 4B contexts.

Table 51 samian vessel forms (No. examples)

Period	*4A*	*4B*		*4C*			*6/7*			*Unphased/modern*			*Total*		
Form	*SG*	*SG*	*CG*	*SG*	*CG*	*EG*	*SG*	*CG*	*EG*	*SG*	*CG*	*EG*	*SG*	*CG*	*EG*
Ritt. 9	–	–	–	–	–	–	1	–	–	–	–	–	1	–	–
15/17	1	1	–	–	–	–	–	–	–	–	–	–	2	–	–
18	–	2	1	–	2	–	–	1	–	–	–	–	2	4	–
18 var.	–	–	–	–	–	–	–	–	–	1	–	–	1	–	–
18 or 18/31	–	3	–	–	1	–	–	3	–	–	–	–	3	4	–
18/31	–	2	1	2	–	1*	–	–	–	–	–	–	4	1	1
18/31R	–	–	–	–	1	–	–	–	–	1	1	–	1	2	–
18/31 or 31	–	–	–	–	–	–	–	2	–	–	1	–	–	3	–
31	–	–	–	–	–	–	–	1	–	–	–	–	–	1	–
18/31 type	–	–	–	–	–	1	–	1	4	–	3	1	–	4	6
Lud.Sb/Sa	–	–	–	–	–	–	–	–	1	–	–	–	–	–	1
27	–	1	–	–	–	–	–	–	–	–	–	–	1	–	–
33	–	–	–	1	–	–	–	–	–	–	1	–	1	1	–
36	–	–	–	–	1	–	–	1	–	–	2	1	–	4	1
38	–	–	–	–	–	–	–	–	1	–	–	–	–	–	1
42	–	–	–	–	2	–	–	–	–	–	–	–	–	2	–
45	–	–	–	–	1	–	–	–	–	–	–	–	–	1	–
Curle 15	–	–	–	–	–	–	–	1	2	–	–	–	–	1	2
79	–	–	–	–	–	–	–	–	–	–	–	1	–	–	1
37 or 29	–	–	–	1	–	–	1	–	–	–	–	–	2	–	–
37	–	–	–	1	1	–	2*	7	3**	–	2	–	3	10	3
37 or 30	–	–	–	–	–	–	–	1	–	–	–	–	–	1	–
?67	–	–	–	–	–	–	–	1	–	–	–	–	–	1	–
?72	–	–	–	1	–	–	–	–	–	–	–	–	–	1	–
Unspecified															
Open form	1	–	–	1	1	–	–	2	3	–	1	–	2	4	3
Closed form	–	1	–	–	–	–	–	–	–	–	–	–	1	–	–
Unid. form	–	–	–	–	–	–	–	–	1	–	–	1	–	–	2
Ext. corr.	–	–	–	–	–	–	–	–	1	–	–	–	–	–	1

All forms are Dragendorff unless otherwise stated. * = 1 repaired vessel

The earliest form is a Ritt. 9 rim of Claudio–Neronian date (Table 51). Flavian forms include two Drag. 15/17 vessels, including one almost complete, stamped example (Fig. 108, 4) from La Graufesenque, dated to the early AD 70s (*below*). Decorated forms are represented by well made, finely finished body sherds from a Drag. 29 or early 37, as well as a Drag. 37 body sherd with an appliqué mask (Cat. no. 9), which is probably late Flavian in date, and a repaired Drag. 37 rim.

Drag. 18 and 18/31 platters and Drag. 37 bowls occur in both Southern and Central Gaulish fabrics indicating the continuation of the samian supply at the end of the 1st and beginning of the 2nd century AD. Sherds of Drag. 42 vessels also date to this period. Samian of the 2nd century is well represented in the assemblage (Table 51) with Central Gaulish forms continuing well into the Antonine period. These include a Drag. 31 platter, fragments of a Drag. 45 mortarium, and a Drag. 18/31R platter and sherds of a Drag. 37, dated *c.* AD 140–190, as well as several Drag. 31 sherds.

Eastern Gaulish forms dating from the mid 2nd–mid 3rd century are also present. These include the profile of a multiple-repaired Drag. 18/31 platter (Fig. 108, 1), probably from Rheinzabern, as well as Drag. 31, 37, and 38, 18/31 type platters, Curle 15 and Lud. Sb/Sa sherds. Three unusual forms were noted; a body sherd from an externally corrugated form, possibly a Curle 21 (or a Drag. 43 although no trituration grits survive on an otherwise fairly unabraded surface), a small, flat topped beaded rim (Fig. 108, 2) and a slightly everted, unelaborated rim (Fig. 108, 3). Two base sherds, one from a heavy Drag. 37, the other a thick, heavy base from a platter, have rivet repair holes.

Samian potters' stamps, by Brenda Dickinson

For layout of entries, see Chapter 3.2 above.

1. Albucius ii 6a 31 [A] LBVC I Lezoux (a). A stamp known on forms 79 and 80. There are no examples on form 27, which he also made, and this probably means that 6a was one of his later dies, not in use before *c.* AD 160; *c.* AD 160–180; Trench K, 978, pit *977*, Period 4C.
2. Banoluccus 1b 31 [B NO]LVCCI Lezoux (C). There is no internal dating for this stamp. Banoluccus's wares reached Scottish forts occupied in the Antonine period and two of his pots occur in a pit of *c.* AD 150–160 at Alcester (Hartley *et al.* 1994, 109, S118–9). His stamps appear on forms 18/31 and 80; *c.* AD 140–170; Trench H, 513, post-Roman colluvium, Period 6/7.

Table 52 Roman pottery: quantification, Periods 4A–4C

Fabric	Period 4A		Period 4B		Period 4C		Total	
	No.	Wt (g)	No.	Wt (g)	No.	Wt (g)	No.	Wt (g)
Romano-British coarsewares								
E101 (BB1 Poole Harbour)	203	2488	855	12688	2049	23355	3107	38531
E102 (BB1 varient fabrics)	195	2218	336	3018	389	2957	920	8193
E107 (BB1 clay pellet fabric)	–	–	11	142	423	7070	434	7212
Q100 (orange–buff coarse)	–	–	3	197	3	15	6	212
Romano-British finewares								
E103 (Corfe Mullen)	–	–	1	3	–	–	1	3
E160 (New Forest Parchment)	–	–	–	–	3	145	3	145
E161 (New Forest Red-Slipped)	2	9	–	–	8	108	10	117
E162 (New Forest stoneware)	1	9	7	59	58	619	66	687
E170 (Oxfordshire Red Colour-Coat)	1	5	1	3	9	376	11	384
E172 (Oxfordshire White Colour-Coat)	1	20	–	–	–	–	1	20
I100 (Undiagnostic fine)	–	–	–	–	1	37	1	37
Samian								
E300 (all sources)	10	252	14	67	31	560	55	879
Other imported fineware								
E120 (Rhenish)	–	–	–	–	6	25	6	25
Amphora								
E250 (all sources)	1	346	7	521	3	372	11	1239
Mortaria								
E201	–	–	2	202	1	15	3	217
E249	–	–	–	–	2	332	2	332
Total	414	5347	1237	16900	2986	35986	4637	58233

3. Murranus 10c 15/17 or 18 [OF]MVRRA La Graufesenque (a). There are several examples of this stamp from the Boudiccan burning at Colchester (Hull 1958, fig. 76, 10, 11) and it also occurs in the Cirencester Fort Ditch group of AD 55–65 (Hartley and Dickinson 1982, 122, S24–25); c. AD55–65; Trench K, 818, pit *817*, Period 4B.
4. Germanus i 27c 15/17 GERMANI La Graufesenque (a). The die for this underwent two modifications after being broken, the final version being used on vessels which occur in an early Flavian wreck at Cala Culip in southern Spain. This particular stamp comes from the broken die before it was modified, and so should belong to the later Neronian period or the early 70s; Fig. 108, 4; Trench H, 515, grave *514*, Period 4A.
5.]D[? on form 15/17 or 18, South Gaulish; Neronian or early Flavian; Trench H, 500, post-Roman colluvium, Period 6/7.

Romano-British Finewares

The Romano-British finewares represent 3% of the total assemblage (Table 49) or 2% of the sherds from Period 4A–4C contexts (Table 52). Products of the New Forest and Oxfordshire regions are the most common amongst this group which also includes one sherd of late 1st century AD Corfe Mullen ware (Calkin 1935, 54) and one base sherd of an unassigned fineware fabric (I100; Mf 16) jar or beaker, from pit *728* (Period 4C) of probable 3rd–4th century date.

New Forest wares

Seventy-nine sherds of New Forest wares were recovered from Period 4A–C contexts, the majority occurring in Period 4C (Table 52). These wares are represented by Fulford's fabrics 1a–c and 2 (1975a, 24–6), the fine, Colour-Coated stoneware, Red-Slipped ware, and Parchment ware.

As noted at other sites in the Dorchester area, the Colour-Coated stonewares are most numerous. Most sherds in this fabric are derived from the highly distinctive indented beaker form (ibid., 50, fig. 12, 27). Other vessels include an example of a small bag-shaped beaker (ibid., 56, fig. 15, 44) and a rim of a jug form with a single handle, dated to c. AD 340–400 (ibid., 50, fig. 11, 21/22). Only one Red-Slipped ware form could be identified, a necked bowl with a reverse S-shaped profile, a fairly unusual form dated by Fulford to c. AD 300/320–340 (ibid., 64, fig. 19, 65). The Parchment ware sherds include a mortarium base and examples of the internally flanged bowl form (ibid., 70, fig. 23, 89).

Oxfordshire wares

Two of the Oxfordshire fabrics were recognised, White ware and Red Colour-Coated ware (Young 1977, 56 and 123). A single White ware mortarium sherd was found within the colluvium sealing the activity on terrace *599* (Period 4A). The

Table 53 amphorae by fabric and period

Period	*Dressel 20*		*Pélichet 47 / Gauloise 4*		*Dressel 2–4*		*Unassigned*		*Total*	
	No.	*Wt (g)*	*No.*	*Wt (g)*	*No.*	*Wt (g)*	*No.*	*Wt (g)*	*No.*	*Wt (g)*
4A	1	346	–	–	–	–	–	–	1	346
4B	2	12	3	462	–	–	2	47	7	521
4C	2	362	–	–	–	–	1	10	3	372
6/7	7	540	1	56	2	194	5	109	15	899
Unph/modern	1	117	1	8	–	–	2	7	4	132
Total	13	1377	5	526	2	194	10	173	30	2270

Red Colour-Coated ware forms and decorated sherds consist of a white paint decorated body sherd, fragmentary examples of Young type C45/46 vessels, bead-rim open bowls (ibid., 158, fig. 58) with rouletted decoration and sherds from a flanged bowl (ibid., 160, fig. 59, C51).

Amphorae, by D.F. Williams

A small number of amphorae sherds was examined and classified by fabric and form (Tables 48 and 53); full details are available in the archive. Three types were identified, Dressel 20, Pélichet 47/Gauloise 4, and Dressel 2–4. All of these are well represented in the amphorae assemblages from other sites in and around Dorchester (Williams 1987, 117, mf 3, C1–C4; Williams forthcoming a). In addition, a number of sherds of small size proved difficult to allocate to a particular form with any degree of confidence.

A single piece of unassigned amphora from the collapse of Period 4C structure *5198* (34 mm diameter; 7 mm hole diameter; 10 g) had been reshaped for use as a spindle-whorl (identified by E. Morris). The reuse of pottery sherds as whorls is a common Romano-British occurrence (Leech 1982, 175; Leach 1982, 217; Holbrook and Bidwell 1991, 275).

Mortaria

Ten mortaria sherds, excluding the Oxfordshire and New Forest vessels already noted above, were recovered (Tables 48 and 52). Two sherds from a Type 313 vessel, as well as an additional body sherd, in fabric E201 (Seager Smith and Davies 1993), a variant of the well-known Bushe-Fox 26–30 type (1913, 77, fig. 19, 26–30) were found. This is perhaps the most common mortaria fabric found on sites in the Dorchester area and corresponds to one of the fabrics used for Hartley's group 1 and 2 mortaria produced in Kent or north-east France in AD 60–150 (Hartley 1977, 11). Two sherds of a less familiar fabric and form were recovered. These occur in a coarse, off-white, sandy fabric (E249), very similar to that of New Forest Parchment ware, but the vessel is wall-sided and bears greater similarities to the Oxfordshire type M14 (Young 1977, 72, fig. 20) than to any of the New Forest products shown in Fulford's corpus. The form is clearly spouted but no trituration grits survive and, as a result of surface abrasion, it is difficult to know whether these ever existed. The provenance of this vessel, as well as its date range, therefore remain uncertain.

Romano-British Coarsewares

This group represents 96% of the sherds recovered and mainly consists of the locally produced Black Burnished ware fabrics (Tables 49 and 52). Six small sherds in a variety of orange/buff coarseware fabrics (Fabric Q100), which probably functioned as 'finewares' within the assemblage, were also present in Phase 4A–4C contexts.

Black Burnished wares

The BB1 assemblage consists of the three major fabric sub-groups discussed for the Southern By-pass (Mf 17). The typical Wareham/Poole Harbour fabric (fabric E101) is, of course, the dominant type, representing 70% of all the BB1 sherds, while the group of 'variant' fabrics (fabric E102) accounts for 20% of the assemblage. The shorter production period of this fabric group is indicated by the decline in the frequency of these sherds during the Roman period at sites in and around Dorchester, as well as along the Western Link. In the Late Iron Age/early Roman (Period 4A) contexts, the Wareham/Poole Harbour and the variant fabrics occur in approximately equal amounts (Table 52) but the percentage of the variant fabrics falls to 27% in Period 4B and only 14% in the Period 4C deposits. This variant fabric group is represented by only a very few examples of rare and unusual forms or residual sherds after the end of the 2nd or early 3rd century (Seager Smith and Davies 1993; Seager Smith forthcoming). The third fabric group present is the coarse, predominantly oxidised fabric containing visible shale or clay pellets (fabric E107). On present evidence this fabric appears to date from the very late 3rd/4th century, possibly continuing into the late 4th or early 5th century, and perhaps represents the degeneration of the Wareham/Poole Harbour industry at this time. This fabric does not occur in Period 4A contexts and while it is present in negligible amounts in Period 4B (Table 52), its proportion of the Black Burnished ware assemblage rises to 15% of the sherds in Period 4C.

Vessel forms

Thirty Black Burnished Ware vessel forms were identified. All the major vessel categories are represented, and the range is typical of assemblages recovered from the Dorchester area; vessel types being described in Seager Smith and Davies (1993). The forms represented are:

Jars — Types 1–4, 6–9, 11–12, 35, 47, 62, 65, 67;
Round-bodied bowls — Types 13–15, 33, 72, 73;
Straight-sided bowls/dishes — Types 20–22, 24–25;
Miscellaneous forms — Types 19, 26, 29

One addition to the Dorchester type series was identified, Type 86, a small shallow bowl (Fig.108, 11).

The correlation between fabric and vessel form by period is shown in Table 54. With the exception of the large, pie-crust rim jars (Type 12) which invariably occur in fabric E107 in the Dorchester area, the majority of forms lack specific associations with particular fabric types. Many forms, however, most notably the straight-sided bowl/dish forms, do occur more frequently in one fabric rather than another, the date range of these vessels being beyond that normally expected for the variant fabric group (fabric E102) and earlier than fabric Q107.

Another feature of the assemblage, probably largely a result of the relative chronologies of the various forms present associated with changes in fashion, culinary practice, etc, is the changing proportions of the major vessel categories through time. These are shown in Table 55 for the assemblage from each period and as a whole. In common with the expected patterns for Dorchester (Seager Smith forthcoming) and elsewhere (Millett 1979, 39) jar forms are represented by the widest range of types and the largest numbers of examples, although the importance of these vessels declines as the straight-sided bowl/dish forms become increasingly common. Similarly, the round-bodied bowl forms, characteristically 1st–early 2nd century AD in date, form only 1% of the Period 4C (3rd–4th century and later) assemblage compared with 27% in Period 4A. In general, however, all the vessels present conform to the size ranges and proportions outlined elsewhere (Gillam 1976; Davies and Hawkes 1987, M3) while the techniques of surface treatment and decoration also follow the accepted conventions for Black Burnished ware (Farrar 1973, 76; Williams 1977, 172; Seager Smith and Davies 1993).

General Assessment of the Late Iron Age and Roman Pottery by Feature Group within Periods 4A–4C

The total number of sherds recovered are shown by Period in Table 49. As noted above, only the material from the Romano-British phases (Periods 4A–4C) (Table 51) will be considered here, according to the feature groups described in the stratigraphic report.

The 51 sherds recovered from pre-Roman contexts (Periods 1 and 2) are all small and abraded and clearly result from the accidental incorporation of the material, derived from the subsequent activity on the site, into the upper levels of the earlier features. While 56% of the total number of sherds in the assemblage was recovered from the Period 6/7 colluvium, only the amphorae and samian were examined in detail. Neither the pre- nor post-Roman deposits contained forms or fabrics not represented within the stratified Romano-British assemblage or sherds of intrinsic interest but further details of the quantity and range of material present can be found in the archive.

Period 4A

Late Iron Age / early Roman

Material from this phase accounts for 9% by number of the stratified Romano-British assemblage recovered. The bulk of this material is from the Late Iron Age/early Roman cemetery although smaller groups of sherds derive from the various terrace/structures and associated features of this phase, such as hollow *528*.

Of the 24 graves identified, eight produced a total of 222 sherds (2616 g), as summarised in Table 46. No ceramics were recovered from ditches *910* and *989* which formed the boundary of the Period 4A cemetery, or from the construction features of cemetery structure *929* which seems to have provided the focus for it. However, 29 sherds (336 g) were found in the post-abandonment fills of the structural elements of this building including everted rim jars (Type 975) and dog-dishes (Type 20), both dating from the 2nd century onwards. Finewares were represented by a single sherd of Southern Gaulish samian and the later 3rd–4th century Oxfordshire Red-Slipped ware and New Forest Red-Slipped and Colour-Coated wares, including a beaker rim (Fulford 1975a, 56, fig. 15, 44). The presence of these later wares in the post-abandonment fills suggests that the cemetery structure must have remained standing well beyond the end of this phase, a hypothesis supported by the five Period 4B graves, which occur in the vicinity of, and respect, this structure.

Ditch *231* produced small quantities (19 sherds, 308 g) of Black Burnished ware from the upper layers. including two rim sherds from Type 1 jars, the characteristic cooking-pot/storage jar form of the Durotrigian period (Brailsford 1958, pl. 1, 5 and 6). Cut into the top of this ditch, a small pit, *256*, contained a complete, if rather abraded, 'Maiden Castle War Cemetery' bowl (Type 33) with two post-firing holes drilled through its base. Such post-firing perforations are comparatively common features among Durotrigian assemblages (Wainwright 1968, figs 15–23, 3, 6, 54, 76, 81, 110, 131, and 170; Wainwright 1979a, figs 63–7; Fig. 70, 19 and 20, Fig. 71, 21–3, 25, and 26) although their purpose, presumably associated with some intentional change in the function of the vessel, remains obscure. The presence of this Late Iron Age/early Roman material in the upper layers and cutting into ditch *231* provides a *terminus ante quem* for the construction and use of this feature.

Terrace *599* produced one large sherd of Dressel 20 amphora from the surface but the features constructed on it only produced small quantities of material. Black Burnished Ware body sherds (E101) were found in the fillings of gully *633* (two sherds) and oven *697* (one sherd) while the keyhole oven *750* produced 12 sherds in all, including a fragment of an everted rim jar (Type 975). All these sherds were small, abraded, and chronologically undiagnostic. A thin layer of colluvium, 573, sealing the activity on this terrace produced only five sherds, four BB1 body sherds and a fragment of an Oxfordshire White ware mortarium (fabric E172). Six sherds of BB1 (E101), including rim sherds from an upright rim jar (Type 1) and a flat flange-bowl (Type 22) dated to the 2nd century, come from pit *363*, and two body sherds of BB1 (E102) were recovered from the disturbed upper fill of this feature.

Discussion

With the exception of the grave goods and the complete vessel found in pit *256*, the majority of sherds from this phase are comparatively small and abraded. Taking the assemblage from Period 4A as a whole, the average sherd weight is 9 g when the complete vessels and the single large amphora sherd from terrace *599* are excluded. Although rim forms are few (Table 54), the assemblage is characterised by Durotrigian vessel types, the only later material being from the post-abandonment fills of cemetery structure *929* which clearly continued to exist beyond the end of this phase, and the 2nd century Type 22 rim from the disturbed upper fill of pit *363*. All the samian recovered is from Southern Gaul (Tables 50 and 51) while the Black Burnished ware fabrics (E101 and E102) occur in nearly the same quantities (Table 52).

With the exception of the colander sherds from infant burial *472*, normally expected to be of 3rd–4th century date

Table 54 Black burnished ware forms by fabric type and period (No. examples)

Vessel form	*Period 4A*		*Period 4B*		*Period 4C*			
	E101	*E102*	*E101*	*E102*	*E101*	*E102*	*E107*	*Total*
1st–early 2nd century AD								
1	4	1	9	6	–	–	–	20
6	1	–	–	–	–	–	–	1
7	4	–	1	2	1	2	–	10
8	–	–	2	1	–	2	–	5
13	–	–	2	2	–	1	–	5
14	–	1	–	–	–	–	–	1
15	3	2	–	2	1	–	–	8
33	–	1	–	–	–	–	–	1
86	1	–	–	–	–	–	–	1
Late 1st–early 3rd century AD								
62	–	–	5	–	–	–	–	5
72	–	–	–	–	1	–	–	1
73	–	–	–	1	–	–	–	1
26	–	–	1	5	–	2	–	8
29	–	–	–	1	–	–	–	1
35	–	–	1	–	–	–	–	1
2	–	–	1	–	24	2	6	33
4	–	–	–	–	1	–	–	1
9	–	–	–	–	–	1	–	1
20	2	–	14	2	53	5	–	76
22	1	–	1	1	3	–	–	6
24	–	–	–	–	3	1	–	4
47	–	–	–	–	1	1	–	2
65	–	–	–	1	–	–	–	1
67	–	–	–	3	–	–	–	3
975	7	–	13	2	50	6	–	78
3rd–4th century AD+								
3	–	–	1	–	12	–	–	13
11	–	–	–	–	3	–	–	3
12	–	–	–	–	–	–	2	2
19	1	–	–	–	1	–	–	2
21	–	–	–	–	1	–	–	1
25	–	–	3	–	52	3	–	58
Total	24	5	54	29	207	26	8	353

[although an example in BB1 (E102) fabric was found in a pre-AD 70 deposit at Norden (Sunter 1987, 24, fig. 12, 28)] and the Type 86 bowl, all the coarseware 'grave goods' are characteristic Durotrigian types, well paralleled in Brailsford's type series (1958, pl. 1). The Type 15 bowls are commonly found in Durotrigian burials in the area, occurring at Alington Avenue (Seager Smith forthcoming), Max Gate, and Came View (RCHM(E) 1970, 577–8), and were possibly even preferentially selected as grave goods during this period (cf. the material from the Durotrigian pits at Flagstones). All the grave goods however, show considerable surface abrasion suggesting that they were well-used prior to their deposition in this funerary context.

Period 4B: Early–Mid-Roman, 1st–2nd century AD

A total of 1237 sherds (16,900 g) was recovered from this phase which represents 27% of the stratified Roman sherds. This material is largely derived from settlement features with smaller quantities from the graves. Romano-British pottery was recovered from the fillings of eight graves and one possible grave belonging to this phase. No ceramic 'grave goods' were present (Table 46).

The upper fillings of robber trench *457* produced a total of 117 sherds (2702 g), mainly of late 1st–late 2nd/early 3rd century date and including the only Corfe Mullen ware sherd and two unassigned amphorae sherds, one with part of a ?drilled hole showing. The BB1 fabrics (E101 and E102) occur in the ratio of *c.* 3:1 sherds while the vessel forms include upright and bead rim jars (Types 1 and 7), round-bodied open bowls (Type 13) and 'dog-dishes' (Type 20) as well as an unusual jar or flagon form with a thickened, everted, and lid-seated rim (Type 35; Fig. 108, 12). The majority of BB1 (E101) body sherds appear to be from a single large jar with moderate to severe 'use-wear' abrasion on its interior surface. The average sherd weight of this material is also unusually high, 23 g compared with only 14 g for the material from this phase as a whole.

A total of 456 sherds (5427 g) was recovered from the complex including gullies *534* and *536*, pit *598*, and ditch terminal *588*. Pit *598* contained 357 sherds (4726 g), mostly of mid–late 2nd–3rd century date including both main BB1 fabric groups and jar Types 1, 3, 62, 65 and 67, straight-sided bowls/dishes of Types 20, 22 and 25, and lids (Type 26). Sherds of Central Gaulish samian, Pélichet 47/Gauloise 4 amphorae and New Forest Colour-Coated ware were also found. Gullies *534* and *536* and ditch terminal *588* produced mostly undiagnostic body sherds of BB1 with everted jar rims (Type 975) and 'dog-dish' rims (Type 20) as well as one sherd from a New Forest indented beaker (cf. Fulford 1975a, fig. 12, 27), a small amount of samian, Oxfordshire White ware, and New Forest Colour-Coated ware including one sherd decorated with white painted lattice.

Gullies *418* and *419* produced a total of 37 sherds (399 g) while four BB1 (E101) body sherds were found in the colluvial cover of the Period 4A sunken floored structure *420* which was cut by these features. Of the fourteen features in feature Group *876*, only pit *827* and feature *841* were thoroughly excavated, though four other features also produced Romano-British pottery. Most of the material is of later 1st–2nd century date. A total of 438 sherds (6924 g) was recovered, the majority (273 sherds, 5045 g) from pit *827*. Amongst this material BB1 fabrics (E101 and E102) occur in the ratio of *c.* 1:4 sherds. Vessel forms include Type 1 (one with graffitto on the shoulder and a post-firing, multi-perforated base), Type 8, and Type 62 jars, carinated bowls (Type 15), 'dog-dishes' (Type 20), and lids (Type 26). Six sherds of Southern Gaulish samian and a footring base from an unassigned orange/buff ware flagon were also noted. The average sherd weight of the material from this pit is comparatively high (15 g) and the many of body sherds present are from the lower part of a large jar form. One very large sherd (429 g) of Pélichet 47/Gauloise 4 amphora comes from *841*. Other forms from this complex include Types 7, 13 and 975 (pit *817*), 13, 975 (linear feature *872*; feature *861*) and six body sherds (30 g) of BB1 fabric E107 (top of *861*).

Discussion

The average sherd weight for this phase is 14 g, above average for the stratified Roman assemblage as a whole (12.5 g), mostly as a result of the large sherds from pit *827* and robber trench *457*. The remaining sherds were all comparatively small and abraded but in general, the material spans the period from the late 1st–late 2nd/ early 3rd century. The samian recovered from this phase corresponds with this date-range, it being from both Southern and Central Gaulish sources (Table 50). The

Table 55 proportions (%) of the major Black Burnished ware vessel categories present in Periods 4A–4C

Period	*Jars*	*Round-bodied bowls*	*Straight-sided bowls / dishes*	*Misc. forms*
4A	65	27	10	3
4B	58	8	25	8
4C	45	1	52	1
Total R-B	51	5	41	3

reduction in the proportion of the variant Black Burnished ware fabrics (E102), to 27% of the sherds, clearly indicates the decline in the importance of this fabric group during the 2nd century. The small quantities of later 3rd–4th century material (ie. the BB1 vessel Types 3 and 25 and sherds of fabric E107, New Forest and Oxfordshire ware) recovered are mostly from contexts where later disturbance can be demonstrated.

Period 4C: late Roman occupation, 3rd–4th century

The material from this phase represents 64% of the assemblage from the three Roman periods. In total, 2986 sherds (35,986 g) were recovered. The majority are, again, small and abraded.

In working area 467, the colluvium which built up on the upslope side of the revetment wall *356* produced 101 sherds (680 g), all of late Romano-British date. These included BB1 Types 25 and 975, BB1 fabric E107 and New Forest Colour-Coated ware, as well as Central Gaulish samian and the base of a small Rhenish ware beaker (AD 150–200 continuing into the 3rd century). A further 71 sherds (1168 g) including all three Black Burnished ware fabrics, New Forest Colour-Coated ware and a Dressel 20 amphora handle were recovered from the collapse of revetment wall *356*. Eight examples of dropped flange bowls/dishes (Type 25) occurred amongst this material. One of these, unusual in that it occurred in BB1 fabric E102, was noted to conjoin with sherds from the gradual collapse of drier *404*. Thirty-four sherds (378 g) were found in the colluvium to the north of, and probably associated with, the collapsed wall (Types 2, 20, and 25 as well as part of a New Forest Colour-Coated ware bag-shaped beaker (cf. Fulford 1975a, 56, fig. 16) and a piece of Central Gaulish samian). Eleven BB1 sherds were recovered from the surface of yard *359*, the only recognisable fragments were everted rim jar forms (Types 3 and 975), respectively dating from the 3rd and 2nd century onwards.

The pottery from the primary abandonment fills of cistern *360* consisted of body sherds of BB1 (E101 and E107) and New Forest Colour-Coated ware. Larger quantities of material (65 sherds, 1034 g), including the total profile of an attenuated everted rim jar (Type 3), a substantial part of the body and neck of another example of this form as well as rim sherds from an everted rim jar (Type 2), a dropped flange bowl (Type 25) and the base of a New Forest Parchment ware mortarium were recovered from the final silting of this feature, suggesting a late 3rd or 4th century date at least for the abandonment of this structure.

Late Roman material (82 sherds, 1509 g), including sherds of the very late BB1 fabric E107, was recovered from deposits representing the gradual collapse of drying oven *404* as well as Types 975, 20, and 25 and sherds from a New Forest Colour-Coated ware indented beaker (cf. Fulford 1975a, 50, fig. 12, 27). One of the dropped flange bowls was complete and sherds from another unusually small example, in BB1 fabric E102, were found to conjoin with sherds from the collapse of the revetment wall *356*. A New Forest Parchment ware mortarium base and 42 undiagnostic body sherds of BB1 (E101 and E102) were found amongst the final silting over this structure.

Forty-four BB1 sherds (648 g), including four Type 2 jar rim fragments, were recovered from the initial silting on the up slope side of wall *712* of structure *5198*. A wider range of material, in total 152 sherds (1067 g) was recovered from a series of features (hearth *728*, post-hole *701*, and hollows *348* and *702*) whose construction is presumed to be contemporary with the initial use of this structure. Body sherds of fabrics E101, E102, and E107 occurred, the latter including base sherds of a very unusual form (Fig. 108, 13) with small, square pre-firing perforations around its circumference and a large central hole. A similar large base sherd in this fabric type with many small, pre-firing perforations was found at Alington Avenue (Seager Smith forthcoming, fig. 60, 49) but no parallels have been found for this vessel, although it was clearly manufactured for a specific purpose. A complete 'dog-dish' and sherds from an incipient flange bowl (Type 24) as well as body sherds of New Forest Colour-Coated ware, Rhenish ware, and unassigned orange coarseware were also found.

A greater quantity of material (132 sherds, 1534 g) was recovered from the later floor level *717*, *347*, and *349* but much of this is chronologically undiagnostic, rim Types 2, 20, and 25 only being recognised. The coarse, oxidised BB1 fabric E107 was absent although sherds of unassigned orange/buff coarseware, New Forest Colour-Coated ware, and Rhenish ware were noted. Two sherds of late 2nd century Central Gaulish samian (a Drag. 18/31 base and a Drag. 45 body) and sherds of a late 2nd–mid-3rd century Eastern Gaulish Drag. 18/31 platter were also present.

Material from the collapse of this structure consists of 30 sherds (417 g) including all three Black Burnished ware fabric groups (vessel form Types 2, 20, and 25) as well as a New Forest Colour-Coated ware beaker base. The amphora spindle-whorl was also found in these collapse deposits. Although generally of late 3rd–4th century date or later, much of the pottery recovered from this structure is chronologically undiagnostic, making it difficult to suggest more precise dates for its construction, use, and abandonment. However, the presence of BB1 fabric E107 sherds, considered to be of 4th or even 5th century date in hearth *728* and hollow *348* as well as amongst the floor deposits within the structure suggests occupation during the very late Roman period.

In Trench H, features associated with structure 5197 produced BB1 material of mainly 3rd–4th century date in fabric E101, including Type 11 flanged jars. A New Forest Colour-Coated ware body sherd was also found. Further sherds of 3rd–4th century BB1 including fragments of jar Types 2, 3, 11, and 975, and Types 20, 25, and 21 bowls and dishes, were recovered from various gullies in this area (*537*, *535*, *557*). New Forest Colour-Coated ware and Central Gaulish samian were also recorded with New Forest Colour-Coated and Red-Slipped wares, and Kentish or Gallic mortaria in gully *535*.

Unusually, the 139 sherds (2079 g) recovered from the primary fills of gully *557* were not badly abraded and represent a consistent late 3rd–4th century group. Seventy-five sherds (847 g) found amongst the post-packing in this feature include, again, Types 2, 20, 25, and 975 in addition to a New Forest Parchment ware internally flanged bowl (cf. Fulford 1975a, 70, fig. 23, 89). Sherds from two samian vessels, a Central Gaulish Drag. 37, probably of Antonine date, and body sherds from an Eastern Gaulish 18/31 type platter, were also present.

Hearth *583* produced 103 sherds (1832 g). These are predominantly of fabric E107 with just two sherds of E101 and one sherd of New Forest Colour-Coated ware. The majority of

the BB1 E107 sherds are from a large jar found lying on the surface of the hearth. The fabric of these sherds shows highly variable firing and soot deposits on the interior surface although there is no evidence to suggest burning *in situ* (as might be expected if the sherds had been deliberately positioned to provide a base for a fire).

Structures in trench H

No pottery was found amongst the structural elements of platform *5101* although 114 sherds (2280 g) of late 3rd–4th century pottery were recovered from the colluvium sealing the terrace. Sherds of BB1 fabric E107 (71 sherds) jar forms predominate although no precise vessel types could be identified. The Wareham/Poole Harbour fabrics were represented by 37 sherds, including everted rim jars (Type 3) and 'dog-dishes' (Type 20). New Forest Colour-Coated ware was also present while the two sherds of BB1 (E102) and one of Central Gaulish samian are presumably residual in this context.

Pit *993* produced 105 sherds (934 g), generally of slightly earlier date than that from the colluvium and therefore possibly associated with the use of the structure itself. BB1 (E101 and E102) vessels include Types 2, 8, 9, and 20. One sherd from a Central Gaulish Drag. 36 is also present. Sherds of New Forest indented beakers and of BB1 fabric E107 (including a Type 12 'pie-crust' jar rim) occur in both upper and primary fillings, indicating that this feature was dug before the late 3rd/4th century.

Seventy sherds (623 g) were found within the occupation deposits of structure *5199*, including 2nd–3rd century BB1 (E101) everted rim jar (Type 975), 'dog-dish' (Type 20) and incipient flange bowl (Type 24) forms, sherds of BB1 fabric E102, fabric E107, and one very small sherd of Southern Gaulish samian. A further 114 sherds (1006 g) were recovered from the colluvium sealing this structure, the vessel forms suggesting a later 3rd–early 4th century date. Fabric E102 is only represented by body sherds but everted rim jars (Type 975), 'dog-dishes' (Type 20), and dropped flange bowls/dishes (Type 25) occur in E101 and Type 2 everted rim jars occur in E107. Finewares are represented by New Forest Colour-Coated sherds and two sherds of later 2nd century Central Gaulish samian.

The colluvium sealing structures *981* and *983* included 167 sherds (2148 g) of which eight were late 1st –mid-2nd century Southern and Central Gaulish samian. Predominant Black Burnished ware forms date from the 2nd–3rd century onwards (Types 2, 8, 20, 22, 24, 25, 26, and 47). Sherds of fabric E107 (including Type 2 rims), New Forest Colour-Coated and Oxfordshire Red-Slipped wares indicate that the colluvium could not have been deposited until at least the later 3rd or 4th century. Two sherds of the unassigned mortaria fabric E249 also occurred.

The 371 sherds (4459 g) recovered from occupation deposits overlying structure *867* are predominantly late 3rd–4th century or later in date and are comparatively unabraded. All three Black Burnished ware fabrics are present, fabric E102 only in small quantities while the amount of fabric E107 may well be under-represented as most sherds are oxidised, making it difficult to distinguish between the coarser E101 and the E107 sherds. Vessel forms are dominated by 'late' types (Types 3, 19, 20, and 25) with Types 2, 22, and 72 also occurring. New Forest Colour-Coated ware, Oxfordshire Red-Slipped ware and two small sherds of Southern Gaulish samian are also present.

Late Roman Activity in trench K

Pit *811* produced 41 sherds (1024 g), predominantly of later 3rd–4th century date. All three Black Burnished ware fabrics were present, represented by Types 2, 3, 7, 13, and 25. An Oxfordshire Red-Slipped ware flanged bowl (cf. Young 1977, 160, fig. 59, C51) and sherds of all three New Forest fabrics, including a Parchment ware, internally flanged bowl rim (cf. Fulford 1975a, 70, fig. 23, 89) are also present.

The upper parts of unexcavated features *970* and *977* produced 45 sherds (614 g) and 39 sherds (254 g) respectively, including three sherds of late 1st–mid 2nd century AD Southern and Central Gaulish samian. The remainder were BB1 (E101 and E102). Types 20, 47, and 975, all dated 2nd century onwards, were recovered. The pottery may be intrusive.

Field Boundaries in trench D

Ditch terminal *158* and linear feature *160* each produced three undiagnostic body sherds (18 g and 11 g respectively) of BB1 (E101).

Late Roman burials

Three burials, graves *154, 167* and *5007*, produced 29 sherds (111 g), all chronologically undiagnostic body sherds of BB1 (E101) found in the upper levels of the grave fillings.

Discussion

The average sherd weight for the material from this phase is 12 g and the majority of sherds show considerable surface abrasion. The assemblage is predominantly of late 3rd/4th century date, probably continuing into the 5th century and, in terms of composition, is broadly comparable with that recovered from the Period 4C structures at Maiden Castle Road. The vessel forms (Table 54) are characterised by Types 2, 3, 20, and 25, with Types 11, 12, 19, and 21 occurring in smaller quantities, all known late Roman types several of which (ie, Types 2, 3, 11, 12, 20, 25) may continue into the late 4th or early 5th century. A range of finewares, typically found in late Roman contexts and consisting mainly of products of the Oxfordshire and New Forest industries together with small quantities of imported samian and Rhenish wares, is also present. It is, however, difficult to assign precise dates to the construction and use of many of the Period 4C features because of the lack of chronologically diagnostic material. A large proportion is from post-abandonment silting in, and colluvial deposits sealing, structures and features of this phase and can therefore only offer a *terminus ante quem* for their construction and usage.

In contrast to the situation at other Dorchester sites where sherds of the coarse, oxidised BB1 fabric E107 have only been found in association with the demise of late Roman features or structures (Seager Smith 1993b; forthcoming and above, Chapter 3), sherds of this fabric occur in the construction and usage deposits of many of the Period 4C features along Fordington Bottom. These include hearth *728* and the floor layers within structure *5198*, gully *557*, hearth *583*, and the occupation deposits with structure *5199*. It is possible that these structures at least date from the very end of the Roman period, and represent a slightly later phase of occupation than that seen at Maiden Castle Road.

Taking the assemblage from Period 4C as a whole, a sufficiently wide range of fabrics and forms was recovered (Tables 52 and 54) to suggest an everyday, domestic settlement assemblage. However, as noted above, very little of this material was directly associated with the construction and use of the structures and other

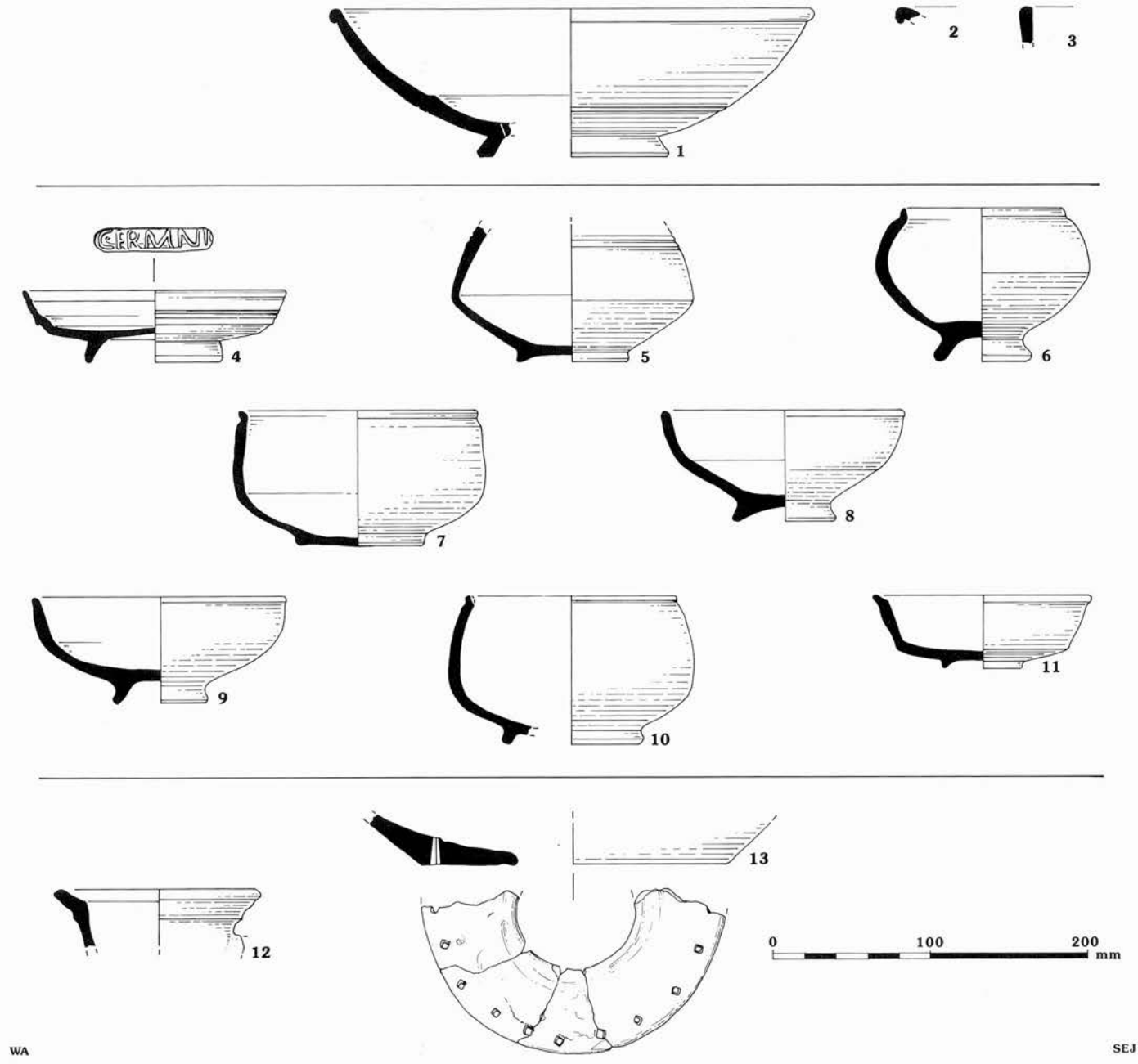


Figure 108 Western Link: Late Iron Age/Roman pottery. Scale 1:4

features of this phase and is therefore of dubious relevance to the activities carried out here. Only small quantities of material were directly associated with structures *5197*, *5198*, and *5199*, for example, but amongst these the presence of certain vessels, most notably the very unusual base from structure *5198* (Fig. 108, 13), or deposits such as the sherds laid on the surface of hearth *585*, strongly suggest that other more specialised activities were taking place in this area.

Alternatively, if the Period 4C structures and features do date to the very end of the Roman period perhaps the apparent paucity of associated pottery is not surprising. If fabric E107 represents the final degeneration of the Black Burnished ware industry, then the Period 4C activity occurred at a time when pottery may have been in short supply. Although the Dorchester area clearly continued to support a population into the post-Roman period (Keen 1984; Woodward *et al.* 1993; Adam and Davies in prep.), the material evidence characteristic of this period is, as yet, lacking or poorly understood.

List of Illustrated Sherds

Fig. 108

Samian

1. Drag. 18/31, EG; Trench E, 347, Period 4C.
2. Unassigned, EG; Trench H, 513, Period 6/7.
3. Unassigned, EG; Trench H, 500, Period 6/7.

Grave-goods/samian

4. Drag. 15/17, SG; Trench H, SF2613, grave *514*, Period 4A.

Grave-goods/Black Burnished ware
5. Type 15, E102; Trench H, SF2614, grave *514*, Period 4A.
6. Type 14, E102; Trench H, SF4050, grave *509*, Period 4A.
7. Type 15, E101; Trench K, SF4392, grave *914*, Period 4A.
8. Type 15, E101; Trench K, SF4393, grave *914*, Period 4A.
9. Type 15, E102; Trench K, SF4418, grave *5018*, Period 4A.
10. Type 15, E101; Trench K, SF4419, grave *5018*, Period 4A.
11. Type 86, E101; Trench K, SF2853, grave *5018*, Period 4A.

Black Burnished ware
12. Type 35, E101; Trench G, 374, Period 4B.
13. Base perforated, E107; Trench E, 724 and 728, Period 4C.

Graffito, by R.S.O. Tomlin

A single example of graffito was identified on a Black-Burnished ware vessel (E101, Type 1, pit *827*, Period 4B). It is inscribed in capitals after firing: MΛX[...]; *Max[imus]* or *Max[imi]*; 'Property of Maximus'. The Latin cognomen *Maximus* occurs frequently as a personal name in Roman Britain. It is not distinctively military or civilian.

4 **Coins**, by John A. Davies

The small group of 18 Roman coins provides a useful addition to the expanding numismatic picture from sites in and around the *Civitas* capital at Dorchester. This extra-mural group complements the town assemblages from Greyhound Yard, Wollaston House and Colliton Park (Reece in prep.), County Hall, and Wessex Court (Davies 1993). A catalogue is in archive, the distribution is summarised in Table 56.

The coins recovered are all bronze denominations representing issues most commonly used on British sites. The list opens with two *aes* of Hadrian (AD 117–138). Both coins are heavily worn and clearly circulated for lengthy periods before their eventual loss. A *sestertius* of Lucius Verus, struck in AD 168, is a less common site find, although *aes* struck during the same period for Marcus Aurelius (AD 161–180) did reach Britain in greater quantity. It was in the late 3rd century from *c.* 268, that the main episode of coin loss at the site can be dated. Irregular issues comprise the bulk of the *antoniniani* of those years, with minims outnumbering the larger examples. A single issue of Carausius (AD 287–293) is present, adding to the high incidence of coins of that ruler found on the Wessex Court sites in Dorchester.

The assemblage is light on 4th century issues. The four examples present represent some of the most prolific periods of coin loss in Britain, with three dating AD 336–348 and the latest issue, of Valentinian I, AD 367–375.

The strong late 3rd century loss exhibited within this small extra-mural coin group, followed by appreciable but lighter 4th century deposition, is a similar pattern to that found in Romano-British urban site assemblages. In this respect, the assemblage mirrors the main periods of coin use at *Durnovaria*.

5 **Objects of Copper Alloy**, by Rachael Seager Smith

Twenty-eight copper alloy objects were recovered (Table 57). The assemblage consists of eight brooches, two finger rings, one armlet, five pins, one spoon-probe, and a pair of tweezers, as well as two droplets of industrial waste material and eight miscellaneous fragments or objects. Full descriptions of these are presented in the catalogue (archive). All of the objects are probably of Romano-British date, although only ten were found in Late Iron Age or Roman (Periods 4A–4C) contexts. All of the objects were cleaned and, with the exception of the industrial waste items, treated to inhibit further corrosion, by M. Brooks.

Brooches

Seven of the eight brooches are early Roman in date, from the 1st–2nd century AD and, as a collection, these represent a range of quality material. The eighth is a penannular brooch dating from the 2nd–3rd century. There are four T-shaped brooches, two of which bear enamelled decoration (Fig. 109, 1 and 3) including a very fine example which is incised and has traces of tinning, and one which is just incised, with the others decorated but not enamelled (Fig. 109, 2 and cat. no. 3). Two of the others are simple strip brooches and both are decorated (Cat. nos 2 and 6). All are broadly comparable to others within and around Dorchester, as well as further afield

Table 56 occurrence of coins by period

			2nd century AD		*3rd century AD*	*4th century AD*	
Period	*Trench*	*Context*	*117–138*	*168*	*c. 268–293*	*336–348*	*367–375*
4C	E	Slot 336	1 (Cat. no. 1)	–	–	–	–
	G	Collapse of wall 356	–	1 (Cat. no. 3)	–	–	–
	H	Gully 538	–	–	–	1 (Cat. no. 16)	–
6/7	E	Sub-soil (post-Roman)	–	–	1 (Cat. no. 6)	–	–
	H	Colluvium (post-Roman)	–	–	6 (Cat. nos 5, 8, 10–13)	–	1 (Cat. no. 18)
		Sub-soil (post-Roman)	–	–	2 (Cat. nos. 4, 9)	1 (Cat. no. 15)	1 (Cat. no. 17)
Unph./ modern			1 (Cat. no. 2)	–	2 (Cat. nos 7, 14)	–	–

(Davies 1987c, fig. 66, 4–6, 11; Mackreth 1982, fig. 115, 11).

One unusual example is an extremely well preserved chatelaine brooch in the form of a casket and inlaid with blue and green enamel (Fig. 109, 4). Although broadly paralleled by *c.* 15 other examples from the British Isles (Hattatt 1987, 194–6), no two are exactly alike. The closest parallels for the Western Link brooch are from Kettering, Northamptonshire (Collingwood and Richmond 1969, fig. 106, 107) and from an unspecified location in Suffolk (Hattatt 1982, fig. 64, 142) while an example with rounded cells containing turquoise and red enamel, is known from Wanborough, Wiltshire (Butcher in prep.), where it is dated to around AD 100. The transverse bar held by the perforated lugs at the base of the casket, from which specially made toilet articles originally would have been suspended (Collingwood and Richmond 1969), is missing from the Western Link brooch.

The rarity of this brooch type and the individuality of all the known examples, together with their highly decorated nature and multi-coloured enamel, suggest that these items must have been fairly expensive, ownership probably being confined to the more wealthy sections of society. It is interesting, therefore, to note the presence of this example on a rural settlement.

A very fine, small penannular brooch with recurved terminals and decorated with delicate, V-shaped notches along the spine (Fig. 109, 5) is probably gilded and may be of zoomorphic type, the terminals representing animal heads (Fowler 1960, 153, fig. 1). It is probably of 2nd–3rd century date although these brooches are notoriously difficult to date accurately.

Other Items of Personal Ornament

Other items of personal ornament included two finger rings, an armlet, and five pin fragments. Of the finger rings, one is a ribbed example with overlapping terminals (Fig. 109, 6), while the other is a simple, undecorated fragment (Cat. no. 9). The armlet fragment (Fig. 109, 7), probably of 3rd–4th century date, is made from four strands of plaited wire. Similar armlets are comparatively well-known from Roman sites (Clarke 1979; Crummy 1983, fig. 41, 1604–36; Leach 1982, fig. 118, 50–8; Leech 1982, fig. 79, 1–7) although the use of two or three strands of wire appears to be marginally more common than the use of four. Three of the pins were represented by shank fragments only (Cat. nos 12, 14–15), but two others were complete, a pin with a shallow notch cut into one side to produce a square head (Cat. no. 13) and a ball-headed pin (Fig. 109, 8) which is similar to one from Catsgore (Leech 1982, fig. 80, 28).

Toilet Instruments

The spoon-probe (Fig. 109, 9) can be broadly paralleled by two examples from Colchester, Essex (Crummy 1983, fig. 65, 1929, 1931), where probes were recovered in late 1st–2nd century contexts and later. The tweezers (Fig. 109, 10) are decorated with a row of punched dots on each leg and, while tweezers are comparatively common finds on Roman sites both within Dorchester (Adam in prep., fig. 24, 15–7) and elsewhere (Crummy 1983, fig. 63; Leach 1982, fig. 119, 82–4; Leech 1982, fig. 80, 25 and 26; Stead and Rigby 1986, fig. 57, 289, 304, 310–2), decorated examples are rarer. Tweezers have a wide date range throughout the Roman period and are thus difficult to date accurately.

Table 57 copper alloy objects by period

Trench	*Feature*	*Object*	*Cat./ Fig. no.*
Period 4A			
H	Hollow *528*	?pin shank	Cat. no. 12
		square-head pin	Cat. no. 13
Period 4B			
K	Gully *876*	T-shaped enamelled brooch	Fig.109,1
K	Pit *827*	Strip brooch	Cat. no. 2
		pin shank	Cat. no. 14
K	Post-hole *878*	enamelled chatelaine brooch	Fig.109,4
K	Pit *817*	pin shank	Cat. no. 15
Period 4C			
G	Fill of drier *404*	?ring	Cat. no. 9
G	collapse/ demolition revetment wall *356*	industrial waste	Cat. no. 27
H	Final silting gully *557*	spoon-probe	Fig.109,9
Period 6/7			
H	Colluvium	T-shaped brooch	Cat. no. 3
		T-shaped, head-studded brooch	Fig.109,2
		T-shaped enamelled brooch	Fig.109,3
		strip brooch	Cat. no. 6
		finger ring	Fig.109,6
		4-strand wire armlet	Fig.109,7
		ball-headed pin	Fig.109,8
		tweezers	Fig.109/10
		sheet frags (3)	Cat. nos 19,22,26
		studs (2)	Cat. nos 20,23
		oval disc	Cat. no. 21
		domed object (2)	Cat. nos 24,25
		industrial waste	Cat. no. 28
S	Colluvium	penannular brooch	Fig.109,5

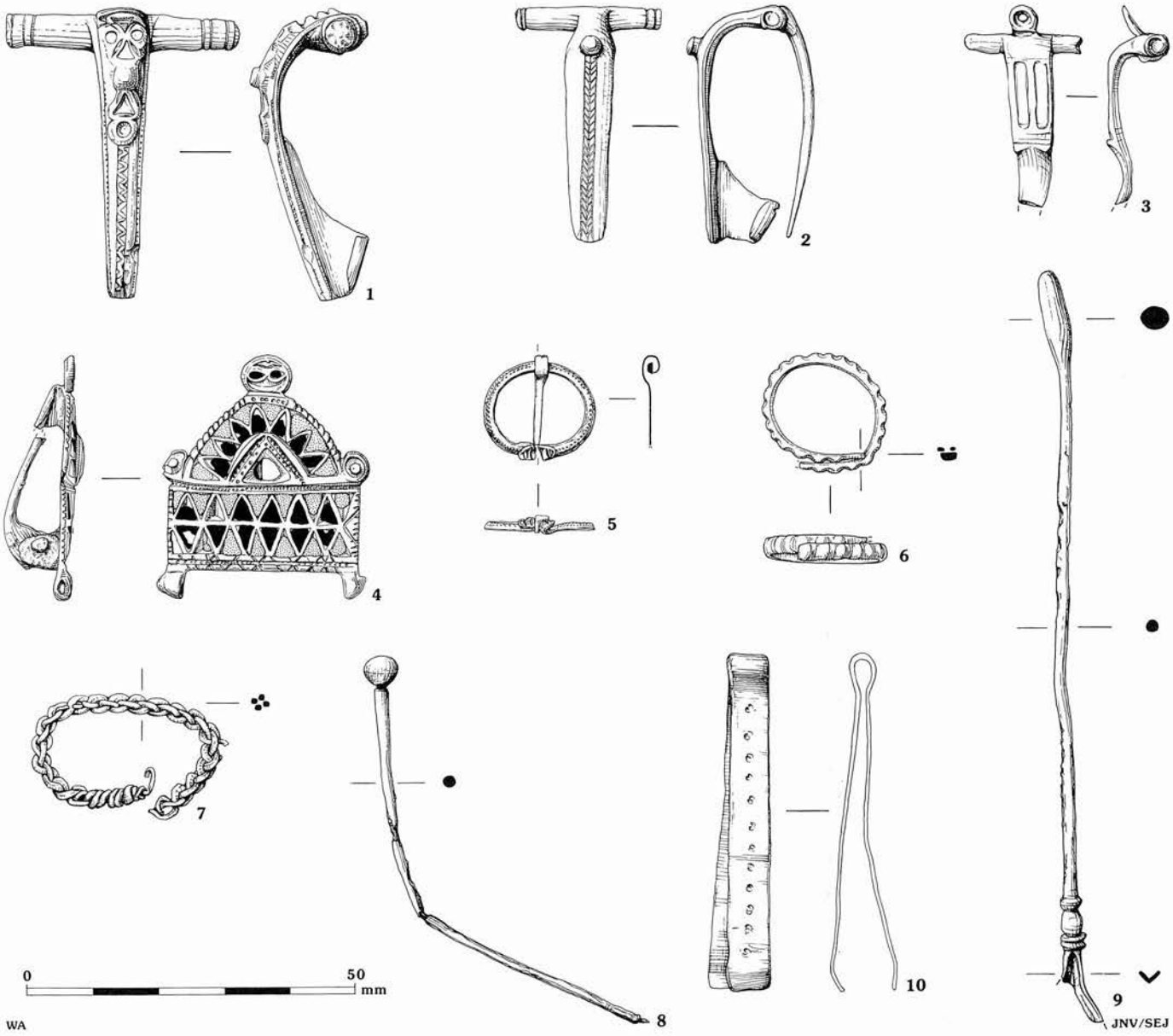


Figure 109 Western Link: copper alloy objects. Scale 1:1. On No. 4 black shading = blue; stipple = green

Fragments

Eight miscellaneous fragments, the function and identification of which are uncertain, were also found. All of these are probably, but not certainly, of Romano-British date and include fragments of sheet, studs, and a composite copper alloy and lead or lead alloy object, possibly part of a weight (Cat. no. 25). In addition to these, two droplets of solidified molten metal were also recovered (Cat nos 27, 28).

Discussion

In general, the range of copper alloy objects recovered is broadly comparable with those found in the town of Dorchester (Davies 1987c, 95–8; Adam in prep.; Cool and Mills 1993). In particular, the presence of several quality or uncommon items, all of a very similar date range (late 1st–2nd century), at this site seems rather incongruous given its rural location and range of agricultural activities carried out there. These objects include the enamelled, T-shaped and chatelaine brooches, the spoon-probe, and the decorated tweezers.

It is probable that much of the copper alloy assemblage, including the unusual or quality objects, is actually derived from the Romano-British activity identified higher up the slope (Farrar 1956). The association of these objects predominantly with the final infilling and the demolition and abandonment of agricultural features is purely coincidental. The activity upslope is as yet of an undefined nature but the possibility of these objects being derived from burials should not be overlooked, based on the quality of the objects and their state of preservation, as well as the observation of a burial in the area (op. cit).

Fig. 109

1. T-shaped, head-stud brooch with traces of enamel on bow; pin missing; *c.* AD 100–200. Cat. no. 1, SF4090, trench K, 877, Period 4B.
2. T-shaped, head-stud brooch with incised herringbone design on bow; complete; *c.* AD 100–200. Cat. no. 4, SF2514, trench H, 500, Period 6/7.
3. T-shaped brooch with wide, enamelled head; incomplete; 2nd century. Cat. no. 5, SF2748, trench H, 501, Period 6/7.
4. Chatelaine brooch in the form of a casket; blue and green enamel survives in the triangular fields on the body of the brooch; fragment of pin missing; 2nd century. Cat no. 7, SF4314, trench K, 879, Period 4B.
5. Small, penannular brooch with recurved terminals; 2nd–3rd century. Cat no. 8, SF1000, trench S, 5185, Unphased.
6. Ribbed finger ring; incomplete; Romano-British. Cat no. 10, SF2565, trench H, 513, Period 6/7.
7. Fragment of four-strand, plaited wire armlet; incomplete; 3rd–4th century. Cat no. 11, SF2623, trench H, 533, Period 6/7.
8. Ball-headed pin; complete; Romano-British. Cat no. 16, SF2584, trench H, 513, Period 6/7.
9. Spoon-probe; incomplete; Romano-British. Cat no. 17, SF3084, trench H, 559, Period 4C.
10. Tweezers; decorated with a row of punched dots, 10 on one leg and 12 on the other; complete; Romano-British. Cat no. 18, SF2755, trench H, 501, Period 6/7.

6 **Ironwork**, by A.P. Fitzpatrick with a contribution by Elaine L. Morris

A total of 81 objects, 349 nails, 13 timber dogs, 111 hobnails, 5 cleats, and 19 sheet, strip, and rod fragments from non-funerary contexts (Tables 58 and 59), and four objects, 110 hobnails and five cleats, and 297 nails, tacks, and shanks (Table 61) from funerary contexts was recovered. All were X-rayed and a sample cleaned either selectively or entirely by M. Brooks. Mineralised wood was identified by J. Watson (English Heritage, Ancient Monuments Laboratory). The objects are catalogued in the archive. Finds from domestic and funerary contexts are considered separately.

Finds from Non-Funerary Contexts

Most of the ironwork consists of nails with smaller quantities of sheet and strip fragments and unidentified bindings (Cat. nos 58–73). Other objects whose use is not known, such as the rings which may have been used in chains or in split-looped pins (Cat. nos 40–4), were also comparatively common. The majority, including all the certainly medieval or later pieces (eg, Cat. nos 31, 56), or pieces suspected to be comparatively modern (Cat. nos 77–80) was found in the Phase 6/7 colluvium. In addition, there is a small but interesting range of agricultural and other tools which were largely found on floor surfaces or in negative features of Period 4C.

Agricultural tools

Of the agricultural tools, the most notable finds were the tips of three bar shares (Fig. 110, 1–3) of Rees's type 2a (1979). These are characteristically of later Roman date and 18 of the 20 finds known to Rees (op. cit., 58, 269–86) came from hoards. The possibility of a small, scattered hoard can be discounted for the present examples as, in contrast to the finds from hoards, all of them appear to have been broken, presumably in use. All were found in Period 4C contexts.

Two bills (Fig. 110, 4–5) were also found, both in Period 4C contexts. These tools are considered to have been used in gathering foliage for animal fodder (op. cit., 473). A fragment of a possible bladed tool (Cat. no. 7), from either a scythe or a bill was also found in a late Roman context, while a pruning or reaping hook probably of Romano-British date (Cat. no. 6) was found in the Period 6/7 colluvium.

The working of wool or cloth is represented by parts of two pairs of shears, one from a late Roman context (Cat. no. 8), the other (Cat. no. 9) from the Period 6/7 colluvium.

Tools

Although none were found in Roman period contexts, one probable and two possible leatherworking awls (Fig. 110, 6; Cat. nos 11, 12) suggest that leather was worked, and probably prepared, as well as textiles. Other tools include a broken bit from a wood drill found in a late Roman context (Fig. 110, 7) and, from a unphased cleaning layer, a complete socketed hook (Fig. 110, 8) which may have had a multitude of uses. The small size and shape of an unidentified object (Fig. 110, 9) found in a later Roman context, suggests that it may also be from a tool. Seven knives likely to be of Romano-British date (Fig. 110, 12; Cat. nos 25–31) were found, while the object with a ring-terminal (Fig. 110, 10), found in a later Roman context, might also be from an early type of knife. These knives will have been used for many purposes.

An end of bar piece was recovered from a late Roman context (Cat. no. 81a). One end is straight and square and the other is misshapen as if burnt in the hearth and so cut off from the bar end (J. Mills pers. comm.). The piece may be used to suggest ironworking, although only four pieces of slag were recovered from Roman contexts.

Transport

One fragmentary hipposandal and two fragments possibly from others (Fig. 110, 11; Cat. nos 21, 22) were found. If Manning's observation that the majority of hipposandals, or 'temporary horseshoes', have been found in towns which had metalled streets is correct (1985, 63), then it would emphasise the relationship of the farm to the town of *Durnovaria*.

Structural metalwork

Few nails were found in contexts associated with the stone walls and only a single fitting, a bar (Cat. no. 74), appears (revetment wall *356*) to have been driven into a wall to provide some form of attachment. Combined with the small number of joiners' dogs, this might suggest that the timber elements of the stone-footed buildings were made with a competent standard of carpentry.

The rarity of structural ironwork is emphasised by the comparatively large number (8) of locks and keys which comprised approximately 10% of the assemblage. All are from later Roman or post-Roman contexts. Two barb-spring padlocks were found, including a complete one with the bolt *in situ* (Fig. 111, 13), as were one certain and three probable keys for such locks (Cat. nos 36–9). The existence of different sorts of locks is demonstrated

Table 58 iron objects from non-funerary contexts

Trench	Context	Functional categories A	B	C	D	E	F	G	H	I	J	K	L
Period 4A													
H	post-hole *634*, assoc. with grave *555*	–	–	–	–	–	–	–	–	–	–	–	1 (Cat.no.59)
Period 4B													
H	gully *534*	–	–	–	–	1 (Cat.no.22)	–	–	–	–	–	–	–
K	pit *827*	–	–	–	–	–	–	–	–	–	–	1 (Cat.no.55)	–
Period 4C													
E	walls/floors structure *5198*	3 (Fig. 110, 2, 5; Cat. no. 7)	1 (Cat. no. 8)	1 (Fig. 110, 7)	2 (Fig. 110, 9, 10)	3 (Fig. 110, 11; Cat. nos 21, 23)	3 (Fig. 110, 12; Cat. nos 25-6)	2 (Cat. nos 36-7)	2 (Cat. nos 42-3)	1 (Cat. no.49)	–	–	4 (Cat. nos 65-6,72-3)
	collapse structure *5198*	1 (Fig.110, 1)	–	–	–	–	–	–	1 (Cat.no.44)	–	–	–	1 (Cat.no.81)
F/G	wall *356*	1 (Fig.110, 3)	–	–	–	–	–	–	–	–	1 (Cat.no.54)	–	1 (Cat.no.74)
H	walls/floors structure *5197*	1 (Fig.110, 4)	–	–	–	–	–	–	–	–	–	–	–
	pit *579*	–	–	–	1 (Cat. no.17)	–	–	–	–	–	–	–	–
	gully *537*	–	–	–	–	–	–	1 (Cat. no. 34)	–	–	–	–	–
	hearth 587	–	–	–	–	–	–	–	–	1 (Cat.no.51)	–	–	–
K	colluvial fill structure *867*	–	–	–	–	–	–	–	–	1 (Cat.no.50)	–	–	3 (Cat. nos 68-70)
	?floor structure *5199*	–	–	–	–	–	–	–	–	–	–	–	1 (Cat.no.67)
	colluvial cover structure *5199*	–	–	–	–	–	–	–	–	–	–	–	1 (Cat.no.75)
Period 6/7													
D	colluvium	–	–	–	–	–	–	–	–	–	–	1 (Cat.no.56)	–
H	colluvium	1 (Cat.no.6)	1 (Cat.no.9)	1 (Fig.110,6)	1 (Cat.no.19)	–	3 (Cat.nos 27,29-30)	2 (Cat. nos 33,38)	3 (Cat. nos 41, 46, 48)	–	–	1 (Cat.no.57)	8 (Cat. nos 60, 63,71, 76-80)
E	subsoil	–	–	1 (Cat.no.12)	–	–	–	1 (Cat.no.35)	1 (Cat.no.45)	–	–	–	1 (Cat.no.62)
H	subsoil	–	–	–	–	–	–	1 (Cat.no.39)	2 (Cat. nos 40, 47)	–	1 (Cat.no.53)	–	1 (Cat.no.58)
Unphased/modern		–	–	1 (Cat.no.11)	2 (Fig.110,8; Cat.no.18)	–	2 (Cat.nos 28, 31)	1 (Fig. 111, 13)	–	–	1 (Cat.no.52)	–	2 (Cat. nos 64, 67)

A = agricultural equipment/tools; B = wool & cloth; C = wood- & leatherworking; D = miscellaneous; E = transport; F = knives; G = locks & keys; H = rings & pins; I = hinges & fittings; J = boxes & vessels; K = personal; L = others

Table 59 Timber dogs, nails, hobnails, cleats, and other iron fragments from non-funerary contexts

		Poundbury nail types														
Period	*TD*	*Ia*	*Ib*	*Ic*	*Id*	*Ie*	*II*	*IV**	*?*	*Shank*	*Modern*	*Hn*	*Cl*	*Sh*	*St*	*Rod*
4A	–	–	–	–	–	–	–	–	–	3	–	1	–	–	–	–
4B	–	5	–	1	–	–	–	–	–	2	–	3	–	–	–	–
4C	3	20	–	2	–	2	3	–	8	20	1	20	1	2	–	–
6/7	2	57	5	8	2	5	1	2	81	107	6	96	3	3	11	2
Unph./ modern	8	4	–	–	–	–	–	–	2	2	–	1	1	–	1	–
Total	13	86	5	11	2	7	4	2	91	134	7	121	5	5	12	2

* also classifiable as T-staples
TD = timber dogs; Hn = hobnails; Cl = cleats; Sh = sheet; St = strip

by the presence of a latchlifter (Cat. no. 34) and a lift key (Cat. no. 35). One drop hinge (Cat. no. 49), and a possible pintel (Cat. no. 50) were also found. A thin, spiked object (Cat. no. 51) driven into the base of Period 4C hearth *587* appears to have been a piece of hearth furniture.

Dress

A single, broken, penannular brooch found in Period 4B pit *827* (Cat. no. 55) and the presence of hobnails and cleats are the only testimony as to what the occupants of the farm may have worn as they went about their daily lives.

Discussion, by Elaine L. Morris

The range of ironwork recovered from domestic contexts is distinctively agricultural in character, with barshares, bills, and the possible scythe or reaping hook, and very different from that recovered at Maiden Castle Road (*above*, Fig. 74), which is minimal and far from indicative of an agricultural settlement. The collection of awls, the drill bit, and other tools emphasise the range of craft activities such as wood, leather, and textile-working, which occurred along the Western Link route. It is immediately apparent that the small number of iron objects from the Maiden Castle Road site could have affected the number of agricultural tools identified there. However, when an index of the amount of Roman period pottery to iron objects has been calculated (Western Link = 1:167, Maiden Castle Road = 1:194) it is apparent that there is a similar ratio of iron to pottery at both sites and therefore, the absence of any agricultural tools and so few craft tools at Maiden Castle Road is not necessarily a factor of quantity.

A comparison of ironwork assemblages from Romano-British sites in southern England was prepared for the Greyhound Yard report, examining six categories of objects (Mills and Woodward 1993a, table 6) which can be enhanced by presenting similar information from Western Link, Maiden Castle Road, Catsgore (Leech 1982), Gatcombe (Branigan 1977), and Charles Street (Adam in prep.) and County Hall (Mills 1993b) in Dorchester (Table 60). The small number of typically woodworking tools from Western Link may be significant when compared to that from Gatcombe, Catsgore, Greyhound Yard, and Charles Street, particularly when the presence of buildings is obvious from the number of locks and keys at the former. The absence of styli at Western Link is in keeping with an agricultural settlement, an unusual aspect highlighted at Catsgore as suggesting the presence of officials concerned with the collection of the *annona* (Leech 1982, 36), as would be expected in urban or suburban contexts (cf. Alington Avenue; Davies *et al.* forthcoming).

Table 60 comparison of selected ironwork assemblages

Site	*Agricultural tools*	*Reaping hooks*	*Carpentry tools*	*Knives*	*Weapons*	*Styli*	*Keys/locks*	*Total Fe objects*
Catsgore	–	–	6	14	–	7	4	95
Gatcombe	1	?1	10	8	2	1	5	84
Western link	6	1	1	8	–	–	8	81
Maiden Castle Rd	–	–	–	1	–	–	2	17
Charles Street	1	?1	6	15	–	7	1	c. 80
County Hall	–	?1	1	2	–	1	1	14

After Mills and Woodward 1993a, table 6

Table 61 nail type by grave

			Poundbury nail types									
Period	*Grave*	*Trench*	*Ia*	*Ib*	*Ic*	*Id*	*Ie*	*?*	*Shank*	*Tack*	*Total nails*	*Mineralised wood*
4A	*5111*	K	2	–	–	–	–	2	3	–	7	–
4B	*224*	F	2	–	–	–	–	3	4	–	9	X
	288	F	11	–	1	–	–	1	–	–	13	X
	922	K	6	–	–	–	–	3	5	–	14	X
4C	*154*	D	16	2	1	–	1	9	21	–	50	X
	167	D	123	5	1	2	–	46	33	22	232	X
	5007	K	12	–	–	1	–	2	1	–	16	X
Total			172	7	3	3	1	66	67	22	341	

Nearly all of the ironwork from domestic contexts occurred in the Period 4C structures *5198* in trench E and *5197* in trench H, with revetment wall *356* in trench F/G, and associated with structures *5199* and *867* in trench K, or in the Period 6/7 colluvium in trench H. The agricultural and other tools were primarily recovered from *5198* and *5197*. The recovery of so many similar artefacts of Roman date from the colluvial deposit upslope of these trenches suggests that a similar range of activities had taken place there during the late Roman period.

Finds from Funerary Contexts

Personal

Two personal objects were found with burials, a spiral finger ring (Fig. 111, 16) from Period 4A grave *5011* and the fragment of a Colchester type brooch from Period 4B grave *920*.

Hobnails

Groups of hobnails were found in three Period 4B and 4C graves, eight at the feet of burial *222*; 99 with burial *154*, and 56 heads by the left foot and 28 heads by the right foot, plus a further three, with burial *922*. Although the difference in numbers between the boots in burial *922* may be caused by repair or resoling, it is perhaps more likely to be the result of difficulty in distinguishing between the groups in excavation. Two groups of hobnails were found in colluvium (Period 6/7) and it is possible that they derive from plough-damaged burials (Cat. no. 57).

Coffin fittings

Evidence for nailed coffins or grave structures was found in seven graves (Table 61). Graves *922* and *5111* contained occasional nails, which may have reinforced structures otherwise made wholly of wood or, more likely, may have been introduced into the grave fill. With one exception (grave *167*), the other burials contained between 7 and 50 nails, predominantly of Poundbury type Ia with an average of 15 nails per grave. In general the nails were evenly spaced around the corpse, although in 5007 they were apparently grouped along two sides only. Mineralised wood was found in six burials and appeared to be from radially-split oak planks. The exception to this pattern was grave *167* which is considered in more detail below.

Grave 167

The young adult male buried in grave *167* was placed with his head to the north-west on the western side of a particularly large grave pit, 3.3 m long, 1.7 m wide, and 1.4 m deep, which was aligned on a boundary (Fig. 105). There was a step or terrace on the east side of the pit, while a small platform was left at the northern end, *c.* 0.2 m above the floor of the pit. The fill (166) within the timber lining of the grave pit was distinguishable. Two hundred and ten nails and shanks were recorded and are interpreted as deriving from a grave lining, a coffin, and a wooden chest. Most of the nails could be ascribed to the Poundbury nail type series and of these the majority were type Ia, the most common Romano-British type generally. Mineralised wood occurred on many nails showing that they had been driven firstly through oak planks 20–40 mm thick and then down on into a second piece whose grain was generally at right-angles to that of the first. Most of the planks appeared to have been split radially from the timber, although a minority may have been flat sawn.

A small number of nails seemed to have been hammered over, which might suggest that they were at right angles to the majority of the nails, perhaps fixing vertical battening. The distribution of these nails is compatible with the presence of battens strengthening the corners and mid-points of a timber structure. It seems likely that a timber structure lined the pit. A single small piece of binding (Cat. no. 87) on the western side of the pit/coffin may suggest that some of the timber had been re used.

The corpse had been laid in an extended supine position and its lateral compression suggests that it had been wrapped in a shroud. A row of nails by the feet of the body (SFs 2095, 2141, 2162, 2163) might indicate the end of a coffin which was separate from and smaller than the grave pit. It was not possible to distinguish different types of nails from two separate structures and there was no unambiguous horizontal separation. However, if the southern group of nails is accepted as deriving from a lining, then the occurrence of a piece of mineralised wood containing two nails driven in from different heights (SF2331) would suggest that there had been fittings, perhaps on the inside of the structure. By comparison with the lower body of the corpse there was a clear concentration of nails around the upper body, suggesting that the lid of the (putative) coffin was decorated (although none of the nails have large decorative heads), and/or that there was a further fitting or

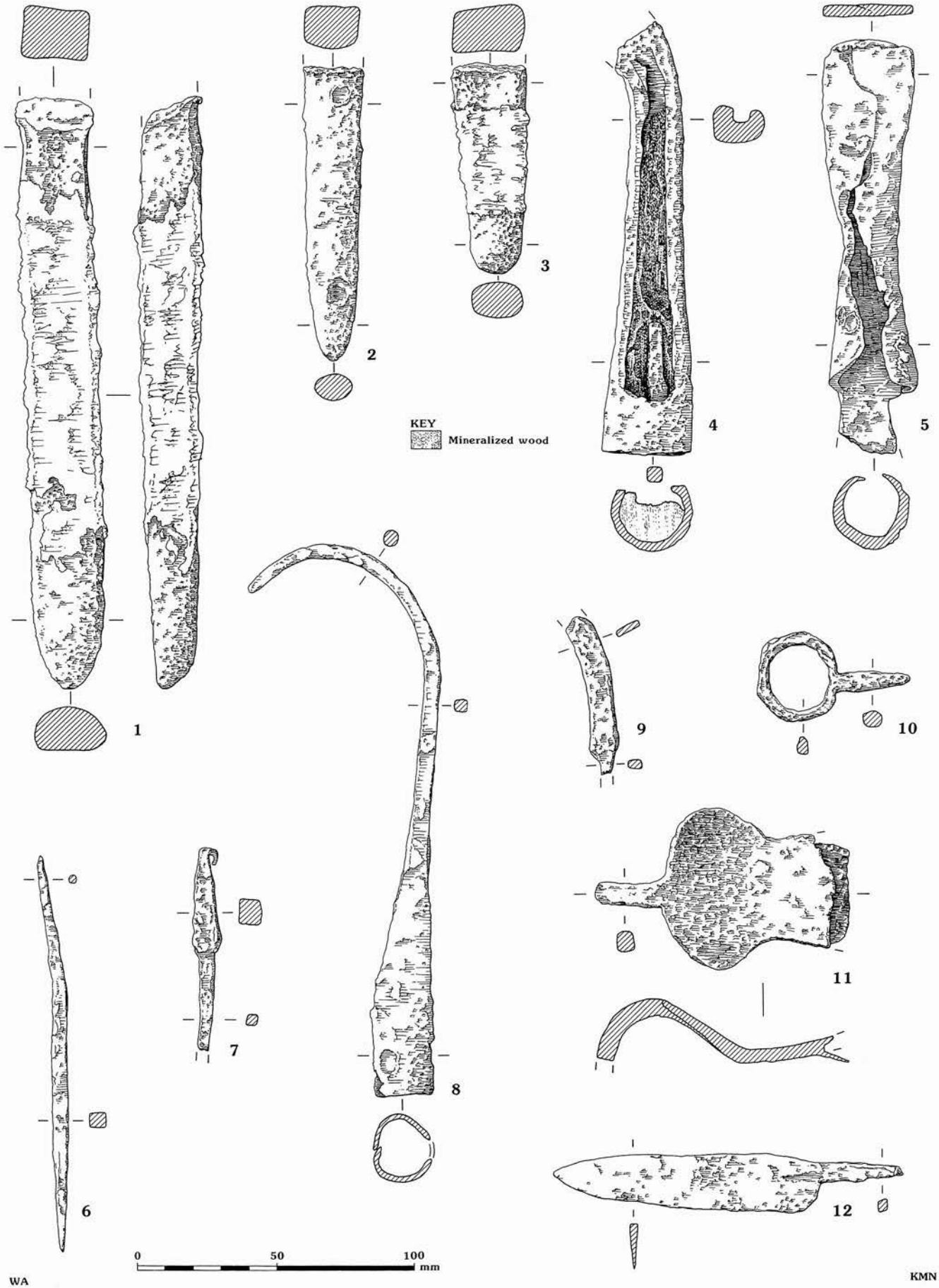


Figure 110 Western Link: iron objects (1–12). Scale 1:2

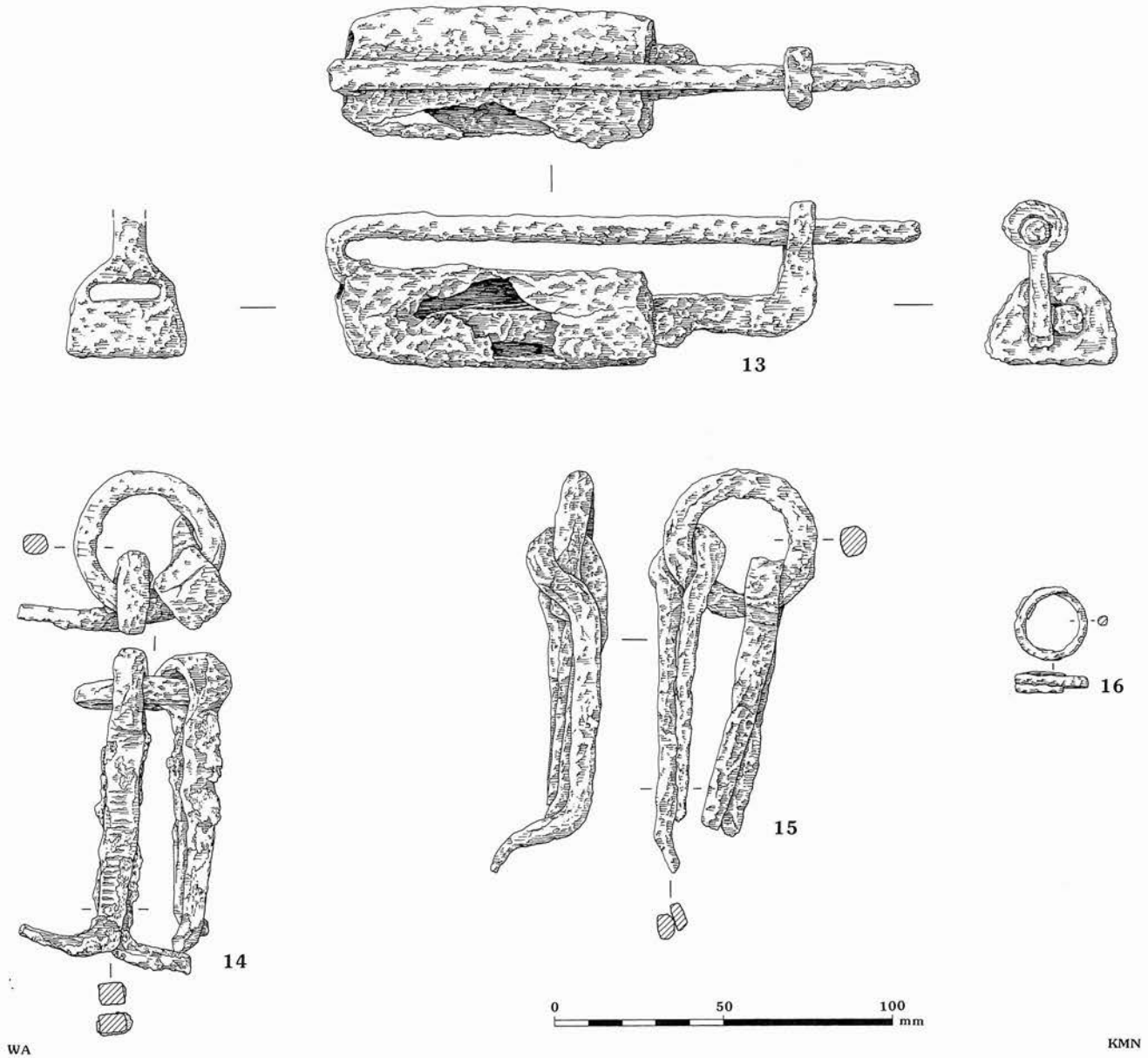


Figure 111 Western Link: iron objects (13–16). Scale 1:2

decorative element placed on, or attached to, it. The presence of tacks in this concentration might further suggest a textile or leather covering.

Tacks also occurred in the area of what is interpreted as a chest. This was set on the terrace at the northern end of the pit and its south-west angle was clearly defined by a right-angle of nails. No trace of metal or bone hinges was found. The placing of the chest at a higher level on the terrace may suggest that it was placed outside the timber lining of the grave pit. The tacks may have been decorative or attached a similar, if not the same, covering as those in the area of the upper body.

No other grave goods or dating evidence was recovered but the large, elaborate grave pit, sometimes with a terrace or 'step' down is paralleled at a number of late Romano-British burials in the region. The nearest are at Poundbury (Farwell and Molleson 1993, esp. graves 1248 and 1312, figs 26 and 28), with others at Roden Downs, Berkshire (Clarke 1979, 353, 453), Burntwood Farm (Fasham 1980, 56–60, fig. 18–20), Winchester-Lankhills and Winchester-Victoria Road, Hampshire (Clarke 1979, 134, 353, 453). The Poundbury and Burntwood Farm burials are also aligned on boundaries. Other than Poundbury, separate grave linings which have been interpreted as vaults have been clearly demonstrated in later Roman burials at Kelvedon, Essex (Rodwell 1988, 37–41, 50–2, fig. 32; 35, G33; 37, G34). There the timbers lining grave 34 were vertical and the grave was apparently enclosed by a free-standing circular structure which was interpreted as a mausoleum.

At Kelvedon, Essex, there was evidence that the timbers had been charred but there was no evidence for this in burial *167*, nor for a platform above the coffin, as at Lankhills (Clarke 1979, 134, 352–3, fig. 11, 66, G 208), or for a superstructure. The placement of the grave goods (taking the trunk as one) outside the coffin is, however, paralleled at Lankhills (op. cit., 160, fig. 45, 51, G248, 250).

The apparent separation of the coffin from the pit might suggest that there was access to it during mourning or rites of passage and the separate trunk and possible textile or leather coverings may be related to this. The alignment of the Poundbury, Western Link, and Burntwood Farm burials on

boundaries may bear on both access to mourn at the grave and inheritance (Hopkins 1983, 221).

Other objects associated with mortuary practice

Two rings each with two double-spiked loops were found in components of Period 4A grave *555*. Apparently contemporary with this grave were two 'post-holes' on opposing sides. As one of the loops has traces of mineralised wood, it seems likely that the loops were associated with, and perhaps attached to, posts standing in the post-holes. It is not clear whether the rings were originally attached to the posts above or below ground level nor is their use in the mortuary practices known. The grave fill also contained a fragment of iron bar (not catalogued).

Fig. 110

1. Rees type 2a bar share, tip; later Romano-British. Cat no. 1, SF4070, trench E, 718, Period 4C.
2. ?Rees type 2a bar share, tip; later Romano-British. Cat. no. 2, SF2791, trench E, 711, Period 4C.
3. ?Rees type 2a bar share, tip; later Romano-British. Cat. no. 3, SF2355, trench G, 366, Period 4C.
4. Large, socketed bill, broken; Romano-British. Cat. no. 4, trench H, SF4082, 770, Period 4C.
5. Socketed bill, broken; Romano-British. Cat. no. 5, SF2663, trench E, 347, Period 4C.
6. Manning type 4 tanged awl, broken; Romano-British. Cat. no. 10, SF2309, trench H, 501, Period 6/7.
7. Drill bit, with bent head and broken shaft; Romano-British. Cat. no. 13, SF4075, trench E, 724, Period 4C.
8. Socketed hook, complete; Romano-British. Cat. no. 14, 800, trench K, Unphased/Modern.
9. Curved tool, broken; undated. Cat. no. 15, SF2688, trench E, 347, Period 4C.
10. Ring-headed terminal from a tool; probably Romano-British. Cat. no. 16, SF2659, trench E, 347, Period 4C.
11. Manning type 3 or 4 hipposandal, front or 'toe' part; Romano-British. Cat. no. 20, SF2784, trench E, 347, Period 4C.
12. Manning type 18b knife, broken at tang; Romano-British. Cat. no. 24, SF2669, trench E, 347, Period 4C.

Fig. 111

13. Barb-spring padlock case with a straight hasp; late Romano-British. Cat. no. 32, SF2123, trench F, 212, Unphased/Modern.
14. Complete ring with two double-spiked loops; unparalleled. Cat. no. 88, SF4004, trench H, 638, grave *555*, Period 4A.
15. Complete ring with two double-spiked loops; unparalleled. Cat. no. 89, SF4040, trench H, 647, grave *555*, Period 4A.
16. Spiral finger ring; probably Iron Age. Cat. no. 82, SF4399, trench K, 5012, grave *5011*, Period 4A.

7 **Roman Glass**, by H.E.M. Cool

Vessel glass of incontrovertible Roman date was all found in trenches G/H and E; the former produced 22 fragments from a minimum of 7 vessels and the latter 16 fragments from a minimum of 6 (Table 62). Most of this material is of 2nd century or later date. Of the vessels that can be relatively closely dated, there is a greater concentration of late 2nd and 3rd century types than there is of those of an earlier or later period. With one exception (Fig. 112, 8), all of the forms are common to other sites in and around Dorchester, most notably at the Greyhound Yard/Old Methodist Chapel site, and on sites elsewhere in Roman Britain. In light of this, the typological discussion has been kept to a minimum and the reader is referred to Cool and Price 1993 for further references. In addition to this material, the excavations also produced one fragment of vessel glass from an unphased/modern context in trench K (Fig. 112, 1) that may be of 1st century AD date. As it is open to question whether the fragment is Roman, it is considered separately, followed by a discussion of the intaglio (Fig. 113).

Vessel Glass

1st–2nd Second Century AD Tablewares

One drinking vessel and one jug may be assigned to this period. The vessel (Fig. 112, 2) is almost certainly the lower body and base of a colourless wheelcut cylindrical beaker similar to that found in a pit dated to c. AD 155–165 at Towcester, Northamptonshire (Price 1980, 64, no. 4, fig. 14). This variant had come into use by the end of the 1st century AD and was common during the first two-thirds of the 2nd century (Cool and Price 1993, 152, fig. 85, 53–60). A blue/green ribbed jug of either the globular Isings form 52 or the conical Isings form 55 is represented by a neck fragment (Fig. 112, 9). This range of jugs is very common on later 1st–2nd century sites, at Greyhound Yard for example, at least eight could be identified (op. cit., 152–3).

1st–2nd century containers

The only containers identified in this assemblage are base fragments from two vessels in trench G/H (Fig. 112, 10, 11) and body fragments of one vessel in trench E (Cat. nos 13a, 13d, and 16h). Two (Cat. nos 13d and 16h) are from square bottles which are most common in late 1st–2nd century contexts and may not have gone out of use until the early 3rd (Isings form 50; Cool and Price 1993, 153, fig. 87, 125–34). One example (Fig. 112, 10) bears a design of at least two moulded circles with a central dot; the commonest known pattern. Figure 112, 11 appears to have a much less common base pattern; the fragment has been distorted by heat, but may have been somewhat similar to that on a square bottle from Corbridge (Charlesworth 1959, fig. 9, bottom right). with a six-petalled flower enclosed within a circular moulding with semi-circular mouldings attached to the interior of the framing circle between the end of the petals.

Later 2nd–3rd century tablewares

Three drinking vessels and one bowl of later 2nd or 3rd century date were found. Two of these (Fig. 112, 3–4) are complete bases from colourless cylindrical cups with fire rounded rims and double ring bases (Isings form 85b; Cool and Price 1993, 153, fig. 85, 61–4). These were the commonest glass vessel type in the north-western provinces during the late 2nd–early 3rd centuries. One vessel (Fig. 112, 4) has been carefully reworked to remove the side and leave the base as a disc. This is a common feature, but the purpose served by these discs is not known.

Two examples (Fig. 113, 5–6) are very likely to have come from the same hemispherical drinking cup. Such cups, decorated with pinched-up knobs or lugs, were commonest in the mid 3rd century (Cool and Price 1993, 154, figs 86–7, 68–70). They often had thickened bases and it is possible that an additional small fragment (Cat. no. 8) came from the edge of the base. The fourth vessel (Fig. 112, 8) is a much rarer form. The two fragments come from the rim and cut-out fold of a blue/green bowl of Isings form 69b, very similar to samian Drag. 38 bowls used during the later 2nd and 3rd centuries though the glass forms have rarely been found in closely dated

Table 62 occurrence of glass by period

Trench	Context	Cast	Blown tablewares		Tablewares/containers		Intaglio
			Light green	Colourless	Blue/green	Yellowish-green	
Period 4C							
E	Walls & floors of structure *5198*	–	–	3 (Fig.112,3,7; Cat. no. 9b)	5 (Fig.112, 8, 9; Cat. nos 11b, 13a, 13d)	–	–
E	Collapse of structure *5198*	–	–	1 (Fig.112,4)	–	–	–
G	Drier *404*	–	1 (Cat. no.2)	–	1 (Cat. no. 16b)	–	–
	Collapse of drier *404*	–	–	1 (Cat. no.8)	–	–	–
	Abandonment of cistern *360*	–	–	–	1 (Fig.112,11)	–	–
Period 6/7							
H	Colluvium (post-Roman)	–	–	2 (Fig.112,5,6)	8 (Fig. 112,10; Cat. nos 12a,b, 16a,16c-f)	–	1 (Fig.113)
H	Sub-soil (post-Roman)	–	–	1 (Fig.112,2)	5 (Cat. nos 12c,13b,c,e,16g)	1(Cat. No. 17)	–
Unphased/modern		1(Fig.112,1)	–	–	1 (Cat. no. 16h)	–	–

contexts. Here they are from late Roman Period 4C structure *5198*. This is only the third example to have been positively identified in Roman Britain, the others are from Silchester, Hampshire (Boon 1974, 232, fig. 36.7) and Piercebridge, Co. Durham (unpublished).

Later 3rd–4th century tablewares

The only 4th century vessel which can be identified with certainty is a colourless cylindrical beaker (Fig. 112, 7) a variant of the conical beaker Isings form 106 (Cool and Price 1993, 155, fig. 87, 141–4). These were one of the commonest late Roman drinking vessel forms and were in use throughout the 4th century. A second vessel of this date may be represented by the two yellow/green body fragments decorated with abraded bands (Cat. no. 17).

Miscellaneous

At least two other vessels are represented by a light green rim fragment (Cat. no. 2) and the blue/green trailed body fragment (Cat. no. 12a) but in neither case can the vessel form be identified.

Conclusion

The vessel glass assemblages found in trenches G/H and E cover the same date range. In trench G/H bottles are more frequent judged both by numbers of fragments and estimated minimum number of vessels. The scarcity of bottle fragments in trench E is even more apparent when the secondary use on one (Cat. no. 13a) is considered. This fragment has been reworked to produce a sharp edge and thus its final use was as a tool and not as a bottle.

Fragment from trench K

A most unusual polychrome fragment (Fig. 112, 1) was the only fragment of glass from trench K and was found in an unphased/modern context. It appears to have been made from two layers of glass. The exterior is composed of sections of a cane consisting of concentric rings of translucent purple and opaque white glass around an opaque white centre. The interior is monochrome purple of a lighter shade than the exterior. This layer gives the appearance of being opaque but is translucent on the edge of the fracture. It is unlikely that this fragment has been blown as the surfaces do not have the characteristic gloss associated with blown vessels. The surfaces do show the minute pits that are often seen on cast vessels of the 1st century AD. On neither surface, however, is it possible to see the regular polishing marks that are usually visible on cast vessels, though some scratches on the interior may be the result of deliberate polishing.

Polychrome cast fragments are not infrequent finds on mid 1st century AD sites in Britain, though such vessels can never have been very common. The majority had gone out of use by the early Flavian period, although bowls with wide rims appear to have continued to be made into the Flavian period (though see Cool and Price 1995, 38). If this example is Roman, it is therefore of mid–early Flavian date at the latest, though the unusual features of the fragment must make a Roman origin possible rather than probable. Roman cast vessels made from two layers of glass are exceptionally rare (Price and Cool 1985, 45, no. 2, fig. 17). Purple and white canes were also rarely used. The only other vessel with such canes from Britain is a shallow saucer with footring from Piercebridge (unpublished).

Intaglio

A blue/green moulded glass intaglio (Fig. 113; Cat. no. 18) from a Period 6/7 context in trench H, belongs to a group whose designs were probably derived from radiate coinage (Henig 1974, 164) and, therefore, though rarely found in closely dated contexts, are most likely to be of 3rd century date. Their distribution pattern suggests they were made in the south of Britain (ibid., fig. 3). The design on this intaglio might have been intended to be Virtus although the spear that figure normally holds in the left hand of the impression is missing here (ibid., i/170, footnote 18, ii/77, nos 549–52,

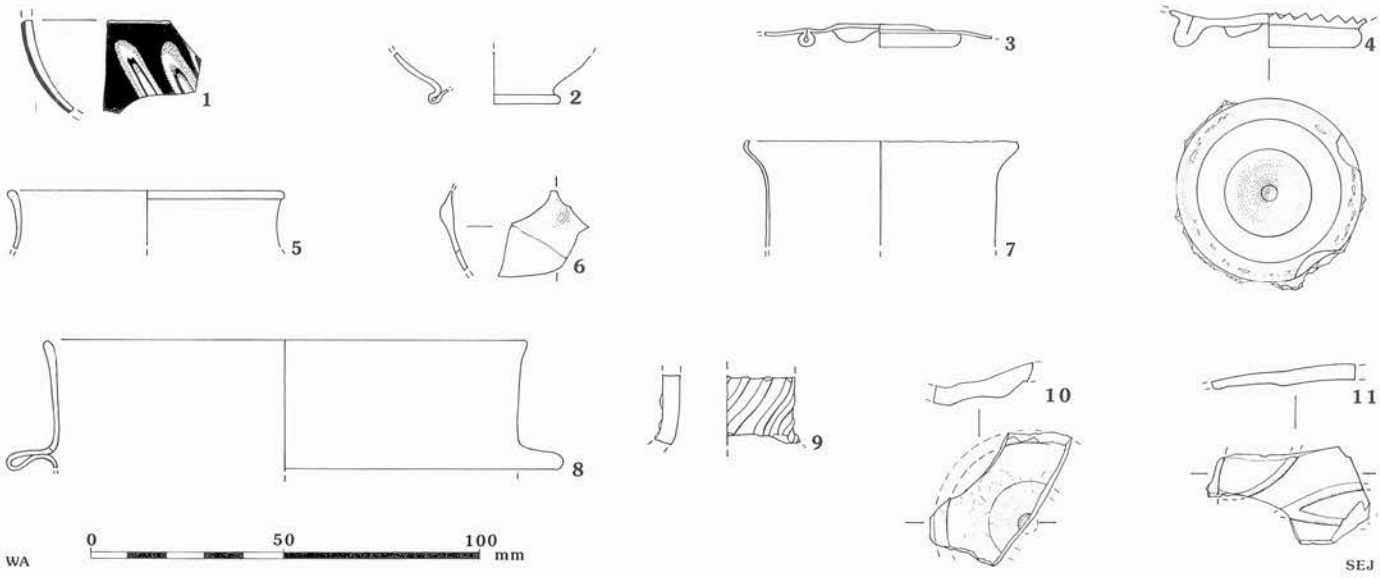


Figure 112 Western Link: Roman glass. Scale 1:2

pl. xvii). Previous finds of similar moulded glass intaglios from Dorchester include one with a figure that may have represented Cupid (ibid., ii/79, no. 578, pl. xviii) and one with an unidentified figure (ibid., ii/79, no. 572, pl. xviii).

Fig. 112

1. Body fragment, cast vessel; exterior polychrome purple and white design in purple ground, interior monochrome purple. Cat. no. 1, Trench K, SF2857, 802, Unphased/ Modern.
2. Lower body and base fragment, blown beaker; colourless. Cat. no. 3, Trench H, SF2278, 500, Period 6/7.
3. Lower body and complete base fragment, blown cylindrical cup; colourless. Cat. no. 4, Trench E, SF3033, 724, Period 4C.
4. Complete base, blown cylindrical cup; colourless. Cat. no. 5, Trench E, SF3065, 718, Period 4C.
5. Rim fragment, blown cup or beaker; colourless. Cat. no. 6, Trench H, SF2778, 513, Period 6/7.
6. Body fragment, blown glass; colourless; one pinched-up knob. Cat. no. 7, Trench H, SF2569, 513, Period 6/7.
7. Two rim and four body fragments, blown cylindrical beaker; slightly green-tinged colourless. Cat. no. 9a, Trench E, SF2872/2873/2849/3061, 724, Period 4C and Trench E, SF2843, 315, Period 6/7.
8. Rim and body fragment, blown bowl, cut-out fold; blue/ green. Cat. no. 10, Trench E, SF2800/3063, 727/724, Period 4C.
9. Neck fragment, blown jug; blue/green; parts of seven diagonal ribs. Cat. no. 11a, Trench E, SF4300, 724, Period 4C.
10. Base fragment, blown prismatic bottle; blue/green; at least two concentric circular dots with central dot on base. Cat. no. 14, Trench H, SF2632, 533, Period 6/7.
11. Base fragment, blown prismatic bottle; blue/green; part of one possible circular moulding with parts of three others internally, possibly forming parts of a series of semi-circular mouldings joining the outer moulding and a central petal design on the base. Cat. no. 15, Trench G, SF2847, 397, Period 4B.

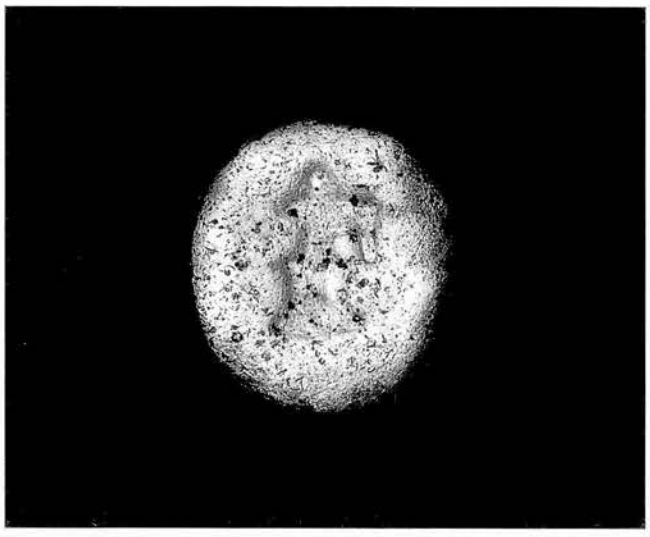


Figure 113 Western Link: glass intaglio

Fig. 113

Glass intaglio; blue/green. Schematised standing figure with shortened outstretched arms and ?sword in right hand. Longitudinal impressions on underside may have been produced by surface on which object made. Upper edge smoothly rounded, lower edge neatly chipped round most of circumference suggesting removal of flange so intaglio could be fitted into ring bezel. Cat. No. 18, Trench H, SF2727, 513, Period 6/7.

8 Objects of Worked Bone, by Rachael Seager Smith

Eleven pieces of worked bone were found, consisting of 6 pins, 4 needle or pin shank fragments, and 1 gouge fragment. Three were found in late Roman Period 4C contexts in trench E, associated with structure *5198*, and eight were derived from the Period 6/7 colluvium in the north-east corner of trench H.

The pins were classified and dated, where possible, according to the type series from Colchester (Crummy 1983, 19–25). These consisted of two complete pins: one, a late Roman Colchester type 3B (Fig. 114, 5), was

broken in antiquity and found in two pieces; the other, a Colchester type 5 (Fig. 114, 6) is of 4th century date. All the other pins are broken. The earliest is a Colchester type 2 fragment (Fig. 114, 1), dated to the mid 1st–late 2nd century AD, but this was found in the same structure, *5198*, as a Colchester type 3B (Fig. 114, 2), dated from *c.* AD 200 until the end of the Roman period. Fragmentary examples of a Colchester type 3A (Fig. 114, 3) and a flat-headed pin (Fig. 114, 4) of a type somewhere between the Colchester types 3C and 6 (Crummy 1983, fig. 19, 254 and 330 and fig. 22, 420 and 423) and similar to a 4th century or later example from Catsgore (Leach 1982, 35, fig. 94, 13), were also found. The four shank fragments (Cat. nos 7–10), probably from pins or needles, all have gently tapering shafts. The gouge fragment (Cat. no. 11), may also be of Roman date, although this object type occurs widely with few typological changes from the Bronze Age onwards.

Although the range of object types is small, all the items are characteristic of the range present at other sites in the vicinity. With the exception of the Colchester type 2 pin (Fig. 114, 1), all are of late 3rd–4th century date, consistent with the date range suggested for most of the activity recognised along the route of the Western Link road. The Colchester type 3 pins (Fig. 114, 2–4 and 6) are marginally the most numerous at this site and are also by far the most common type amongst the assemblages from County Hall (Mills 1993b) and Greyhound Yard (Woodward 1993), although at Charles Street this type forms only 16% of the assemblage (Adam in prep.). The other pin types present are also represented in small numbers at other Dorchester sites while the remaining items are consistent elements amongst almost all worked bone assemblages from the area.

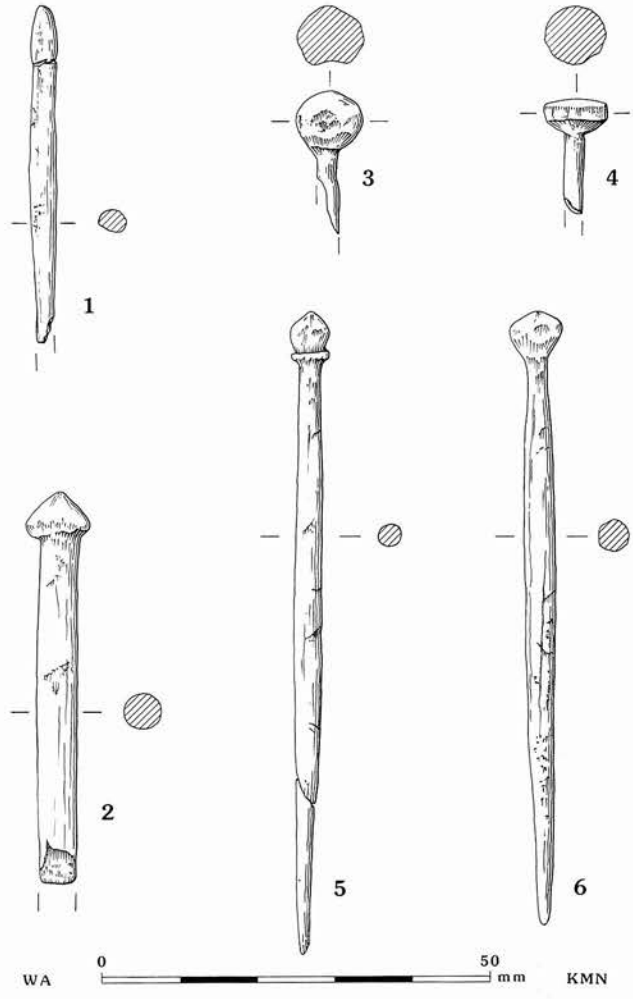


Figure 114 Western Link: bone objects. Scale 1:2

Fig. 114

1. Pin, incomplete; Colchester type 2; 1st–2nd century AD. Cat. no. 1, SF2786, trench E, 704, Period 4C.
2. Pin, incomplete; Colchester type 3B; late Roman. Cat. no. 3, SF3057, trench E, 724, Period 4C.
3. Pin, incomplete; Colchester type 3A; late Roman. Cat. no. 3, SF2428, trench H, 500, Period 6/7.
4. Pin, incomplete; hybrid between Colchester type 3C and type 6; late Roman. Cat. no. 4, SF2542, trench H, 513, Period 6/7.
5. Pin, complete; Colchester type 5; late 3rd–4th century. Cat. nos 6 and 10, SF2760/2876, trench H, 513 and 533, Period 6/7.
6. Pin, complete; Colchester type 3B; late Roman. Cat. no. 5, SF2761, trench H, 513, Period 6/7.

9 Kimmeridge Shale, by Rachael Seager Smith

Seventy-nine pieces of shale were recovered. Twelve of these are recognisable objects, consisting of 3 armlets, 1 bead, 2 spindle-whorls, 2 vessel fragments, and 4 tray or chopping board fragments (Table 63). Six objects were derived from Roman contexts (Periods 4B and 4C), while three others were from the post-Roman colluvium in Trench H; the remainder being from unphased or unstratified deposits. In addition, one piece of worked shale waste from armlet production occurred in a Period 2 (Bronze Age) context. Full descriptions of all the objects, and the special waste piece are in the archive catalogue. The remainder of the collection (66 pieces) consists of unworked and worked, undiagnostic waste (Table 64).

Shale Waste

Of the 66 pieces found, 56 showed no signs of deliberate working (category 1: Woodward 1987d, 106). The remaining ten pieces showed the conchoidal fracture, chisel, and sawmarks characteristic of category 2 waste (ibid., 107) although this was not sufficiently distinctive to suggest a product.

In addition to these, one piece of category 3ci waste (Cat. no. 13), a shale sheet with a punched or chiselled hole was recovered from the Period 2 (Bronze Age) deposits sealing structure *5195*. Woodward (ibid., 107) notes that waste of this sort is generally derived from the production of handmade armlets although the disc removed from this sheet appears to have been only about 70 mm in diameter. The importance of this fragment lies not in the identification of the product but in the implication that shaleworking was carried out somewhere in the vicinity during the Bronze Age.

Table 63 occurrence of shale objects and diagnostic waste pieces

Trench	*Context*	*Armlet*	*Bead*	*Spindle-whorl*	*Vessel*	*Tray*	*Armlet production waste*
Period 2							
K	Colluvial fills, structure *5195*	–	–	–	–	–	1 (Cat. no. 13)
Period 4B							
H	Pit *598*	1 (Fig.115,1)	–	–	–	–	–
K	Pit *827*	1 (Fig.115,2)	–	–	–	–	–
Period 4C							
E	Walls & floors, structure *5198*	–	–	1 (Cat. no. 6)	–	–	–
F	Hollow-way *354*	–	–	1 (Cat. no. 5)	–	–	–
H	Gully *535*	–	–	–	1 (Cat. no. 7)	–	–
H	Pit *579*	–	–	–	–	1 (Cat. no. 11)	–
Period 6/7							
H	Colluvium (post-Roman)	–	1 (Cat. no.4)	–	–	2 (Cat. nos 9,10)	–
Unphased/modern		1 (Fig.114,3)		–	1 (Cat. no. 8)	1 (Cat. no. 12)	–

Armlets

Three, finished lathe-turned armlets were recovered, two in Period 4C contexts (Fig. 115, 1, 2), and both types are well-known from other Dorchester sites (Mills and Woodward 1993b) and elsewhere (Lawson 1976). The third armlet (Fig. 115, 3) has a polygonal median ridge on its outer face which is further decorated with groups of V-shaped notches cut into the upper and lower edges. No exact parallels have been identified for this armlet type. The internal diameters of the armlets are *c.* 50–80 mm, well within the standard range.

Bead

One lathe-turned spacer bead (Cat. no. 4) was found in the Period 6/7 colluvium in trench H. Similar beads are known from Poundbury (Davies and Cox 1987, 109, fig. 77, 7) and Silchester (Lawson 1976, fig. 1, 6 and 7), dated to the early 2nd–late 3rd century, but described as being made of jet.

Table 64 quantification of shale waste

	Category 1 (unworked)		*Category 2 (worked)*	
Period	*No.*	*Wt (g)*	*No.*	*Wt (g)*
4A	1	9	–	–
4B	2	6	–	–
4C	13	55	–	–
6/7	35	509	9	372
Unph./ modern	5	79	1	43
Total	56	664	10	415

Spindle-whorls

Two spindle-whorls were recovered from Period 4C (Cat. nos 5, 6). Both may have been derived from lathe cores. As Calkin notes (1972, 47), the presence of a few of these easily reusable objects on a settlement site is no proof of a local shaleworking industry.

Vessel Fragments

Two fragments of lathe-turned vessels were recovered from a Period 4C deposit (Cat. no. 7) and an unphased context (Cat. no. 8). The latter example is part of a low footring base, probably from a platter derived from a variety of Gallo-Belgic ceramic forms (Rigby 1973, figs 1–4). Similar vessels have been found frequently elsewhere in and around Roman Dorchester (Calkin 1972, 44, fig. 2, 14 and 15; Davies and Cox 1987, fig. 77, 8–9; Adam in prep; Copson and Healy 1993b, fig. 19, 2–3; Mills and Woodward 1993b).

Tray / Chopping Board Fragments

Fragments of four tray/chopping boards were recovered (Cat. nos 9–12). Two of these (Cat. nos 9, 10, the latter circular) are undecorated, and several pieces are from a large, very roughly made example (Cat. no. 11). A small fragment of a decorated rectangular tray (Cat. no. 12), similar to an example from Greyhound Yard (Mills and Woodward 1993b, fig. 81, 50) was recovered from an unphased context. All have shallow, irregular cut or scratchmarks on at least one surface. These objects are generally of 1st–2nd century AD date and are well known, both locally and further afield. Biddle (1967, 248–59) has suggested that they were used as trenchers although their use as cutting boards for general domestic and industrial purposes is also likely.

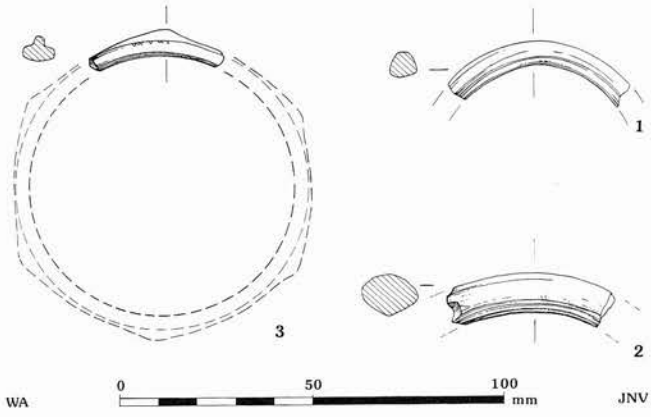


Figure 115 Western Link: shale objects. Scale 1:2

Discussion

All the shale objects recovered correspond well with the range of types known within and around Roman Dorchester, and produced in Purbeck (Thomas 1987a; Woodward 1987a, 106–10; Cox and Woodward 1987, 165–72; Adam in prep.; Davies *et al.* forthcoming). The presence of shale waste amongst the assemblage is perhaps indicative of shaleworking somewhere in the vicinity during the late or post-Roman period, even though it does not appear to have been an important activity at this site. The identification of two spindle-whorls indicates textile preparation. Most significantly is the occurrence of a large piece of handworked armlet waste from a Bronze Age context.

Fig. 115
1. Armlet, incomplete; lathe-turned; Romano-British. Cat. no. 1, SF2839, trench H, 629, Period 4B.
2. Armlet, incomplete; lathe-turned; Romano-British. Cat. no. 2, SF2862, trench K, 828, Period 4B.
3. Armlet, incomplete; lathe-turned; Romano-British. Cat. no. 3, SF2752, trench H, Unstratified.

10 Objects of Worked Stone, by Rachael Seager Smith

There are 26 worked stone objects, comprising 7 whetstones, 3 mortars, a chalk weight, a perforated chalk object, 12 quern/millstone fragments, and 2 miscellaneous objects, possibly sharpening stones (Table 65). Of these, 18 were recovered from Romano-British (Periods 4B and 4C) contexts, the remainder occurring in the post-Roman colluvium (Period 6/7) or in unphased/modern features. No worked stone objects were recovered from Late Iron Age/early Roman (Period 4A) or earlier contexts. Details of all objects are in the archive catalogue. They are all probably of Romano-British date. Petrological identifications were made by D.P.S. Peacock.

Whetstones and Other Sharpening Stones

Of the seven slender, roughly bar-shaped whetstones or hones recovered, five (Fig. 116, 1–3, 5, and 7) are of glauconitic sandy limestone, one (Fig. 116, 4) is of a fine-grained grey limestone, and the other (Fig. 116, 5) of a fine-grained sandstone. All are comparatively well worn. Four were associated with the Period 4C structure *5198* and working area *467*. Whetstones of a similar shape and stone types are already known from a variety of Romano-British contexts in the Dorchester area (Davies *et al.* 1987, fig. 74, 8, 9 and 11; Mills forthcoming) and elsewhere (Leach 1982, fig. 109, 55).

In addition, the two miscellaneous worked stone objects (Cat. nos 25 – 6) may also be interpreted as sharpening stones. These roughly rectangular pieces of stone with smoothed, worn surfaces are broadly comparable to the group W2 stones at Hengistbury Head (Laws 1987, 173, ill. 122, 12–14) and elsewhere. Both are of sandstone, probably Old Red Sandstone from the Mendips, and were found in Period 4C contexts.

Mortars

Fragments of three mortars were recovered. One of these (Fig. 116, 8) is an uncommon type, made from an arkosic grit. Although the source of this rock type is uncertain, the object is likely to be imported and of Romano-British date. Two are base fragments of common Romano-British types (Beavis 1970) and are well-known in the Dorchester region (Davies *et al.* 1987, fig. 75, 19– 20; Mills and Woodward 1993c, fig. 81, 11–14, fig. 82, 15–20 and 22; Adam in prep.). One (Cat. no. 9) is of Purbeck Limestone while the second (Cat. no. 10) is of a fine-grained sandstone.

Perforated Objects

Both of the perforated objects are made of chalk. One (Fig. 116, 9) is probably a weight. Although not quite complete, this object weighs just over 3 kg. Similar chalk weights occur in Period II and IV contexts at Poundbury (Davies *et al.* 1987, fig. 75, 22 and 32). The second object (Cat. no. 12) is a small, roughly rectangular block with a sub-circular, central perforation which is slightly hour-glass in profile. Both the function and date of this object are uncertain.

Millstones and Querns

Fragments of six millstones (Fig. 116, 10, 13; Cat. nos 13, 16, 17, 22), five rotary quern stones (Fig. 116, 11, 14; Cat. nos 19, 21) and one probable rotary quern stone (Fig 116, 12) were recovered. All the millstones are of Upper Greensand and have a flat, pecked grinding surface although the other side is generally completely unaltered. Two (Fig. 116, 13; Cat. no. 16) have vertical tooling around the edge. The diameter of the millstones ranges from c. 300–750 mm while the thickness varies from 30–45 mm. All occurred in Period 4C contexts; one (Fig. 116, 13) was found in post-hole *666* of structure *5197* and the others were associated with the collapse and final silting of structure *5198* and working area *467*. It is likely then, that these stones are of late Roman date. The larger examples (ie, Fig. 116, 10) would probably have needed to be mechanically operated, most probably using water power (Peacock pers. comm.).

Fragments of two and one complete lower rotary quern stones (Cat. nos 19 (sandstone) and 21 (Upper Greensand) Fig. 116, 11) and two upper stones (Fig. 116, 14; Cat. no. 20) were present. The complete lower stone is of Old Red Sandstone and was found lying on the lowest surface of the Period 4C structure *5198*. The fragments were found on yard surface *716* to the west of this structure. A complete but severely burned stone of soft, limonitic sandstone, source uncertain, (Fig. 116, 12) may be part of a rotary quern with flat surfaces and an oval central

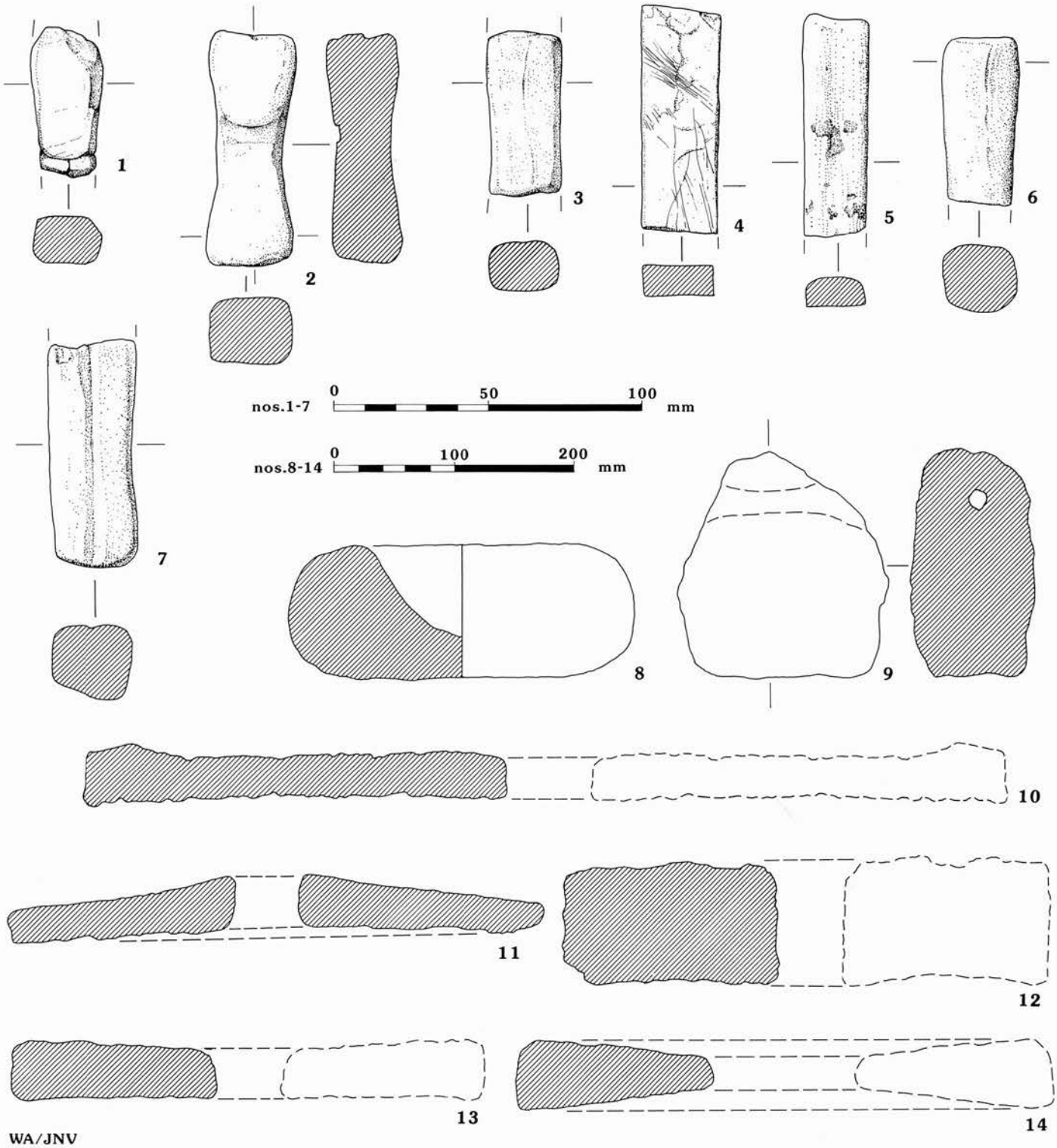


Figure 116 Western Link: stone objects. Scales 1:2 (Nos 1–7), 1:5 (Nos 10–14)

perforation extending throughout its thickness but Peacock (pers. comm.) considers that this stone type was always too soft to ever have functioned successfully as a quern.

Discussion

The range of objects and the stone types are broadly comparable with the pattern known from other sites in the area where the majority of objects occur in stone types which are available comparatively locally (ie, greensand, limestone, sandstone, chalk). Only one possible Continental import was identified, while the Old Red Sandstone used for a late Roman lower rotary quern stone can be seen as a regional import from the Mendips or the Bristol Channel/south Wales. Old Red Sandstone querns are however, fairly uncommon in the Dorchester region, although examples are known from the Colliton Park Library site (Aikten and Aitken 1982, 117) and from County Hall (Copson and Healy 1993a,

Table 65 occurrence of worked stone objects

Trench	*Context*	*Whetstones*	*Mortars*	*Perforated objects*	*Millstones/querns*	*Sharpening stones*
Period 4C						
E	Walls & floors, structure *5198*	3 (Fig.116, 1-3)	–	–	1 (Fig. 116,11)	1 (Cat. no. 26)
E	Collapse of structure *5198*	–	–	–	5 (Fig.116,14; Cat. nos 13,16,17,22)	–
E	Yard surface *716*	–	–	–	2 (Cat. nos 20,21)	–
G	Drier *404*	1 (Fig.116, 4)	1 (Fig. 116,8)	1 (Fig. 116,9)	–	–
G	Revetment wall *356*	–	–	–	–	1 (Cat. no.25)
H	Structure *5197*	–	–	–	1 (Fig.116,13)	–
H	Pit *579*	–	–	–	1 (Fig.116,12)	–
Period 6/7						
H	Colluvium (post-Roman)	2 (Fig.115, 6,7)	2 (Cat. nos 9,10)	1 (Cat. no.12)	–	–
Unph./modern		1 (Fig.116, 5)	–	–	2 (Fig.116,14; Cat. no.19)	–

cat. nos 8, 9 and 19). Some fairly intensive grinding activities associated with structure *5198* and working area *467* are suggested.

Fig. 116

1. Whetstone, incomplete; glauconitic sandy limestone. Cat. no. 1, trench E, SF2664, 347, Period 4C.
2. Whetstone, incomplete; glauconitic sandy limestone. Cat. no. 2, trench E, SF2666, 347, Period 4C.
3. Whetstone, incomplete; glauconitic sandy limestone. Cat. no. 3, trench E, SF2667, 347, Period 4
4. Whetstone, incomplete; grey limestone. Cat. no. 4, trench G, SF2822, 388, Period 4C.
5. Whetstone; glauconitic sandy limestone. Cat. no. 5, trench H, SF2830, 714, Unphased/Modern.
6. Whetstone, incomplete; fine-grained sandstone. Cat. no. 6, trench H, SF2600, 513, Period 6/7.
7. Whetstone, incomplete; glauconitic sandy limestone. Cat. no. 7, trench H, SF2734, 513, Period 6/7.
8. Mortar, incomplete; arkosic grit. Cat. no. 8, trench G, SF2499, 407, Period 4C.
9. Perforated object, incomplete; chalk; probably a weight. Cat. no. 11, trench G, SF2501, 416, Period 4C.
10. Millstone, incomplete; Upper Greensand; possibly part of Cat. no. 13. Cat. no. 14, trench F, SF2833, 243, Period 4C.
11. Lower stone of rotary quern; Old Red Sandstone. Cat. no. 15, trench E, SF2655, 347, Period 4C.
12. ?Rotary quern or crushing stone; soft, limonitic sandstone; severely burnt. Cat. no. 18, trench H, SF3087, 627, Period 4C.
13. Millstone, incomplete; Upper Greensand. Cat. no. 23, trench H, SF4044, 590, Period 4C.
14. Upper rotary quern stone with radial grooves, incomplete; Upper Greensand. Cat. no. 24, SF4339, Unstratified.

11 Building Materials, by Rachael Seager Smith

A variety of durable building materials was recovered. By far the largest component of this assemblage are the ceramic building materials, predominantly bricks and tiles of Roman date but also stone building materials and *opus signinum*. Small quantities of mortar and wall plaster, were also recovered. These material types are summarised below while further details can be found in the archive.

Ceramic Building Materials

In total, 207 fragments (26,345 g) of ceramic building material were recovered. The majority is of Romano-British date, although all fragments are comparatively small and thus difficult to assign to a particular form. No measurable dimensions other than thickness were preserved. The ceramic building material was sorted into catagories as for the Southern By-pass (above) and listed by type (as number and weight of pieces) and period in Table 66, while a more detailed breakdown by context can be found in the archive.

The 'Other' category (Table 66) includes a presumably intrusive featureless fragment of medieval or later roof tile from ditch *55* (Period 2) and a possible Roman floor tile fragment, *c.* 22 mm thick, found in the collapse/demolition deposits of the Period 4C corndrier *404*. Only one 'featured' fragment was noted amongst the assemblage — part of a brick with curvilinear finger smearing or 'signature' (Brodribb 1987, 99) on one surface, found amongst the Period 6/7 (post-Roman) colluvial material in the north-west corner of Trench H.

Ceramic building material was comparatively poorly represented during the late Iron Age/early Roman period (Period 4A). Given the very small quantities recovered, it is unlikely that any of the structures belonging to this phase made extensive use of ceramic building materials in their construction.

Amongst the pieces recovered from Period 4B contexts, only two definite roof tile fragments could be identified. The material was derived from various features but none was directly associated with the structures identified. Conversely, the material recovered from the Period 4C contexts was predominantly associated with structure *5198* and working area *467*. Given the comparatively high mean weight per piece of this material (189 g), it is likely that at least one of the struct-

Table 66 quantification of ceramic building material, opus signinum, and other fired clay by period

Period	Ceramic building material												Opus sig.		Fired clay	
	Tegula		Imbrex		Misc. tile		Misc. brick		Other		Total					
	No.	Wt(g)	No.	Wt(g)	No.	Wt(g)	No.	Wt(g)	No.	Wt(g)	No.	Wt(g)	No.	Wt(g)	No.	Wt(g)
0	–	–	–	–	1	10	–	–	–	–	1	10	–	–	–	–
2	–	–	–	–	–	–	–	–	–	–	–	–	–	–	1	2
4A	1	340	1	106	3	228	–	–	–	–	5	674	–	–	7	22
4B	2	315	–	–	32	1055	1	948	–	–	35	2318	–	–	28	148
4C	10	3262	3	240	48	4271	11	5801	1	208	73	13782	53	8836	43	250
6/7	11	1599	6	278	43	2228	4	2670	–	–	64	6775	4	225	52	401
Unph/ mod.	6	1060	–	–	21	1432	1	220	1	74	29	2786	1	4	14	199
Total	30	6576	10	624	148	9224	17	9639	2	282	207	26345	58	9065	145	1022

ures of this period had a tiled roof and/or made considerable use of ceramic building material as flooring or generally within its structure. Seventeen roof tile fragments were present in the Period 6/7 colluvium but are likely to be derived from other Romano-British activity further upslope.

Stone Building Materials

The most common use of stone as a building material consisted of the utilisation of local stone types, especially flint, chalk, and limestone, in wall construction. This material was not collected and no quantification is therefore available. Evidence for the use of deliberately shaped stone as a building material is severely limited. One stone roof tile, roughly rhomboidal in shape and made from Old Red Sandstone (identified by D. Peacock) was found amongst the material relating to the collapse of the Period 4C structure 5198 while the only other item was a small *tessera* of shelly limestone from the Period 6/7 colluvium in Trench H.

Opus Signinum

A total of 58 fragments (9065 g) of *opus signinum* was recovered. Most are featureless fragments with no original surfaces surviving, although six pieces show traces of light red ochre on one smoothed, flat surface. Most fragments are made up from successive layers, varying in the coarseness of the crushed tile and chalk inclusions used. Two size ranges were noted, the finer being from 10–15 mm across, including all the painted pieces, while the coarser inclusions measured 25–30 mm across. The majority of *opus signinum* fragments were associated with the Period 4C working area *467*. Thirty fragments were found *in situ*, lining cistern *360*, with a further 11 in its final silting. Ten pieces also occurred amongst the post-abandonment fills and final silting of corndrier *404* but may also be derived from the lining of cistern *360*. The use of this non-permeable material clearly indicates that it was intended to hold liquids. While it is possible that this feature served as a farm pond, the use of *opus signinum*, more generally found in bath-houses or as a flooring material in buildings of some status, suggests a more specialised function.

Wall Plaster

Eight pieces (88 g) of wall plaster were recovered. Two fragments are painted deep red. These were also associated with the Period 4C working area *467*; the two painted fragments were found in the final silting of corndrier *404*.

Mortar

Eighteen fragments (1352 g) were recovered. All have a pale, calcareous matrix containing abundant quartz sand, flint, chalk and other stone fragments with occasional carbonaceous material. Some of the fragments found amongst the collapse of wall 712 of structure 5198 (Period 4C) have flattish, smoothed surfaces showing possible withy impressions.

12 **Fired Clay**, by Rachael Seager Smith

The fired clay consists of 248 pieces (4069 g) probably derived from 8 separate objects and 145 (1022 g) small featureless fragments with no preserved surfaces. No fabric analysis was undertaken for the latter, although a variety of fabrics is present.

Possible Weights

Two perforated objects (Cat. nos 1 and 2), both probably derived from weights, were identified and are likely to be of Roman date. A third, unperforated, fragment (Cat. no. 3) is probably also from a weight. This was found in the colluvial deposits upslope of, and sealing, the Period 2 structure *5195* and may therefore be of Bronze Age date. Shape could not be determined.

Slabs

Eight contexts also produced numerous fragments, which, on the basis of fabric similarities, are probably derived from five rather flat, slab-like objects with many visible fingerprints and impressions. Three of these (Cat. nos 5–7) were associated with the Period 4C structure *5198* while a fourth (Cat. no. 4) was

Table 67 quantification of stone fragments by Period (No. fragments/weight (g))

	Stone type													
Period	*1*	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*	*13*	*14*
4A	–	–	–	2/24	–	–	1/45	–	–	–	–	–	–	–
4B	1/47	–	–	–	–	7/808	4/120	5/217	–	1/74	–	1/130	3/183	–
4C	15/293	5/348	1/4	6/71	–	–	–	–	1/7	1/568	4/21	1/14	11/191	–
6/7	6/106	–	–	–	–	–	–	–	1/22	–	–	–	6/211	–
Unph/ modern	3/824	1/204	1/204	2/64	1/44	–	–	2/359	1/62	–	–	–	1/18	1/12
Total	25/1270	6/552	2/208	10/159	1/44	7/808	5/165	7/576	3/91	2/642	4/21	2/144	21/603	1/12

Key: 1 = limestone; 2 = grey limestone; 3 = fine-grained limestone; 4 = shelly limestone; 5 = brown shelly limestone; 6 = grey shelly limestone, poss. carboniferous; 7 = fossiliferous shelly limestone; 8 = sandstone; 9 = Upper Greensand; 10 = Old Red Sandstone; 11 = micaceous sandstone, poss. Pennant; 12 = quartzite pebble; 13 = Heathstone; 14 = unidentified

recovered from a post-Roman (Period 6/7) soil layer sealing features in this area. Other fragments (Cat. nos 8, 10 and 11), all probably derived from the same object, were found in the post-abandonment fills of the Period 4A cemetery structure *929* while another piece (Cat. no. 9), of a very similar fabric, was recovered from the fill of the Period 4B grave *5128* situated close to structure *929*. The function of these objects remains unclear but these too are likely to be of Roman date.

13 **Stone**, by Rachael Seager Smith

A total of 316 pieces (16,743 g) of stone, other than portable objects and identifiable building materials, was recovered. Over half of the material was from the Period 6/7 (post-Roman) colluvium in the north-east corner of trench H. No detailed petrological examination of these pieces was carried out. However, the rock types from that sequence were broadly comparable with those from other areas of the site. The only 'new' stone type is a piece of Oolitic Limestone. The closest outcrop of this rock type occurs *c.* 5 km to the south-west of Dorchester in the area around Bincombe, while Oolitic Limestones of the Corallian series are found *c.* 10 km to the north-east between Alton Common and Ansty (Reid 1899, 3). The rock type and distribution by period of the remaining fragments is summarised in Table 67. Petrological identifications were made by D.P.S. Peacock

Almost all the stone types present can be found within a 10–15 km radius of Dorchester and are broadly comparable with the assemblages recovered from other sites in and around the town (Adam in prep.; Bellamy 1993b; Copson and Healy 1993a). Much of the assemblage is derived from the Portland series of limestones and sandstones which form the Dorset Ridgeway to the south. Heathstone, which forms 22% of the stone fragments from phased contexts is derived from the Tertiary deposits of the Reading Beds and London Clays which occur *c.* 10 km to the east of Dorchester in the Frome and Piddle valleys (ibid., 18 and 23). Upper Greensand also occurs around Bincombe and as an irregular belt to the north of Dorchester at the foot of the Chalk escarpment from Minterne Magna eastwards towards Hilton (Reid 1899, 5). More distant sources are represented by small quantities of Old Red Sandstone from Somerset and Pennant Sandstone which occurs along the Bristol Channel, in the Forest of Dean, and in south Wales. Most of this material may be interpreted as building stone, especially given its concentration in contexts associated with the Period 4C structures in trenches E, G, H, and K.

14 **Worked Flint**, by P.A. Harding

The flint and one scraper of Portland chert were found in 100 contexts of which 19 were assigned to Periods 1 and 2. Flint was not recovered from the topsoil. The material was sorted by context and the totals listed in archive. The results are summarised by period in Table 68, which shows a relatively low density of flint across the site, including the colluvium, and indicates that most was found in stratified Period 2 deposits representing the earliest major occupation at the site.

The contents of pit *5034* provided the only *in situ* assemblage contemporary with the Period 2 Bronze Age occupation. The remaining stratified flint, including that from the Bronze Age structures in trench K, occurred in deposits of colluvium and ditch silts. Most of the flint from trenches G and H had been redeposited in Roman features. Material associated with the Bronze Age phase is described in archive. This study showed that most contexts contained insufficient diagnostic flint for meaningful conclusions to be made.

Four small groups comprising the fill of hollows *146*, the contents of pit *5034*, and colluvium infilling structures *5195* and *5196*, were examined in more detail. They showed similar results which can be summarised by reference to *5034*. This assemblage, which comprised five flake cores and 49 flakes, including 25 broken pieces, represents waste from a flake industry producing blanks from unprepared cores. The cores include one heavily patinated example which is probably residual and others which were probably rejected during preparation. The predominant technology involved using alternate flaking to prepare the large nodules which are found in the area. The flakes were consequently large with 83% and 73% respectively of measured pieces exceeding 40 mm in length and breadth. The cortex is thick and when used as a hammer it produces effects similar to those of soft hammer percussion by diffusing the impact of the blow on the flint. The flakes have a squat planform with a thick profile and broad butts which are usually plain. Platform preparation is generally absent and there are no signs of platform rejuvenation, a technique which is rendered unnecessary by alternate flaking.

There was only one retouched flake from pit *5034*. This piece, which refitted to another flake, had been truncated at the distal end to remove a hinge fracture. Additional retouched material from the contexts examined comprised seven pieces from structures *5195* and *5196* and from ditch *6* which showed repetitive techniques of retouch. These included an end scraper made on a flake, from the colluvium infilling *5196*. Five pieces were retouched using inverse retouch to remove or thin the

Table 68 struck flint

Period	*Cores*	*Broken cores*	*Flakes*	*Broken flakes*	*Burnt flakes*	*Implements*				*Chips*	*Misc. debitage*	*Total*
						A	*B*	*C*	*D*			
1	1	–	45	32	–	–	–	1	6	3	1	89
1/2	–	–	9	1	–	1	–	–	–	–	–	11
2	11	4	165	113	–	3	1	–	7	–	–	304
4	3	2	114	81	2	5	–	–	5	1	–	213
6/7, unph./ unstrat.	2	1	65	74	8	–	–	–	5	–	1	156
Total	17	7	398	301	10	9	1	1	23	4	2	773

Key: A = scrapers; B = discoidal knife; C = fabricator; D = retouched flakes

proximal end and four showed denticulate or irregular flaking at the distal end.

The quantity of flint is insufficient to produce conclusive results; however general comparisons can be made with similar sites on the line of the Southern By-pass. The most readily comparable assemblages are at Maiden Castle Farm and Middle Farm where Bronze Age occupation occurred. The excavators of the Western Link interpreted irregular hollows *146* as grubbing hollows for flint; however these contexts produced only 28 unbroken flakes, of which none were preparation flakes. The lack of evidence for nodule testing or core preparation argues against these features having been used for flint extraction. Large dumps of Bronze Age flint waste were associated with abandoned structures and ditches at Rowden and Cowleaze (Harding 1991) and with a ring-ditch at Maiden Castle Farm; however Bellamy notes that most Bronze Age habitation sites along the Southern By-pass contained very little associated flint. This characteristic is maintained in the house terraces of the Western Link, with only small scale dumping in a redundant pit.

15 **Human Remains**, by A.V.C. Jenkins

The human bone assemblage was examined, but not weighed or counted (Table 69). Estimates were made, where possible of the sex, age at death, and stature of the remains and any pathologic, traumatic, degenerative, or abnormal conditions were recorded. Because of the small number of individuals represented and the poor condition of many of the skeletons, little attempt was made at demographic and epidemiological reconstruction. Details are in archive.

The number of individuals represented has been taken to be 30, of which 6 are juveniles. Skeletons 2092 and 4332 have been included although they are from unstratified contexts, since they represent at least two more adults, one male, one female, in addition to those discovered in recognisable graves.

Methods

Sex was evaluated by examination of the traits recommended by the Workshop of European Anthropologists. Age of post-adolescents was assessed from either dental attrition or from the conformation of the pubic symphysis (Brothwell 1981). Age of infants and older juveniles was estimated from the development of the teeth and the length of the long-bones (Scheuer *et al.* 1980; Bass 1987). Stature was estimated according to Trotter and Gleser (1958).

Period 4A (Late Iron Age and Early Roman)

Fifteen burials containing skeletons were assigned to Period 4A, 12 adults and 3 perinatal infants. Older children were not represented. Among the 12 post-adolescent skeletons, 5 were considered to be female, 5 male, and 2 indeterminate. Three of the women were over 65 years. The five men died between 25–45 years, while the other two women were aged 17–20 and 30–40 years. Estimated stature for males is between 1.65–1.69 m (average 1.69 m), for females 1.50–1.63 m.

Period 4B (Early Roman)

Seven adult individuals and three juveniles are represented. Three of the adults were identified as females, aged between 17 and 45 (Table 69). One male was 35–45 years at death. Amongst the juveniles were a child of about one year old and another slightly older. The remains of another small child were badly preserved but were c. 3–7 years of age.

Period 4C (Late Roman)

Four adults were recovered from Period 4C. One, a possible male, was found on terrace *979* as disarticulated bones, probably from a disturbed burial. The others were definite males, aged 25–45 years.

General Observations

Wormian bones were recorded in two of the 10 (20%) observable cases, in the lambdoid suture in both instances. None was present in any other location. Cribra orbitalis was seen in two of the 15 (13%) observable

Table 69 human remains

Trench	*Grave*	*Skel. No.*	*Age*	*Sex*	*Stature (m)*	*Pathology or abnormality*
Period 4A						
G	*472*	4093	perinatal	–	–	
H	*509*	2353	adult	–	–	
	514	2611	adult	–	–	
	522	3030	35+	M	1.65	
	555	4042	35-45	M	1.67	
	750	4046	perinatal	–	0.50	
K	*914*	4391	30-35	M	1.68	
	916	4408	65+	F	1.57	
	918	4407	35-40	M	1.69	
	5000	4325	perinatal	–	–	
	5009	4402	65+	F	1.59	o.a. of shoulders and r. wrist
	5011	4377	17-20	F	1.50	
	5018	4417	30-40	F	1.63	lumbar vertebrae 3-5 & sacrum fused by hyperostosis
	5130	4406	65+	F	1.58	prominent gluteal tuberosity
	5111	4425	25-35	?M	1.67-1.71	o.a. of r. hip
Period 4B						
F	*220*	2091	18-24 months	–	–	
	222	2264	17-20	F	1.54	lower P2 and M3 absent
	224	2265	3-7	–	–	
	250	2434	65+	–	1.60-1.65	o.a. of shoulders & hips; vertebra L5 crushed
	288	4060	10-14 months	–	–	
G	*444*	2756	35-45	M	1.75	o.a. of shoulders & hips; C3-4 vertebrae fused
K	*920*	4386	17-25	–	–	l. clavicle & humerus more slender than r.
	922	4395	25-45	F	1.58	
	966	4366	25-35	–	–	chipped enamel on many teeth
	5128	4360	35+	F	1.45	o.a. of shoulders
Period 4C						
D	*154*	2028	45+	M	1.69	
	167	2189	25-45	M	1.70	
K	terrace *979*	4332	adult	?M	–	supernumary incisor; impacted M3
	5007	4342	35-45	M	1.72	exotosis 2 x 6 mm, middle of linea aspera; unerupted supernumary incisor
Unphased						
F	–	2092	adult	F	–	

o.a. = osteoarthritis

cases. This condition is believed to result from iron deficiency in childhood (Walker 1986).

Dental caries were seen in six of 17 (35%) possible cases and abscesses in five (29%) with calculus almost universally present, sometimes to a considerable degree. Fourteen of the 23 (61%) carious teeth were molars. A quantified assessment of *ante mortem* tooth loss could not be accurately made because of the condition of the remains, but the impression was that caries was under-represented through the early loss of the affected teeth. This loss may well be a result of periodontitis rather than, or in addition to, tooth decay. The dentition of skeleton 4366 was unusual in having badly chipped enamel. This ought to indicate a gritty constituent in the diet, yet the calculus seen in the rest of the population implies that soft and sticky foods (eg. starches) were the norm, so some peculiar unknown factor, whether genetic, dietary, or taphonomic may have been the cause in this case. Dental anomalies were observed in three individuals and included two un-

erupted supernumerary incisors; two pointed incisors; and an impacted 3rd molar. There was one instance of undeveloped mandibular 2nd premolars where the deciduous molars had remained in place.

Small articulating surfaces on the lower anterior edge of the tibia have been interpreted as a result of habitual squatting (Thomson 1889). These were present in six of 17 (43%) of the observable cases, comprising five women, one man, and one person of undetermined sex, all of whom were mature or elderly.

Disease, Trauma, and Abnormality

Cervical osteoarthrosis was manifest to some degree in six of 16 (38%) of the observable cases. In skeleton 2756, the 3rd and 4th vertebrae were fused, but all other cases were milder (Sager 1969, grades I–II). Only one individual suffered from lumbar osteoarthrosis, but osteophytic lipping of the lumbar vertebrae was recorded in 10 of 22 (45%) of the observable cases. In skeleton 4417, fusion of the 3rd–5th vertebrae and the sacrum had occurred. In three individuals some of the thoracic vertebrae also showed a slight degree of osteophytosis. Arthritic hips, shoulders, and a right wrist were also noted.

Skeleton 4386 presented a noticeably slender left humerus and clavicle in comparison with those of the right. Poor condition of the bone prevented any quantification of the difference or further observation, but it may be presumed to result from a congenital condition or a disease or trauma in childhood. A healed fracture of a finger in skeleton 4407 was the only observed injury in the whole assemblage.

16 **Discussion**, by Elaine L. Morris

Period 1: Pre-Later Bronze Age

Small amounts of pre-later Bronze Age worked flint and a few sherds of Beaker and Collared Urn pottery were identified in stratified or disturbed contexts in trenches A/B and F/G, and redeposited in later contexts in trenches A/B. There is no indication that this material is anything other than generally domestic in character.

Period 2: Later Bronze Age

The presence of artefact debris resulting from later Bronze Age activity is defined by pottery which cannot be earlier than Early Bronze Age in date and worked flint. The pottery consists of both Early/Middle Bronze Age and Late Bronze Age material. From trenches A/B on Fordington Down, the very small amount of later Bronze Age material was recovered from the fills of possible boundary ditches, *6*, *55*, and *114*, and gravel patch *14*. The quantity and type of finds is consistent with other Middle Bronze Age collections from similar ditches and features in the immediate area, such as that recovered from Middle Farm (Davies and Pearce 1990). A decorated, grog-tempered sherd (Fig. 107, 3) from gravel patch *14* is very similar to a sherd from that site. Sherds of Late Bronze Age pottery were also recovered from one ditch within the Middle Farm evaluation work. The similarity of the Western Link pottery with that from the Middle Farm enclosure (Site 8) is also striking.

Later Bronze Age material was also recovered along the coombe floor from the upper colluvial deposit *230* in trench F (?G). This consists of a very small collection of Late Bronze Age sherds and undiagnostic flint flakes obviously derived from upslope to the east. Bronze Age flintwork was also recovered along the coombe side in trench K including flint debris deposited in pit *5034* within structure *5195*, and the finds from the colluvial covers of both structures *5195* and *5196*. The latter deposits again represent occupation debris derived from further upslope. The range of grog-tempered Early/Middle Bronze Age pottery is very similar in fabrics to that recovered from trenches A/B. The additional items of a possible loomweight and the shale armlet roughout suggest that Bronze Age domestic activities, perhaps including textile production, may have occurred upslope from these terraced structures. The absence of floor surfaces in *5195* and *5196* and any associated debris from occupation is unusual from Middle Bronze Age circular structures, and is probably the result of post-abandonment destruction (see Chapter 9).

Period 4A: Late Iron Age/Early Roman

The 15 bodies recovered from Period 4A graves include three perinatals, several adult (17–45 years) and elderly women (65+), and five middle aged men (25–45). The small number of burials makes further comment about this group unwarranted. Artefacts from this period are represented predominantly by grave goods and burial fittings; out of the 24 burials, 11 included objects (Table 46). Four adult burials (one male, one female, two not sexed) had pottery vessel offerings and one adult female was interred wearing an iron finger ring. The vessels consist of seven Black Burnished ware bowls (Fig. 108, 5–11) and one stamped samian platter (Fig. 108, 4). The former are dated generally to the 1st century BC/AD, while the latter could not have been deposited prior to the later Neronian period or the early 70s AD. Durotrigian burials of the late Iron Age and early Roman period containing pottery vessels and other offerings have recently been discussed in detail (Sharples 1990).

Settlement debris was limited to very few artefacts from this period. The quantity and range of pottery is minimal with a total of 422 sherds, five of which are late Roman types. Many of the sherds were recovered as small fragments from grave fills, which implies that manuring or a similar process of artefact degradation had occurred prior to the digging of the graves in the area of trenches F–K. A single piece of Dressel 20 amphora and ten sherds of South Gaulish samian were identified along with 1st century BC/AD coarsewares. There were no coins, glass, worked bone, stone, or shale objects to signify occupation or activities of any identifiable type.

Period 4B: Early–Middle Roman, 1st–2nd Century AD

The continued use of the coombe as an area for burial in the later 1st–2nd centuries AD produced few settlement artefacts and no actual burial offerings. The location of the burials may be significant with the occurrence of young children and apparently only adult women around ditch *231*. The fragment of an iron penannular brooch from grave *920* was not directly on the body and the fragmentary condition suggests it may have been part of the grave fill.

Domestic activity from Period 4B was represented by three times the amount of pottery recovered in Period 4A deposits, but again was dominated by coarsewares with only 15 sherds of British and samian fineware occurring which is relatively less than in Period 4A. This is probably due to the discontinuation of samian as a burial offering. The seven sherds of amphorae, from Dressel 20, Pélichet 47, and unassigned types, do not suggest a dramatic change in the consumption of olive oil and wine at this time. The presence of amphorae is expected due to the proximity of Fordington Bottom to *Durnovaria* where quantities of these types have been recovered.

The range of discarded artefacts does increase slightly to include three copper alloy brooches, two of which were enamelled, an iron penannular brooch, and a possible horseshoe, two fragments from different shale bracelets or armlets, and one millstone. There were again no coins, few nails, and no worked bone objects, but fragments of 1st–2nd century AD vessel and container glass objects were recovered from subsequent deposits. A large proportion of this increase in artefact deposition occurred in one feature, pit *827*, at the northern end of trench K and away from the Period 4B burial area. The quality of the artefacts is similar to that found on urban and extra-mural sites in the Dorchester area and to that recovered from the early and late Roman settlement observed above the coombe side in this area (Farrar 1956). The presence of settlement structures and debris at this end of trench K suggests a reorganisation of the coombe side with burial being confined to the southern zone.

Period 4C: Late Roman (3rd–4th Century)

The change in scale and emphasis of the occupation from Period 4B to 4C along the coombe floor and side is represented by the abandonment of the area of trenches F–H for burial and the spread of settlement occupation to include trenches E–K. The quantity of artefacts deposited reflect these changes.

Burials took place to the south, in trench D, with a single example in the northern zone of trench K. Several activities can be interpreted from the artefacts found within the structures *5197*, *5198*, and *5199*, and their associated features. These include the use and refurbishment of agricultural tools in the form of barshares, bill hooks, and a possible scythe, with the relatively large collection of whetstones and other sharpening stones in these features. The parching and processing of grain is clearly indicated with the presence of carbonised grain in the ovens (*see Chapter 8*), and querns and millstones from all three areas. The apparent use of the cistern as a water container further emphasises this as a farmyard area. Other activities probably include textile production, indicated by a few shale and ceramic spindle-whorls, a pair of shears, and the possible clay weights, as well as leatherworking and carpentry. The quality of goods used and discarded suggests that the occupants of these 4C structures, or more likely the occupants of the area above the coombe side, had access to the full range of local, British, and imported goods available to the town occupants of *Durnovaria*. This was first noticed in the fine collection of personal brooches recovered from Period 4B, and is enhanced by the range of coarse and fine ware pottery, amphorae and mortaria, imported glass vessels, a non-local stone mortar, and shale trays and vessels.

The collection of hillwash colluvium rich with settlement artefacts behind the revetment wall *356* suggests that much of the material recovered from the abandonment of the Period 4C structures was derived from the upper settlement occupation and not from coombe side activities. The features in trenches G/H associated with working area *467* and structure *5197*, such as gully *535*, pit *579*, and hearths *583* and *587*, indicate their functions more readily than any of the 3rd–5th century backfill artefacts associated with them. The artefacts recovered from the abandonment infilling of these features could have been derived from midden deposits around the structures and includes material spanning the entire period of Roman occupation.

7. Evidence for the Environment and Farming Economy

edited by Michael J. Allen

1 Introduction

The Western Link road passes along the axis of the Fordington Bottom, which is a long, deeply incised, dry valley, debouching on to the southern floodplain of the Frome. The dry valley, or coombe, occupies a specific topographical niche and thus the aims of the environmental analyses are more specific than those addressed for the Southern By-pass. The valley is a microcosm of the downs in which farming was centred in the later Iron Age and Romano-British periods. Environmental analysis aimed therefore, to characterise and describe the land-use history (soils and Mollusca) and to examine specifically Iron Age and Romano-British farming practices and economy (Mollusca, plant remains, bones, and marine shells). This provides an adjunct to the work undertaken along the Southern By-pass and enables discussion of Roman land-use for which evidence is sparse elsewhere.

2 Soils and Colluvium, by Stephen Staines

The soil report from the Southern By-pass sites was principally concerned with summarising soil patterns on gently rolling chalkland whereas Fordington Bottom consists of a small, fairly deeply incised dry valley and as such represents a different and specific facet of the chalkland landscape. This investigation was carried out in order to examine changing soil patterns within the incised dry valley. A number of colluvial sections and one tree-throw hollow soil were investigated to shed some light on conditions in a more dissected landscape.

This report deals only with a selection of the samples analysed and details the chronological change in soil patterns. The full analyses are presented in archive. With one exception all the analyses were performed on colluvial sequences and horizons within colluvium.

Modern Soil Pattern

The modern and ancient soil pattern has been largely described elsewhere (Staines 1991) and earlier in this volume (Fig. 81). Fordington Bottom is characterised by deep silty, calcareous colluvial soils (mainly Millington Series) in valley bottom, footslopes, and on lynchets, very shallow calcareous rendzinas on the valley sides, and black humose (Icknield Series) rendzinas on the steepest slopes under long term grass. The adjacent gently sloping and flat plateaux areas carry a contrasting suite of soils with upwards of 0.8 m of flinty brown silty clay loam soils on the plateaux and acid soils over clayey Tertiary deposits (clay-with-flints).

Methods

Several colluvial sections were described and sampled. Profile descriptions followed Hodgson (1976). Bulk soil samples were taken from selected layers for particle size analysis and for calcium carbonate content. Undisturbed samples in Kubiena tins were taken for thin sectioning. The slides were described utilising the system outlined by Bullock *et al.* (1985). Analytical results, thin sections descriptions, and photomicrographs are included in the archive.

A range of samples was taken of which the results of the most significant are summarised here and are listed in Table 70.

Results

A summary of the most relevant results are here described in chronological order rather than in the analytical suites in the archive report. The analytical results include physical/chemical analyses and further detailed soil micromorphological analyses have been undertaken in particular instances.

Period 0. Tree-throw hollow

The fill of a small depression sealed beneath the colluvial accumulation on a positive lynchet in trench D was investigated as a putative tree-throw hollow and comprised some 27 cm of slightly calcareous, flinty strong brown silty clay. The material contrasted strongly with the overlying, extremely calcareous, silty, chalky pale brown colluvium. It was thought possible that the strong brown soil was a remnant of the original soil cover preserved in the bottom of a tree-throw hollow. The sharp boundary between the overlying colluvial build-up and the chalky Coombe Deposits below indicate that any pre-existing soils were eroded from the site before colluvial accumulation or that they were incorporated thoroughly within the colluvium.

The thin section and analytical data provides evidence for the contrast of this material with the overlying colluvium. It shows a mainly non-calcareous b-type fabric which contains limpid clay coats and concentrations which are not associated with current void distribution. These features are consistent with an interpretation of the original soil as an acid, argillic brown earth. There are also small areas of calcareous fabric (crystallitic). The presence of these fabrics suggests disturbance and the inclusion of a mass of different soil. This could be accounted for by disturbance such as tree-throw. The

Table 70 soils: location and period of main samples

Sample	*Analysis* PS	SM	*Trench* D	*Period*	*Context*	*Feature*
DA	X	X	F	0		tree hollow
F20	X	X	F	2	230	coll., valley bottom
F1-	X		F	4C	251	coll., valley slope
F1-	X		F	4C	251	
F1B	X	X	F	4A/4C	251/252	
F1A	X	X	F	4A	252	
F1-	X		F	4A	252	
DB2	X		D	6		coll., valley side
F2A	X	X	F	6/7	214	coll., valley bottom
F2B	X	X	F	6/7	216	coll., valley slope
F1-	X		F	6/7	214	

PS = particle size analysis; SM = soil micromorphology; coll. = colluvium

'dirty' clay coats (as opposed to limpid coats) can be accounted for by disturbance in a calcareous environment (Courty *et al.* 1989), and others have linked the presence of such coats with cultivation, but they could here equally result from the disturbance created by tree-throw itself.

It is clear that the clayey soil within the hollow is a remnant of a thicker acid argillic brown earth. The absence of soils elsewhere on the hillside suggests that erosion has been severe and removed all traces of similar soils which may have occupied the valley side slope.

Period 2. Bronze Age

The earliest colluvial deposit investigated was that in the centre of the valley in trench F, context 230 (Fig. 93). It was yellowish–brown, typically a silty clay loam and highly calcareous with slightly less chalk fragments than later hillwash deposits. Full descriptions are in archive. There is no sign of any pre-existing soils, the colluvium at the sampling point rests directly on a eroded chalk surface.

The colluvium also includes a sandy infill. This infill seen in thin section comprises sand grains partly set in and partly coated by a mix of fine silt, clay, and calcium carbonate. It is clear that the coatings were washed down around the sand. The sand comprises almost entirely quartz and flint grains with little chalk. This material is similar to sandy deposits found in erosion rills where flowing water has caused the erosion.

This must be taken as providing clear evidence of water erosion on this site. From the nature of the sand fraction the most probable origin for the sand is the acid soils formed in clay-with-flints and plateau drift on the adjacent plateau area.

Period 4. Late Iron Age–Romano-British

A sequence of hillwash on the valley side in trench F is covers Periods 4A through 4C. This section, well up the valley side slope, provides some evidence for the nature of the later erosion episodes. The section comprises fairly uniform highly calcareous silty clay loam. Clay contents are moderate. The thin section of the main colluvium (context 251 period 4C) shows characteristics typical of chalky colluvium, that is, a uniform crystallitic fabric, presence of charcoal and dense ped interiors.

Periods 6/7. Medieval–post-medieval

The colluvium overlying 230 (described above; period 2) in trench F provides a representative sequence of the medieval–post-medieval stratigraphy and is comparable to that analysed in trench D (archive).

The section comprises an old mature pasture topsoil (context 214) that is only slightly calcareous with a characteristic microfabric over calcareous colluvium. The colluvium has moderate to high calcium carbonate levels and is in places clayey (36–60 cm, context 216). The thin sections of the colluvium reveal little about the original soils. All show a crystallitic fabric with significant numbers of 'dirty' (ie, compounded silt, clay, and carbonate) coats lining pores in the lowest horizon. There is no evidence of the original soil and it must be concluded that erosion in the valley bottom has removed the pre-existing soils or that the original soils have been incorporated within the colluvial material by cultivation.

The clay contents revealed in the mechanical analyses are informative. The peak clay content at 38% in context 216 suggest that the material comprising this layer may have derived from the subsoils of argillic brown earths on the valley sides or indeed, the plateau edge. The lower clay content below could be interpreted as representing erosion of silty topsoils which would then expose clayey subsoils to erosion.

Humose soil

A very slightly stony, dark brown humose silty clay loam was buried by recent bulldozing (*c.* 1950) and the valley side (Fig. 93, context 214). This is interpreted as a humose topsoil which has developed over a long period in a grassland environment and is therefore comparable to the present day pasture soil in the valley. There is a marked peak in clay content within the humose Ah horizon (post-medieval buried pasture soil).

Post-medieval colluvial sequences from the valley floor and valley side were analysed from trench D. The results of these analyses show spatial variation with particularly decalcified deposits on the valley floor and highly calcareous colluvium on the slopes; full details are given in archive.

Discussion and Summary

The data from the profiles described above unfortunately provide only limited spatial and temporal detail because of the restricted chronology of the analysed samples. Nevertheless, that spatial variation of the soils can be detected in the medieval period is certainly indicative of earlier complex soil patterning. Although superficially there seem to be significant differences in clay content between the soils in the valley bottom and those on the slopes, any argument for the reason for this is complicated by having to compare deposits of different periods. We cannot, therefore, be sure whether topography or time is the real factor in this phenomenon.

It is clear however, that non-calcareous soils originally existed on the valley sides and that *in situ* non-calcareous argillic brown earths exist sealed below colluvium in the valley bottom. Therefore, most of the valley sides originally carried acid brown earths with clayey subsoils.

It is possible that the non-calcareous material comprising the Romano-British valley side colluvium may derive from erosion of the topsoils of the plateau and plateau edge soils, whilst the later, medieval valley floor

deposits represent the erosion of the clayey subsoils. This would certainly account for the higher clay content of the medieval valley floor colluvium.

One other feature of note is the relatively high clay content of the stoneless humose topsoils which occur over the colluvial sequences. It is clear that these topsoils have developed over a long period under grassland. The length of time is uncertain but it may be of the order of 100+ years. The high clay content could derive from weathering of silt in an organic rich, leaching environment. The other alternative explanation is that the mineral material from these layers derives from late or post-medieval erosion of the soils with high clay contents on the plateau edge and Macphail ascribed elevated clay contents in buried soils at Maiden Castle (Macphail 1991) to the inwashing of a clay-rich, non-calcareous slurry. Without further study it is difficult to give an explanation but this layer can probably be ascribed to a long period of weathering in a grassland environment in which some inwash may have occurred.

It is possible to outline a tentative sequence of events for soil development in this portion of the valley so far investigated:

1. The original soil pattern consisted of acid brown earths in the valley bottom overlying chalky substrates, moderately thick silty over clayey soils on valley side, thick silty over clayey acid brown earths on plateau and plateau margin.
2. Deforestation and initial agriculture led to significant erosion of valley side soils and of valley floor soils. Little of original soil pattern on valley floor or on valley side remained (except lower down the valley where truncated acid brown earths are buried under later chalky colluvium).
3. Continued erosion of valley side soils as a result of intensive tillage practices resulted in increasing amounts of chalk incorporated into the soil and colluvium accumulating in the valley bottom. (Period 4, Romano-British).
4. In the Romano-British period most of original soil mantle removed from valley sides, soils on valley sides very shallow, very chalky and prone to erosion. Development of lynchets reduced erosion and allowed accumulation of very chalky colluvium on valley sides. Material comprising colluvium derived from mixing of soil derived by ploughwash from upslope with underlying chalky substrate. Relatively little accumulation in valley bottom because of anti-erosion effect of lynchets. Evidence of water generated erosion events during accumulation of colluvium may also account for small accumulation of very chalky detritus in the valley bottom — intermittent surface water may have prevented accumulation of very chalky colluvium in this part of the valley (Allen 1988, fig. 6.4).
5. Abandonment of arable usage at in the later medieval period allowed development of humose leached topsoils over the whole area which were finally buried beneath bulldozed material in the last 40 years.

This sequence of events has some significance with regard to the development of soil patterns on chalkland. Recent soils work on the rest of the Dorchester By-pass area suggested that much of the gently rolling chalkland now occupied by a variety of very shallow chalky rendzina soils was originally occupied by moderately thick (40–80 cm) acid argillic brown earths which had silty topsoils and clayey subsoils. The transformation from an acid non-calcareous edaphic environment to a calcareous one was undoubtedly brought about by human activities which involved forest clearance and later agricultural use. The evidence given above adds weight to this thesis and expands it to cover a moderately incised dry valley in the chalk. The only part of the local chalkland landscape not investigated for soil change which now has a rendzina soil cover are the steepest valley sides and the Chalk scarps.

3 Land-use History as Evidenced by Molluscan and Colluvial Sequences, by Michael J. Allen

The description, recording, and analysis of the colluvial sequences allow a broader understanding of land-use. It is unfortunate that we only have limited information with which to date the colluvial sequences. A series of four columns of samples was analysed from both colluvial sequences and ditches in trenches F, G, and M. Further spot samples taken from individual contexts took the total of analysed samples to 36. The results are presented in Tables 71 and 72 and as standard mollusc histograms (Figs 117–19).

Prehistoric Hillwash; trench M

A 2.3 m sequence of typically unsorted colluvium was revealed in trench M. The undated sequence consisted of chalky meltwater deposits which were overlain by a weakly calcareous dark reddish–brown and stonefree silty clay; probably a residual portion of the Early Holocene soil. This in turn was sealed by similar deposits but containing a number of flints upon which there was a stonefree buried soil. The latter horizon was noted to contain relatively large charcoal fragments. This sequence was covered by colluvium; the lower portion containing few stones and some flints, while the upper portion (above 1.1 m) was typically chalky unsorted colluvium, becoming progressively more calcareous up profile.

The basal dark silty clay and weakly calcareous horizons yielded very few shells (Fig. 117). It gave very high magnetic susceptibility results (Table 71) probably as a result of the high clay which is associated with higher concentrations of iron oxides (cf. Oades and Townsend 1963), or possibly to ancient pedogenesis. It represents an eroded argillic brown earth. The buried soil overlying the basal deposits contained shells, and the colluvium produced abundant (up to 742) molluscs (Table 71). The assemblages were predominantly open country and dominated by two species; *Vallonia costata* and *Trichia hispida*. The assemblage from the buried soil was an open country one with a few shade loving and catholic species (apart from *T. hispida*). This is typical of very open dry grassland or arable environments. The overlying lower colluvial sequence displays a reduction in the proportion of *V. costata* and an

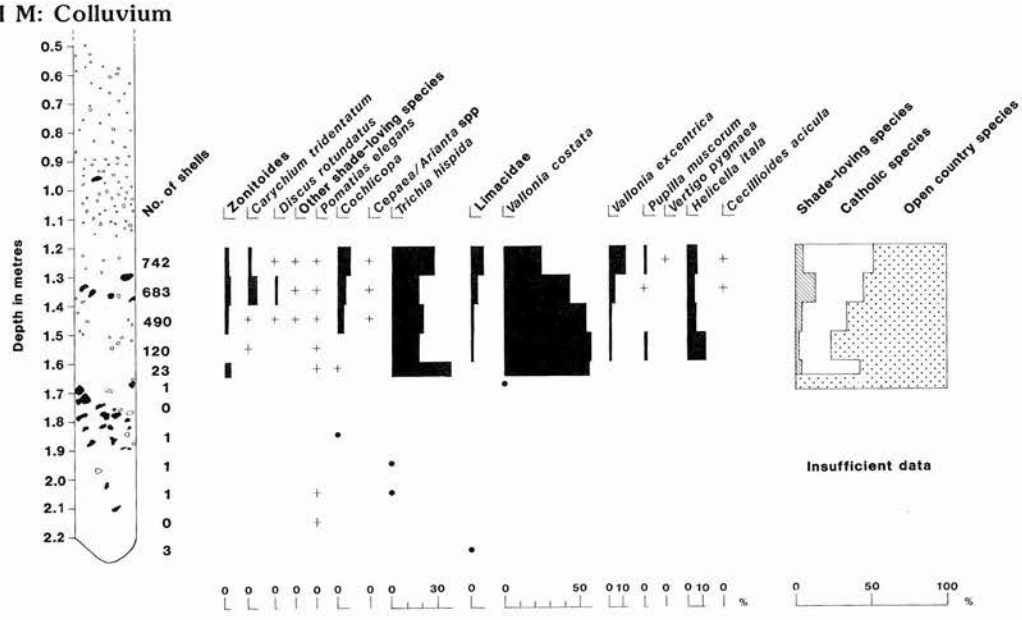


Figure 117 Western Link: land molluscs, trench M colluvial sequence

increase in its congener *V. excentrica*. Slightly more shady and stable conditions are indicated by the presence of *Carychium tridentatum*. This fine, almost stonefree, colluvium probably reflects long grass. The upper colluvial sequence was not analysed but its increase in chalk pieces and general nature is so characteristic of ploughwash as to indicate the onset of local tillage.

Period 1 and 2; ?Neolithic to Middle Bronze Age (Trench F)

A series of seven samples was taken through the pre-middle Bronze Age ditch *262*, the gravel fan that seals it, and the overlying middle Bronze Age colluvium (Fig. 93). The base of the gully produced few shells (Table 71, Fig. 118), but higher up the gully fills, a mixed assemblage was recovered. No species or ecological group was dominant in the assemblage but the Zonitoides and Limacidae groups were well represented along with the open country species *V. excentrica*. This probably indicates a ditch rapidly becoming overgrown with tall grass vegetation but being infilled with soils eroding from adjacent fields.

The gravel fan, surprisingly, also yielded a number of shells. Typical open country, probably arable, assemblages were recorded in which *T. hispida* and *V. excentrica* were dominant. The gravel fan itself indicates a large, probably single, erosion event from arable contexts (Allen 1991a; 1992) and such horizons have been argued as evidence of autumn sowing and thus double cropping (Allen 1988).

The overlying unsorted colluvium pre-dates the late Iron Age/early Roman ditch *231* which both cuts the deposits and acts as a barrier to further deposition in the bottom of trench F. Colluviation here has been ascribed to the Middle Bronze Age. The deposit contained mollusc assemblages with relatively high proportions of shade-loving species. The assemblages are untypical of colluvial deposits and the presence of the Zonitids together with high proportions of *C. tridentatum* may indicate a grassland sward which has been inundated with hillwash from adjacent cultivated fields and is itself typified by more open country species together with *T. hispida*.

Period 4A. Early Roman 1st century Ditch 231 (Trench F)

The construction of a ditched enclosure *231* in the valley bottom acted to arrest further deposition of hillwash at this point (Fig. 90, Period 4A). The ditch itself, rather than displaying a typical tripartite ditch fill (Evans 1972, 231–8; Limbrey 1975, 290–300) was largely infilled with hillwash (Fig. 93).

Two spot samples were analysed; the lower of which produced an assemblage typical of colluvium (Fig. 119) and indicative of ploughed downland. The presence of some shade-loving species, namely *Discus rotundatus*, *C. tridentatum*, and the Zonitids, may reflect the localised existence of longer vegetation restricted to the ditch. The sample from the upper fill indicated that the ditch at least offered shady, albeit very localised, habitats as seen be in the dramatic increase in both the Zonatids and *C. tridentatum*. This probably indicates long grasses and other vegetation growing in the moister conditions of the ditch itself.

Period 4. Romano-British Colluvial Sequences (Column 4; Trench G: Column 3; Trench F)

Two further hillwash sections were sampled and analysed. A sequence of unsorted calcareous colluvium overlying the gravel fan in trench G was sampled (Column 4; Fig. 119). It was situated to the north of the corndrier and lined cistern (*460*) but was sealed by the chalk surface and thus pre-dates the late Roman occupation in the bottom of the valley. This valley bottom deposit is probably broadly contemporary with the infilling of the Late Iron Age/early Roman (Durotrigian) ditch *231*. The second colluvial deposit sampled was on the valley side just to the east (upslope) of the hollow-way (Column 3; Fig. 119) in a sunken-floored building *420*. It is largely of Romano-British date.

These sequences were highly calcareous and analogous with the upper (unanalysed) colluvium in trench M (Fig. 117). Both Romano-British sequences produced typical colluvial mollusc assemblages (Table 72; Fig. 119), being fairly uni-

Table 71 land molluscs: colluvium and ditches 464 and 262

Period	?1-2								
Feature	trench M								
Context	Early Holocene soil				Flint lens			Buried OLS	
Sample	49	50	51	52	53	54	55	56	57
Depth (cm)	220-230	210-220	200-210	190-200	180-190	170-180	165-170	160-165	150-160
Wt (g)	1000	1000	1000	1000	1000	1000	1000	1000	1000
Pomatias elegans (Müller)	–	+	+	–	–	–	–	+	1
Carychium tridentatum (Risso)	–	–	–	–	–	–	–	–	1
Cochlicopa lubrica (Müller)	–	–	–	–	–	–	–	+	–
Cochlicopa lubricella (Porro)	–	–	–	–	–	–	–	–	–
Cochlicopa spp.	–	–	–	–	1	–	–	–	–
Vertigo pygmaea (Draparnaud)	–	–	–	–	–	–	–	–	–
Vertigo moulinsiana (Dupuy)	–	–	–	–	–	–	–	–	–
Vertigo spp.	–	–	–	–	–	–	–	–	–
Pupilla muscorum (Linnaeus)	–	–	–	–	–	–	–	–	2
Vallonia costata (Müller)	–	–	–	–	–	–	1	13	69
Vallonia excentrica Sterki	–	–	–	–	–	–	–	–	5
Acanthinula aculeata (Müller)	–	–	–	–	–	–	–	–	–
Punctum pygmaeum (Draparnaud)	–	–	–	–	–	–	–	–	–
Discus rotundatus (Müller)	–	–	–	–	–	–	–	–	–
Vitrina pellucida (Müller)	–	–	–	–	–	–	–	–	–
Vitrea crystallina (Müller)	–	–	–	–	–	–	–	–	–
Vitrea contracta (Westerlund)	–	–	–	–	–	–	–	–	–
Nesovitrea hammonis (Ström)	–	–	–	–	–	–	–	–	–
Aegopinella pura (Alder)	–	–	–	–	–	–	–	–	–
Aegopinella nitidula (Draparnaud)	–	–	–	–	–	–	–	1	–
Oxychilus cellarius (Müller)	–	–	–	–	–	–	–	–	1
Limacidae	3	–	–	–	–	–	–	–	3
Cecilioides acicula (Müller)	–	–	–	–	–	–	–	–	–
Cochlodina laminata (Montagu)	–	–	–	–	–	–	–	–	–
Clausilia bidentata (Ström)	–	–	–	–	–	–	–	–	–
Candidula intersecta (Poiret)	–	–	–	–	–	–	–	–	–
Helicella itala (Linnaeus)	–	–	–	–	–	–	–	–	15
Ashfordia granulata (Alder)	–	–	–	–	–	–	–	–	–
Trichia hispida (Linnaeus)	–	–	1	1	–	–	–	9	23
Arianta arbustorum (Linnaeus)	–	–	–	–	–	–	–	–	–
Cepaea/Arianta spp.	–	–	–	–	–	–	–	–	–
Helix aspersa (Müller)	–	–	–	–	–	–	–	–	–
Taxa	1	0	1	1	1	0	1	3	9
Shannon index (*H'*)	0	0	0	0	0	0	0	0.83	1.31
Total	3	0	1	1	1	0	1	23	20
Magnetic susceptibility ($x10^{-8}$SI/kg)	8	71	79	128	205	89	23	26	23

Note that all totals exclude *Cecilioides acicula*

Table 71 (continued)

Period	*?1-2*			*2*			*3*			
Feature	*trench M*			*464*	*262*		*colluvium trench G*			
Context	*Colluvium*			*66*	*264*	*263*	*238*	*230*	*230*	*230*
Sample	*58*	*59*	*60*	*37*	*14*	*15*	*21*	*22*	*23*	*24*
Depth (cm)	*140-150*	*130-140*	*120-130*					*20-30*	*10-20*	*0-10*
Wt (g)	*1000*	*1000*	*1000*	*1000*	*2000*	*1500*	*1500*	*1500*	*1500*	*1500*
Pomatias elegans (Müller)	7	8	6	–	–	3	2	–	–	1
Carychium tridentatum (Risso)	1	41	12	–	1	8	–	1	10	5
Cochlicopa lubrica (Müller)	2	5	10	–	–	3	–	–	–	–
Cochlicopa lubricella (Porro)	–	1	–	–	–	–	–	–	–	–
Cochlicopa spp.	23	38	60	–	2	3	1	2	1	5
Vertigo pygmaea (Draparnaud)	–	–	6	–	–	–	–	–	1	1
Vertigo moulinsiana (Dupuy)	–	–	–	–	–	1	–	–	–	–
Vertigo spp.	–	–	–	–	–	–	–	–	–	–
Pupilla muscorum (Linnaeus)	–	2	18	1	2	2	1	1	–	5
Vallonia costata (Müller)	268	303	185	2	2	9	+	–	–	5
Vallonia excentrica Sterki	28	36	90	–	7	18	6	2	6	19
Acanthinula aculeata (Müller)	1	–	–	–	–	–	–	–	–	–
Punctum pygmaeum (Draparnaud)	–	1	–	–	1	–	–	–	–	2
Discus rotundatus (Müller)	2	11	2	–	1	3	–	+	1	5
Vitrina pellucida (Müller)	–	–	1	2	–	–	–	–	–	–
Vitrea crystallina (Müller)	–	–	–	–	3	–	–	–	–	–
Vitrea contracta (Westerlund)	–	10	4	1	7	2	–	–	1	2
Nesovitrea hammonis (Ström)	–	3	13	–	–	1	–	–	1	–
Aegopinella pura (Alder)	–	–	–	–	–	–	–	–	–	–
Aegopinella nitidula (Draparnaud)	11	11	1	–	–	–	2	–	+	3
Oxychilus cellarius (Müller)	2	3	2	–	–	1	–	–	1	–
Limacidae	12	36	64	–	9	7	2	4	2	7
Cecilioides acicula (Müller)	–	2	3	–	8	48	5	20	34	42
Cochlodina laminata (Montagu)	–	6	2	–	–	–	1	–	1	2
Clausilia bidentata (Ström)	3	1	+	–	2	–	–	–	–	2
Candidula intersecta (Poiret)	–	–	–	–	–	–	–	–	–	–
Helicella itala (Linnaeus)	29	35	52	5	5	1	1	–	–	3
Ashfordia granulata (Alder)	–	–	–	–	–	–	–	–	–	1
Trichia hispida (Linnaeus)	101	23	208	–	–	27	15	12	11	22
Arianta arbustorum (Linnaeus)	–	–	–	–	+	–	–	–	–	–
Cepaea/Arianta spp.	+	9	6	+	–	1	1	1	1	3
Helix aspersa (Müller)	–	–	–	–	–	–	–	+	+	–
Taxa	13	19	18	5	12	15	10	7	12	17
Shannon index (*H'*)	1.48	1.88	2.00	1.41	2.01	2.10	1.51	1.13	1.75	2.17
Total	490	683	742	11	42	90	32	23	37	91
Magnetic susceptibility ($x10^{-8}$SI/kg)	27	22	15	42	21	26	20	–	–	27

Note that all totals exclude *Cecilioides acicula*

Table 72 land mollusca: feature 246, 231, 420, 360, and 354

Period	2							
Feature	*colluvium trench F*							*246*
Context	*483*	*369*				*371*	*385*	*246*
Sample	*31*	*32*	*33*	*34*	*35*	*36*	*30*	*16*
Depth (cm)	*75-82*	*65-75*	*55-65*	*45-55*	*35-45*	*25-35*		
Wt (g)	*1000*	*1000*	*1000*	*1000*	*1000*	*1000*	*1500*	*1500*
Pomatias elegans (Müller)	–	–	–	1	–	1	–	5
Carychium tridentatum (Risso)	–	–	–	–	–	–	–	11
Cochlicopa lubrica (Müller)	–	–	–	–	–	–	–	1
Cochlicopa lubricella (Porro)	–	–	–	–	–	–	–	1
Cochlicopa spp.	1	–	–	–	1	6	–	7
Vertigo pygmaea (Draparnaud)	–	–	–	–	–	3	–	4
Vertigo moulinsiana (Dupuy)	–	–	–	–	–	–	–	–
Vertigo spp.	–	–	–	–	–	–	–	–
Pupilla muscorum (Linnaeus)	–	–	–	+	2	6	–	18
Vallonia costata (Müller)	–	–	–	2	2	17	–	24
Vallonia excentrica Sterki	1	1	1	–	4	50	–	8
Acanthinula aculeata (Müller)	–	–	–	–	–	–	–	1
Punctum pygmaeum (Draparnaud)	–	–	–	–	–	–	–	–
Discus rotundatus (Müller)	–	–	–	+	–	–	–	7
Vitrina pellucida (Müller)	–	–	–	–	–	–	–	–
Vitrea crystallina (Müller)	–	–	–	–	–	–	–	–
Vitrea contracta (Westerlund)	–	–	–	–	–	–	–	3
Nesovitrea hammonis (Ström)	–	–	–	–	1	–	–	2
Aegopinella pura (Alder)	–	–	–	–	–	–	–	–
Aegopinella nitidula (Draparnaud)	–	–	–	–	–	–	–	3
Oxychilus cellarius (Müller)	–	–	–	–	–	–	–	2
Limacidae	–	–	9	6	2	6	–	13
Cecilioides acicula (Müller)	1	2	2	7	13	6	3	42
Cochlodina laminata (Montagu)	–	–	–	–	–	–	–	–
Clausilia bidentata (Ström)	–	–	–	–	+	–	–	1
Candidula intersecta (Poiret)	–	–	–	–	–	–	–	–
Helicella itala (Linnaeus)	–	–	–	1	–	8	–	8
Ashfordia granulata (Alder)	–	–	–	–	–	–	–	5
Trichia hispida (Linnaeus)	–	1	1	2	9	37	–	107
Arianta arbustorum (Linnaeus)	–	–	–	–	–	–	–	–
Cepaea/Arianta spp.	–	+	–	–	–	1	–	1
Helix aspersa (Müller)	–	–	–	–	–	–	–	–
Taxa	2	2	3	5	7	10	0	20
Shannon index (*H'*)	0.69	0.69	0.60	1.36	1.50	1.55	0	2.05
Total	2	2	11	12	21	135	0	292
Magnetic susceptibility ($x10^{-8}$SI/kg)	39	23	20	22	24	30	43	27

All totals exclude *Cecilioides acicula*

Table 72 (continued)

Period	4A						4C		
Feature	231		420				354		360
Context	261	259	252				251	235	397
Sample	19	20	8	9	10	11	12	17	18
Depth (cm)			100-110	90-100	80-90	70-80	60-70		
Wt (g)	1500	1500	1500	1500	1500	1500	1500	1500	1500
Pomatias elegans (Müller)	2	1	–	–	–	–	1	–	–
Carychium tridentatum (Risso)	3	174	–	1	–	–	1	49	1
Cochlicopa lubrica (Müller)	1	–	–	–	–	–	–	–	2
Cochlicopa lubricella (Porro)	–	26	–	–	–	–	–	–	–
Cochlicopa spp.	1	2	–	–	–	–	–	13	–
Vertigo pygmaea (Draparnaud)	4	–	–	–	–	2	–	8	–
Vertigo moulinsiana (Dupuy)	–	–	–	–	–	–	–	–	–
Vertigo spp.	–	–	1	–	–	–	–	–	–
Pupilla muscorum (Linnaeus)	20	7	11	10	4	4	17	21	1
Vallonia costata (Müller)	13	19	3	4	–	2	3	17	1
Vallonia excentrica Sterki	57	41	12	10	8	6	12	52	4
Acanthinula aculeata (Müller)	2	–	–	–	–	–	–	–	–
Punctum pygmaeum (Draparnaud)	–	6	–	–	–	–	–	5	–
Discus rotundatus (Müller)	2	9	1	–	+	+	3	38	11
Vitrina pellucida (Müller)	–	–	–	–	–	–	–	–	–
Vitrea crystallina (Müller)	–	–	–	–	–	–	–	–	–
Vitrea contracta (Westerlund)	2	15	–	–	–	–	–	7	4
Nesovitrea hammonis (Ström)	–	–	–	–	–	–	1	3	–
Aegopinella pura (Alder)	–	1	–	–	–	–	–	–	–
Aegopinella nitidula (Draparnaud)	–	8	–	–	–	–	–	11	–
Oxychilus cellarius (Müller)	1	75	1	–	–	–	–	10	2
Limacidae	9	10	–	1	2	4	15	18	1
Cecilioides acicula (Müller)	–	–	2	1	3	2	7	25	93
Cochlodina laminata (Montagu)	–	–	–	–	–	–	–	–	–
Clausilia bidentata (Ström)	1	–	–	–	–	–	–	–	–
Candidula intersecta (Poiret)	–	–	–	–	–	1	1	–	–
Helicella itala (Linnaeus)	10	12	1	2	3	1	–	6	–
Ashfordia granulata (Alder)	–	–	–	–	–	–	–	–	1
Trichia hispida (Linnaeus)	61	64	47	17	19	26	30	106	6
Arianta arbustorum (Linnaeus)	–	–	–	–	–	–	–	–	–
Cepaea/Arianta spp.	+	2	+	–	–	–	+	2	1
Helix aspersa (Müller)	–	–	–	–	–	–	–	1	–
Taxa	15	17	8	7	3	8	10	17	12
Shannon index (*H'*)	1.89	1.87	1.17	1.56	1.28	1.45	1.73	2.14	2.00
Total	189	472	77	45	36	46	84	367	35
Magnetic susceptibility ($x10^{-8}$SI/kg)	26	33	20	–	18	21	23	32	52

Note that all totals exclude *Cecilioides acicula*

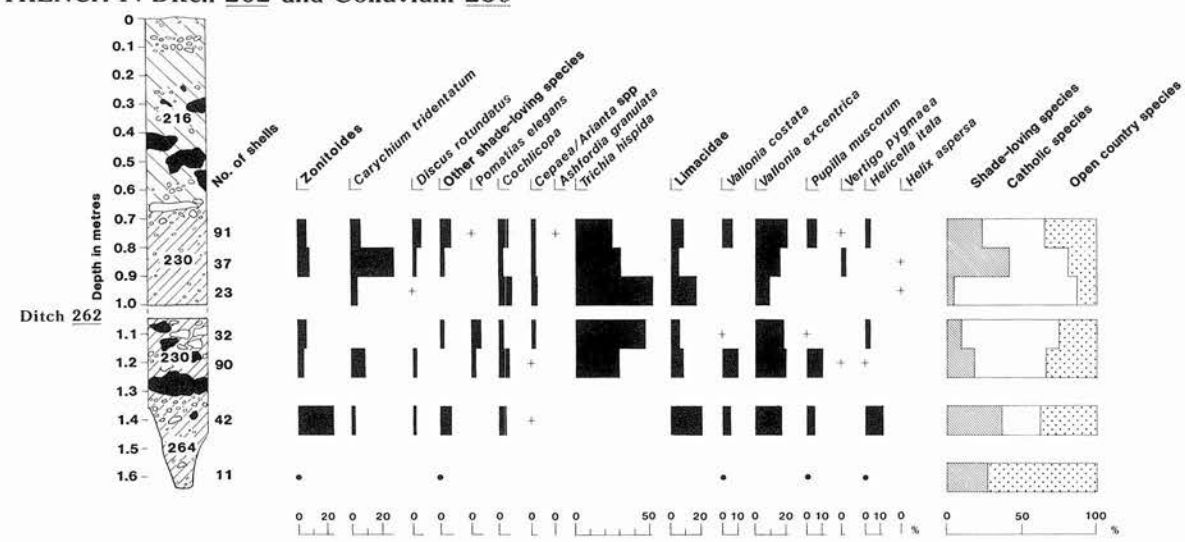


Figure 118 Western Link: land molluscs, trench F, ditch 262 and colluvial sequence

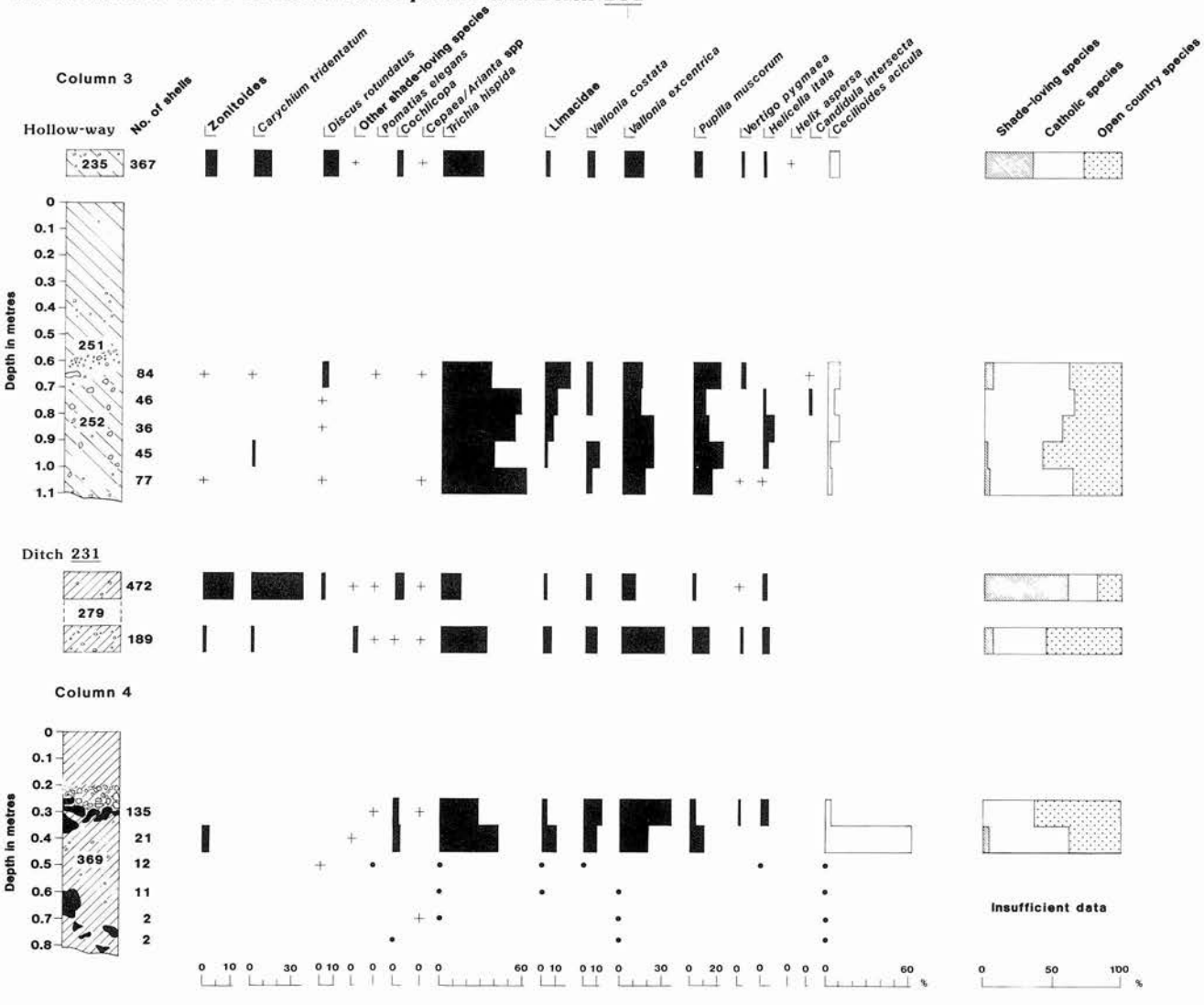


Figure 119 Western Link: land molluscs, trenches F and G, ditch 231 and colluvial sequence

formly dominated throughout by *T. hispida*, *V. excentrica*, and *Pupilla muscorum* which are indicative of very open dry downland, probably arable or very short, grazed, grassland. Only a limited number of shade loving species were present, and these primarily occurred in the upper, stonier portion of the valley bottom colluvium (Fig. 119) where it was sealed by the late Roman activity floor.

Period 4C. Lined Cistern (360)

A single spot sample from the silts at the base of the Late Roman lined cistern (Table 72) indicates that these deposits were probably not a result of long standing water. The assemblage was wholly terrestrial and typical of an open dry landscape.

Period 4C. Hollow-way (239)

A single spot sample was analysed from the base of the hillwash filled hollow-way. Although the mollusc assemblage was broadly comparable with other hillwash assemblages, it is differentiated by an increased number of shade loving species. The Zonatids, *C. tridentatum* and *D. rotundatus*, together represent a third of the assemblage and probably indicate grass and vegetation within or along the edge of the routeway.

Discussion and Summary

It is unfortunate that the colluvial episodes in many cases, can only be broadly dated, nevertheless the analysed sequences enable a fairly comprehensive picture of the land-use to be portrayed.

The earliest feature, the shallow gully (*262*) possibly of late Neolithic–Early Bronze Age date, was dug in a pre-existing open environment suggesting any clearance had occurred somewhile previously. The relict, weakly calcareous argillic soil in trench M may represent the severely truncated former acid soil which did not facilitate the preservation of mollusc shells. The earlier prehistoric activity seems to have been associated with pasture or open grassland, (as evidence from trench M), and limited arable activity as implied by the Mollusca from the gully fills.

Destabilisation of the valley side soils, probably in the earlier Bronze Age, resulted in large scale erosion events. The gravel fan (which sealed gully *262*) is only the coarse component of a larger erosion regime; the finer material was washed northwards down the valley axis and possibly into the Frome valley. This may be evidence of more intensive farming on the hilltop and valley sides. Limited hillwash is deposited in the Middle Bronze Age indicating continued arable activity but the evidence for areas of grassland, particularly in the valley bottom, exist.

The response to the major erosion of soils on the sides of the combe may have been the creation of the series of defined fields, as a part of a whole field system, and the formation of a lynchet along the contour of the combe (Figs 9 and 106, Period 2). The date of this event can not be precisely determined, although two later Bronze Age buildings, *5195* and *5196*, were constructed over positive lynchet material and within this field system. Both buildings were also partly terraced into the combe side. Little occupation debris was recovered from either building. Either they were only occupied for a short period or erosion after their abandonment had displaced this material downslope, as suggested by the colluvium infilling the terrace structures. During the later Bronze Age a ditched field system was established on the clay-with-flint deposits on Fordington Down above the coombe.

Although Early and Middle Iron Age colluvium may have been eroded from the sequence, it is more likely that there was a real hiatus in arable activity and the area was returned to long term pasture. Further episodes of colluviation can be recognised during the Late Iron Age–late Romano-British periods.

These colluvial deposits are lighter in colour, more calcareous, and less organic. This indicates considerably thinner soils in the immediate vicinity. In all cases the hillwash is indicative of tillage; the evidence of pasture and grassland is limited even within the valley bottom. This can be attributed to the more intensive nature of the activity demonstrated by the archaeological record. There is however a possible indication of a reduction in the intensity of land-use (and activity) in the valley bottom. The fact that long grasses and other shady vegetation is allowed to establish in the Late Iron Age/early Roman ditch *231*, may be taken as evidence of relaxation of land-use pressure. Subsequent continued erosion was associated with both arable activity and intensive occupation of the valley during the Romano-British period.

Post-Roman deposits were sparse in the central area of the valley and may indicate that after occupation had terminated this area was laid down to permanent pasture. Such an hypothesis is supported by the very dark pasture soils that existed in the area and are preserved as a consequence of recent bulldozing.

4 Charred Plant Remains, by J.B. Letts

Two flots containing charred plant remains were examined in the Environmental Archaeology Unit at the University Museum, Oxford. The samples derive from late Roman, Period 4C, features. One sample (1044) was from a burnt area (context 417) in the base of the stokehole of corndrier *404*, and the other (sample 1037) was of the basal fill (context 361) of cistern *360*.

The samples were processed on site using a standard flotation recovery procedure with flots retained on a 0.5 mm mesh. Grain and weed specimens were identified by comparison with reference material held in the seed collection at the University Museum, and nomenclature follows Clapham *et al.* (1989).

Results

Both samples contained cereal grain (Table 73), but a greater proportion of the grain in the corndrier (sample 1044) was identified to species due to better preservation. It is dominated by spelt wheat (*Triticum spelta*), while emmer wheat (*T. dicoccum*) and bread wheat (*T. aestivum* s.l.) are minor components in both samples. One 'bread-type' wheat grain from the corndrier shows the clefting characteristic of hulled wheats.

This suggests that some of the short-grained wheat usually classified as free-threshing hexaploid wheat may actually be 'aestiform' spelt present in small quantities within the dominant crop.

Twelve per cent of the wheat grain identified in the corndrier shows evidence of having sprouted prior to charring; and this is under-represented due the poor preservation of the remaining cereal, which is also true of the grain from the cistern (sample 1037). The corndrier also contains 556 sprouted embryos, while only eight were recovered from the cistern. Although the rate of sprouting observed in the latter (1%) could have occurred accidentally, the rate in the corndrier (53%), strongly suggests deliberate germination of grain for malting. An additional 8% of the cereal recovered from the corndrier consists of diminutive and unsprouted tail grain.

In both samples 5–6% of the cereal is barley. In most cases the grain could not be identified to sub-species, but asymmetrical lateral grains of hulled 6-row barley *H. vulgare* ssp. *hexastichum* and hulled median grains of either the six or the two-row sub-species *H. vulgare* ssp. *distichum* appear in both samples. The small number of oat grains *Avena* sp. recovered could not be assigned to a cultivated or wild type as no floret bases survive.

Both samples are rich in hulled wheat chaff, with a greater proportion of the glume bases in the cistern attributable to spelt wheat. The glume base:wheat grain (GB:G) harvest ratio for spelt wheat is usually around 1:1, and grain will usually survive charring better than chaff when charred in the spikelet. The samples examined have GB:G ratios of *c.* 9:1 (corndrier) and 54:1 (cistern), and are thus clearly enriched with chaff. Small glume bases and glume fragments are also plentiful in both samples, although somewhat less so in the cistern sample.

Two cotyledon fragments of celtic bean *Vicia faba* var. *minor* in the corndrier represent the only cultivated legumes recovered. The samples differ considerably in their content of weed seeds. Grasses (Gramineae) and the stinking mayweed (*Anthemis cotula*), which has been linked to the Late Iron Age/Roman period expansion of cultivation onto heavy clay soils (Jones 1981), are the only significant weed species encountered in the cistern. Grasses are more plentiful in the corndrier, and stinking mayweed is replaced by a related species, the scentless mayweed (*Tripleurospermum inodorum*), which is also characteristic of disturbed ground but usually on lighter soils.

The corndrier sample contains the usual plethora of weeds associated with cereal cultivation, but there is little suggestion that the source fields were particularly fertile. In fact, the preponderance of vetches (*Vicia/Lathyrus* spp.) and grasses suggests considerable soil infertility; vetches in particular have a strong competitive advantage when growing on infertile soil due to their ability to host the manufacture of nitrogen in their root nodules. Several specimens of common vetch (*Vicia sativa* ssp. *nigra*) and hairy tare (*V. hirsuta*) were well preserved. Both of these species were common in fields and fallow ground in the pre-herbicide era, but are now restricted to grassy places, hedges, and field boundaries.

Poppies (*Papaver* spp.), in particular the opium poppy (*P. somniferum*), are common in the corndrier. All poppies are annual species adapted to disturbed soil conditions. They are most common in cereal crops and particularly on light soils (McNaughton and Harper 1964). An average field poppy (*P. rhoeas/dubium*) produces upwards of a dozen seed capsules per season, each of which may contain over 1200 seeds and an average opium poppy contains over 6000 seeds in its considerably larger capsule (Salisbury 1961, 172). The accidental inclusion of one spikelet sized seed head in the harvest would result in a disproportionate number of poppy seeds in fine crop processing waste.

The Fordington Bottom and Southern By-pass specimens may derive from a crop cultivated for either culinary or medicinal purposes, but even wild populations of the cultivar may have been gathered relatively easily due to the 0.9–1.2 m height of the plant and the large size of its seed capsules.

Other arable weeds such as wild radish (*Raphanus raphanistrum*), chickweed (*Stellaria media* agg.), fat hen (*Chenopodium album*), knotweed (*Polygonum* sp), and dock (*Rumex* sp.) are common constituents of Romano-British charred seed assemblages. Phytosociologically, most are included within the British arable weed community of the class *Stellarietea-Mediae* (Silverside 1977). Cleavers (*Galium aparine*) suggests autumn sowing, and the few specimens of sheep's sorrel (*Rumex acetosella*) recovered, along with the presence of mayweeds, might reflect the survival of pockets of the original acidic brown earth valley soils in what had become a predominantly calcareous pedological milieu by the Roman period (Jones and Straker 1993; forthcoming; Ede 1993).

Discussion

Romano-British corndriers probably served several purposes:

1. to parch hulled wheat spikelets prior to dehulling,
2. to dry and harden grain prior to grinding, and
3. to parch or roast malted grain (van der Veen 1989).

Unlike cereals whose grain is to be used for breadmaking or pottage, grain destined for the brew house is not parched or dehulled as this treatment kills the embryo. The harvest is simply cleaned of coarse and fine threshing debris, soaked in water, and germinated in the spikelet. When sufficiently sprouted, the spikelets are dried, parched in a corndrier/oven, pounded to loosen the glumes, coleoptiles, and root fragments, and sieved to separate this waste from the malted grain (Fenton 1978, 394; van der Veen 1989). This grain may be further roasted and cleaned before it is ground for use in brewing. Traditionally, waste chaff from the various cleaning stages is valued as a slow burning fuel that imparts no bitter flavour to the malt (Hillman 1982; Markham 1681).

Parching and malting is clearly reflected in the corndrier, and small quantities of charred malted grain were mixed with fuel-chaff in the stokehole region of the corndrier either purposely or accidentally during cleaning. The arable weed seeds are unlikely to have survived the malting process, and probably arrived with the 'fine sievings' used as fuel. Archaeologically, the corndrier and its charred remains compare favourably with data from similar Romano-British corndriers where malting has been suggested (van der Veen 1989).

The fact that the chaff in the cistern is much better preserved than the grain suggests non-contemporaneous charring followed by mixing when the components were discarded. This may have been facilitated by the burning of the chaff in the oxygen deficient atmosphere of an oven or corndrier, while the grain whose parching or roasting it fuelled was charred beyond use and the accompanying fine chaff and weed seeds were totally destroyed. In either case, the lack of weed seeds in the sample suggests that the chaff used to fuel the parching process was derived from well

Table 73 charred plant remains

	Sample 1044	Sample 1037
LEGUME		
Vicia faba L. var. *minor* (celtic bean)	2	–
CEREALS		
Hordeum vulgare ssp. *hexastichum* L. (6-row barley, hulled); lateral grain	6	4
H. vulgare L. (6/2-row barley, hulled); median grain	9	3
H. vulgare L.	18	6
cf. H. vulgare	16	5
Triticum dicoccum Schubl., (emmer wheat)	7	2
T. dicoccum Schubl.; sprouted	–	1
T. spelta L. (spelt wheat)	93	9
T. spelta L.; sprouted	22	–
T. dicoccum/spelta (hulled wheat)	193	18
T.dicoccum/spelta; sprouted	26	–
Triticum aestivum s.l. (bread wheat)	8	1
Triticum sp.	57	2
Avena sp. (oat)	11	–
cf. Avena sp.	5	1
Cerealia indet.; frags	1145	141
Cerealia indet; coleoptile frags	+++	+
CEAREAL CHAFF		
Hordeum sp. (barley); rachis segment	–	2
Hordeum/Secale sp. (barley/rye), rachis seg.	–	1
Avena sp.; awn frag.	–	4
Avena sp.; floret frag.	1	–
Triticum dicoccum Schubl.; glume base	?	?
T. spelta L.; glume base	31	234
T. spelta/dicoccum; spikelet fork	106	40
T. spelta/dicoccum; glume base	886	844
T. spelta/dicoccum; small glume base	2438	532
T. spelta/aestivum (hexaploid wheat); rachis internode	–	14
Triticum sp.; glume frags	+++	+
WILD TAXA		
Ranunculus cf. *flammula* (lesser spearwort)	1	–
Papaver somniferum L. (opium poppy)	26	–
P. rhoeas/dubium (type) (field poppy)	4	–
Papaver sp.	6	–
Raphanus raphanistrum L. (wild radish)	1	–
Stellaria media agg. (chickweed)	2	–
Silene alba	1	–
Chenopodium cf. album (fat hen)	1	–
Caryophyllaceae indet.	2	–
Vicia/Lathyrus/Pisum sp. (large vetch/pea)	2	–
Vicia/Lathyrus sp. (vetch/tare)	32	–
Vicia/Lathyrus sp. (small vetch/tare)	36	–
V. sativa ssp. *nigra* (L.) Ehrh (common vetch)	9	–
V. cf. sativa (L.)	5	–
V. hirsuta (L.) S.F.Gray (hairy tare)	2	–
cf. Lathyrus pratensis (meadow vetchling)	1	–
Rumex cf. acetosella (sheeps sorrel)	2	1
Rumex. sp. (dock)	6	–
Cf. Rumex sp.	21	–
Cf. Polygonum sp. (knotweed)	4	1
Polygonaceae indet.	2	–
Odontites/Euphrasia sp. (bartsia/eyebright)	14	–
Plantago lanceolata L. (ribwort plantain)	2	–
Galium aparine L. (cleavers)	5	–
Galium cf. verum L. (ladys bedstraw)	1	–
Galium sp.	4	–
Tripleurospermum inodorum (L.) Schulz Bip. (scentless mayweed)	3	–
Anthemis cotula L. (stinking mayweed)	–	3
Compositae (tribe Anthemideae)	4	1
Leucanthemum vulgare Lam. (ox-eye daisy)	1	–
Bromus sp. (chess)	2	1
Gramineae indet.	358	30
unident. bud	1	–
Total	5820	2036
Volume (litres)	90	25
Specimens/litre	64.7	81.4

+ = present; ++ = common; +++ = numerous

cleaned spikelets, although a few spikelet-sized seed heads of stinking mayweed and certain grasses appear to have survived the initial cleaning stages and accompanied the semi-cleaned chaff into the fire.

It is not possible to link this sample securely to the malting process observed in the corndrier, or to clarify the use of the cistern from which the sample was recovered, but the fact that brewing was occurring at the site suggests that the pit may originally have been used as a cistern to germinate grain or even as a brewing tank.

Spelt appears to have dominated the mixed cereal crop represented in the samples, and the numerous agricultural implements recovered from the site suggest that the crop was locally grown.

5 **Animal bone**, by K. Reilly

A sample of 2717 bones from four periods: Period 2 (Bronze Age); Period 4A (Late Iron Age/early Roman); Period 4B (1st–2nd century AD); and Period 4C (late Roman) were analysed. Bones from post-Roman and unphased contexts were not recorded. A major feature of the bone assemblage is the high proportion of associated groups. One particularly large group of skeletons, within structure *420*, was excavated under the supervision of M. Maltby. The on-site presence of a bone specialist resulted in the efficient separation of the component articulations comprising the group. Bones were recorded using the Ancient Monuments Laboratory computer based osteometry system (Jones *et al.* 1981) at the FRU in Southampton.

Preservation and Fragmentation

The preservation of the bones in each period was moderately good. There was no obvious difference between those bones found in shallow or deep deposits although the associated groups, often contained in the latter features, were noticeably better preserved. Gnawed and eroded bones were recovered from a variety of feature types. However the larger late Roman sample showed that these alterations were most prevalent in the shallow features where they were more accessible to scavengers and the elements. This probably also explains the higher degree of fragmentation noticed in this period. The incidence of both gnawed and eroded bones in deeper features in all periods suggest a certain degree of redeposition.

The Assemblage

A high number of the bones (1667; 61%) are from associated groups (Table 75). They are considered separately for each period assemblage with the exception of the Bronze Age (Period 2) where few occurred. The results of species representation and abundance of the non-associated groups are given in Table 74.

Period 2. Bronze Age

Few bones are from Bronze Age contexts, and most were found in deposits associated with two round-houses in trench K. They are sheep/goat and cattle (Table 74).

Table 74 animal bone: total fragments per species by period (excluding associated groups)

Period	*2*	*4A*	*4B*	*4C*	*Total*
Cattle	10	20	21	177	228
Sheep/goat	12	30	70	216	328
Pig	–	–	4	18	22
Horse	–	6	–	26	32
Red deer	–	–	1	1	2
Large mammal	7	10	29	243	189
Small mammal	4	14	36	139	193
Unid. mammal	–	–	–	31	31
Dog	–	1	3	9	13
Rat	–	–	3	–	3
Polecat/dom. ferret	–	4	–	–	4
Domestic fowl	–	–	1	3	4
Rook/carrion crow	–	1	–	–	1
Total	33	86	168	763	1050

Period 4A. Late Iron Age/early Roman

Associated groups

Over 70% of the associated groups of this period (Table 75) were recovered from two deposits within structure *420*.

Structure 420: The associated groups came from two deposits infilling the sunken-floored building in trench G. A number of features were cut into the platform including gully 468 which contained a partial skeleton of a mature cow. A sizeable dump of sheep/goat carcasses was found lying on the floor of the structure beneath colluvium. The compaction of these bones suggests that they were animals dumped together or within a short period. Thirty-five groups, mostly sheep, were separated from a total of 901 bones. A wide variety of ages was represented from foetal to very mature (archive). Most of the groups are partial skeletons and consist of only a few articulated bones, representing a minimum of 27 individuals. No butchery marks were found so it is likely they were originally dumped as whole carcasses. They may have been deposited as a collection of partially complete animals and formed a dump of wellrotted carcasses, possibly from a variety of sources.

Several skeletal parts, in particular limbs, were often separated. The carcasses were probably only buried in a shallow hollow and the limbs and other body parts may have been dragged off by scavengers. This would also explain the presence of gnawing. Further removal and disturbance of these skeletons took place at a later date when a 1st–2nd century ditch/gully system was cut through the overlying colluvial deposits. Some skeletons escaped both disturbance phases. A number of well developed foetal skeletons was recovered, including two situated in the pelvic region of a mature ewe suggesting that death occurred within or just before the lambing season, presumably in late winter or spring.

Graves: Grave goods in the form of nine partial skeletons were found in eight of the 24 graves. Four are left forelegs of foetal sheep/goat (graves *514*, *916*, *5009* and *5130*). Other grave goods were vertebrae and two forelimb parts of a mature sheep (grave *5111*); sheep/goat vertebrae (?grave *952*); the left side of a split skull and jaw of a mature male pig (grave *5018*); and the foreleg (tibia and fibula) of quite a large juvenile/immature pig (poss-

Table 75 animal bone: relative abundance of associated groups by period

	Period 4A				*Period 4B*				*Period 4C*			
	N	*N1*	*N2*	*%*	*N*	*N1*	*N2*	*%*	*N*	*N1*	*N2*	*%*
Cattle	1	22	42	52.4	4	51	74	68.9	–	–	–	–
Sheep/goat	47	1058	1088	97.2	4	82	160	51.3	13	234	442	52.9
Pig	2	4	–	100.0	–	–	–	–	–	–	–	–
Horse	–	–	–	–	3	50	50	100.0	–	–	–	–
Large mammal	–	–	–	–	–	125	155	80.6	–	–	–	–
Dog	–	–	–	–	–	–	–	–	3	41	50	82.0
Total	50	1084	1170	92.6	11	308	439	70.2	16	275	492	55.9

N = number of associated groups; N1 = number of bones in associated groups; N2 = toal bones per species; % = N1÷N2 x 100

ibly wild boar or large male) in grave *914*. Notably these pig bones represent the entire pig assemblage from this period.

A very juvenile (possibly neonatal) cattle pelvis from grave *916* could conceivably be associated with the human remains. Butchery chops on this bone fragment suggest the deposition of a particular joint. The deliberate burial of a certain part of the skeleton is clearly shown by the foetal articulations, including one grave good which is represented by a single bone, a radius, from grave *5130*. Both pig groups seem to follow the same deposition pattern. Some graves, particularly in the area adjacent to the cemetery structure *929*, were badly disturbed by later activity which may explain the general lack of grave goods in these graves.

Other contexts: These groups are comprised entirely of sheep and are largely immature and partial skeletons. It is likely that these articulations, unlike those found in graves, were not purposely placed deposits. They were disposed of in a variety of abandoned open features, including the sunken-floored building.

General waste

A total of 86 bones, predominantly of sheep/goat but with some cattle, horse, and dog (Table 74), was distributed over the site amongst a variety of features. The single best represented of these was pit *363*, which produced 23.2% of the assemblage.

Period 4B: 1st–2nd centuries

Associated groups

Eleven associated groups were found in variety of deposits, mostly within abandoned features.

Features: Ditch/gully complex *418, 419, 420, 422*, cut into the colluvium sealing Period 4A structure *420*, revealed three partial sheep skeletons (a foetal, an immature, and a mature animal) and a thorough mix of partial skeletons/individuals of cattle and horse.

Graves: Three out of the seven graves in this period contained animal bones, of which two are likely to represent grave goods. Grave *250* produced a left foreleg of a foetal sheep/goat. Grave *964* produced three bones of a cattle neonatal skeleton including the pelvis. This possible grave was situated in a highly disturbed area, adjacent to the earlier cemetery structure *929*.

General waste

The total of 168 bones dated to this period was concentrated in certain areas of the site, in particular in the possible settlement area at the north of trench K (44 bones; 26.2% of the assemblage), in various features including pit and gully complex *534* (50 bones; 29.8%). Individual features with a reasonable quantity of bones include graves 964 (26 bones; 15.5%) and *444* (25 bones; 14.9%). Most of the bones are sheep/goat although a relatively high proportion of cattle came from the gullies and a single red deer bone from one grave (Table 74).

Period 4C. Late Roman 3rd–4th centuries

Associated groups

Eight of the 16 associated groups were found in pit *579*, five were recovered from the cistern *360* and three from post-hole *790*.

Pit 579: The associated groups in this pit, situated within structure *5197*, were found in one fill. The bones represent a minimum of seven sheep and produced eight partial skeletons. Ages range from possibly juvenile to immature though six out of eight were probably immature. Butchery marks were noticed on two immature skeletons.

Cistern 360: At least two separate carcass dumps were found within the cistern. They comprised two sheep skeletons (one partial and one near complete representing a juvenile and a foetal individual respectively) and a minimum of three dog skeletons (two partial; an immature and a mature individual; and one near complete, very mature, dog).

Post-hole 790: This post-hole (part of structure 5197) contained three partial sheep skeletons, two immature and one very mature.

General waste

A large proportion of the total assemblage of 763 bones was recovered from three main areas: deposits within and contemporary with structure *5198*, trench E (136 bones; 17.8%) where most of the fragments (92) were found within the series of floor surfaces, in the demolition/collapse of revetment wall *356* (Fig. 91) and the post-abandonment fills within corndrier *404* and cistern *360* (218 bones; 28.6%), and in deposits overlying structures, including *867*, and the fill of four pits in trench K (273 bones; 35.8%). These deposits clearly post-date the platforms whereas the pits, if not the fills, may have been contemporary with them.

As with all other phases sheep/goat predominate. Low numbers of horse, dog, and domestic fowl are also represented (Table 74). It is possible that the best represented structure, *867*, in trench E and the demolition/collapse contexts adjacent to revetment wall *356* may represent the remains of middens.

Discussion

Associated groups

Out of a total of 77 associated groups, 50 were found in Late Iron Age/early Roman contexts and 34 of these were in one deposit in the sunken-floored building *420*. While cattle, dog, pig, and horse are represented in associated groups (Table 75) the vast majority (64) are sheep. The greater incidence of sheep in comparison with the other species may reflect its greater importance, either for domestic or ritual purposes, and possibly the greater vulnerability of this animal to disease. The better representation of associated groups in Period 4A can be explained by the large quantity in structure *420*.

The associated groups comprise both partial and near complete skeletons. It was argued for those in structure *420* that most, if not all, the animals represented were originally dumped as whole carcasses. From the incidence of dog gnawing and the likely disturbance of various parts of the site, it can be assumed that a large proportion of the other associated groups also represents whole carcasses.

Most of the associated groups were clearly dumped in convenient hollows. It is possible that these, especially whole when deposited, died from natural causes, probably disease. Apart from the grave goods, a few associated groups apparently represent animals which had been killed. This is suggested by the presence of cutmarks and, in one case, by an indication of deliberate rather than a convenient deposition (archive). It is assumed that an animal whose carcass has been utilised, either for its products or perhaps for its symbolic value, would have been killed rather than have died of natural causes.

An age profile was calculated from the large quantity of sheep aging data (archive) which suggests that a wide variety of ages is represented. This is compatible with most deaths being due to disease. It is also interesting to note that the majority of associated groups with cutmarks were in the 1–2 year bracket.

A large proportion of the excavated graves contained animal grave goods, in particular during Phase 4A. Sheep, pig, and cattle are represented (Table 46) though, as with non-funerary associated groups most are sheep. Out of eight graves in this period with animal remains, four contained left forelimb elements of foetal/neonatal sheep. From the aging evidence (archive) these probably represent neonatal individuals. If these animals were deposited soon after their demise it can be suggested that the accompanying humans had also died during the lambing season, ie., possibly March or April. Perhaps, as with the sheep it is possible that the people on this site were most vulnerable to death in late winter or early spring. Another point of interest is the incidence of pig bones. These are clearly significant as they represent the only pig bones found at this site during the Late Iron Age/early Roman period.

Table 76 animal bone: percentage composition of main domestic species by period

Period	*2*	*4A*	*4B*	*4C*
Cattle	45.4	35.0	21.4	39.7
Sheep/goat	54.6	52.6	71.4	48.4
Pig	–	–	4.1	4.1
Horse	–	10.5	–	5.8
Dog	–	1.9	3.1	2.0
No. bones	22	57	98	446

Major domesticates

Details of the major domesticates are only summarised here (Table 76) and only where they differ from the overall details presented from the other By-pass sites; a full report is in archive.

Sheep / goat

Sheep bones formed a large part of the assemblage from all four major periods; no goat bones were definitely present. Most sheep were culled in their second year as seen with those from the By-pass sites, but young (less than one year) and neonatal sheep were represented in the associated groups.

Withers heights estimates from Late Iron Age/Romano-British examples range from 48.9 cm to 61.4 cm with a mean at 56.7 cm and are similar to those of comparable date (AD 60–200) at Greyhound Yard (Maltby 1993).

Cattle

Most cattle were at least 3 years old at death and a large proportion in Periods 4A and 4C survived beyond the age of 4 years. A small number of mandibles are likely to represent animals with a minimum age of 5 years, possibly much older (Maltby 1981, 179). A few neonatal/juvenile animals are represented. Their abundance is difficult to assess due to preservation biases.

A similar range of withers height estimates was displayed for all the Period 4 material. Period 4C produced wither heights estimates of 107.3–119.3 cm (mean 114.6 cm) with a single individual at 130.6 cm and Period 4B estimates are probably from one individual. One animal in Period 4C with an average height of 119.7 cm may have been male. The Bronze Age cattle bones were within the range of measurements of later periods.

Cattle were clearly larger than those from Iron Age contexts at Flagstones and from the Romano-British periods at Greyhound Yard (Maltby 1993). A closer comparison is afforded by late Roman Owlesbury and Winchester (Maltby 1987) where the mean values are a little larger but the size ranges are very similar.

Pig

Few pig bones were recovered and both the Period 4B and 4C material shows a wide distribution of ages, perhaps with second year animals in the majority. Very few first years are represented and some of the older animals may be well over two years. Bone size suggests

that most of the animals were domestic. However, an animal appreciably larger than any others represented in the site assemblage was placed in grave *5018*. It is either a particularly large male domestic pig or a wild boar.

Horse
Two immature individuals are represented, one from the 1st–2nd century and one late Roman in date. The majority of the horses were clearly of advanced age.

Other species
A red deer antler fragment was found in each of Periods 4B and 4C. The 1st–2nd century fragment clearly re presents a shed antler. In addition both pieces have been burnt and the latest shows signs of polishing. Therefore, while these fragments certainly show the importance of antler as a raw material, they do not necessarily indicate the use of deer as a food source (Grant 1982).

Fowl bones, representing mature birds only, were found in the later two periods. The single fowl bone recovered from a 1st–2nd century context displayed a severe case of osteoperosis (Baker and Brothwell 1980, 61).

Species Representation: Economy and Exploitation

Period 2. Bronze Age
This period is represented by a very small number of bones and just two species, cattle and sheep/goat (Tables 73 and 75). The predominance of these species is also shown by the combined Late Bronze Age assemblages from the Southern By-Pass excavations, and from Middle Farm in particular (archive). It was suggested (*above*) that the abundance of these species indicates a higher degree of farming specialisation in comparison to the Neolithic and earlier Bronze Age periods which features a greater dependence on wild animals.

Period 4A. Late Iron Age/early Roman
Sheep/goat are clearly predominant in this period (Tables 74 and 76). In order of abundance, cattle and then horse, are also well represented. Butchery marks were found on cattle and sheep/goat bones but at no time during this period or later were butchered horse bones represented. While samples are small it is perhaps unlikely that an animal the size of a horse could be defleshed without leaving a single mark. The majority of the meat demand was undoubtedly provided by cattle.

The presence of young sheep/goat and cattle suggests that breeding populations of both species were present at this site. In addition older cattle were found which probably represent breeding stock. Such animals are obviously necessary to maintain a viable herd. It is perhaps surprising therefore that sheep/goat older than *c.* 2 years of age are very poorly represented. While these figures may be an artefact of the small sample sizes they may also denote a possible redistribution of mature animals. The cull of young adult cattle and the predominance of immature sheep/goat suggests that both species were principally exploited for their meat.

Period 4B. 1st–2nd century AD
Possible significant changes include a marked drop in the representation of horse and the inclusion of pig bones in the general waste assemblage of this period. The species distribution compares quite favourably to that shown by the Period 4 assemblage from the Southern By-Pass sites. It is also similar to the earliest period at Greyhound Yard (AD 60–100; Maltby 1993) with one major exception; pig bones are clearly better represented on the urban site.

It is likely that both cattle and sheep/goat were, again, principally exploited as a source of meat, although the latter species were culled at a later age compared to the earlier period. Unlike the Late Iron Age/early Romano-British sheep/goat, no age group is obviously under-represented.

Period 4C. Late Roman
As in previous periods the age profiles of cattle and sheep/goat suggest that both species were principally exploited for their meat. Breeding population of both species are again indicated. This period, however, displays a marked increase in the abundance of cattle at the expense of sheep/goat such that the two species are almost equally represented. A similar abundance, but with generally lower values, is shown at Greyhound Yard, AD 75–400. It is possible that the late Romano-British inhabitants of the Western Link area may have succumbed to the Roman influence and copied, to a certain extent, the urban diet. The lack of change between the Late Iron Age and Romano-British species distributions from the By-pass sites may signify a greater resistance to such influence.

The urban influence on the late Roman diet at this site did not extend to a greater exploitation of pig. This animal is particularly well represented in all periods at Greyhound Yard (Maltby 1993). In sharp contrast pig bones form a very small part of the overall assemblage at this site. A similarly poor representation is also shown by the Iron Age and Romano-British periods of the By-pass sites.

Conversely, horse is better represented at all these rural sites, including Western Link, in comparison to Dorchester. The representation of these two species may show major differences in dietary preference between the town and the rural inhabitants. It was suggested that in the case of horse, the use of this species for its meat was highly developed in the Iron Age and continued in importance into the Romano-British period in rural areas only. Yet, as stated above, there is no evidence at this site that the horse was eaten.

6 Marine Molluscs, by Sarah F. Wyles

Only 93 marine molluscs were retrieved by hand excavation or coarse mesh sieving. Six species were present and occurred in Late Iron Age (Period 4A) to post-Roman (Period 6/7) phases. The details are presented in archive.

The species recovered, in descending order of numerical abundance, are periwinkle (*Littorina littorea*), oyster (*Ostrea edulis*), cockle (*Cerastoderma edule*), mussel (*Mytilus edulis*), and single shells of limpet (*Patella* cf. *vulgata*) and scallop (*Pecten maximus*). Periwinkles and oyster formed the bulk of the assemblage but periwinkles are most numerous because they were recovered where controlled coarse mesh sieving from metre squares occurred, creating an artificial bias towards these smaller shells. Scallop did not occur in the Late Iron Age or Roman contexts.

Sixty per cent of the assemblage is medieval–post-medieval (Period 6/7) but contains only oyster, cockle, and periwinkle. The general range and proportions of species is typical of other sites in the locality, such as Greyhound Yard (Winder 1993), Alington Avenue (Winder forthcoming), and County Hall (Allen 1993b). As with all of these sites, marine molluscs were supplementing the diet but, from the available evidence, were never a major dietary component.

Part 4: Synthesis and Discussion

9. Synthesis and Discussion

1 Introduction

This chapter attempts to synthesise the results of the project and to integrate them into the local and regional archaeological record. The focus is on the immediate environs of Dorchester, between the River Frome and South Winterborne; the area depicted in Figure 1. The prehistory of the wider area has been described and discussed in some detail by Woodward (1991 and in Sharples 1991, 9).

The South Dorset Ridgeway (Woodward 1991) and the Maiden Castle Survey Projects (Sharples 1991), whose prime or partial aims were to examine and make clear the settlement and land-use sequence, have both presented a period by period account of the landscape developments within this particular archaeological landscape, especially for the prehistoric period. In both cases the preliminary results of the Southern By-pass excavations have been used to support these models of landscape development. This discussion has used a thematic approach to bring out more clearly and concisely the evidence that confirms or refutes the existing accounts. The three themes consist of: landscape, land-use, and farming; communal monuments and burials; and settlement, subsistence, and economy.

2 Landscape, Land-use, and Farming, by Michael. J. Allen

The large number of environmental analyses within the Dorchester environs was concentrated in a comparatively small area of downland, but is complemented by previous work on the major monuments (Mount Pleasant, Maiden Castle, and Maumbury Rings), so that a more complete and integrated picture of the landscape can be seen. In addition to the molluscan and sediment analyses there is a comprehensive suite of other archaeological information, now including soils analysis (Staines 1991), and fairly good faunal information as well as ceramic and artefact distributions (cf. Woodward 1991; Sharples 1991). This intensively studied area provides more detailed information which allows the evolution of land-use to be modelled and further interpretation to be presented.

The fact that a large number of environmental data-sets have been recovered from a relatively small area enables a more detailed reconstruction of the *patterns* of land-use (Fig. 282) not previously attainable in this area, nor in other areas of Downland England. For instance, in this environmental programme alone nearly 60,000 shells from the ten different sites have been identified. Although the faunal assemblages are not huge they span the Neolithic to medieval periods and assemblages derive from numerous cultural activities ranging from the domestic to the ritual.

The strength and resolution of the interpretation of land-use patterns within any study area are based upon the density of data-sets. Often a single site has been considered to be broadly representative of a chosen defined landscape. In the Dorchester environs the number of data-sets allows us to begin to examine the mosaic of land-use patterning *within* the study area. As the resolution of interpretation relies not on the number of data-sets but on the their density within the area of study, a simple calculation of this density enables a quasi-quantitative 'confidence' rating to be made (Allen 1994, table 152) from which it can be seen that the Dorchester environs is significantly better served than many:

Study area	*No. data-sets*	*Km² chalk in study area*	*Density*	*Confidence factor*
Dorchester	12	35	0.343	34.3
Stonehenge	17	54	0.315	31.5
Winchester	3	16	0.187	18.7
Avebury	20	130	0.154	15.4
Isle of Wight	9	64	0.140	14.1
Strawberry Hill (Wiltshire)	1	10	0.100	10.0
Lewes (Sussex)	9	106	0.085	8.5
Kent	3	1500	0.002	0.2

The density of data-sets within each area is calculated (data-sets ÷ km^2) and multiplied by 100 to give a relative information factor, or data-set content factor, which provides some indication of the quantity of data underlying the resolution of interpretation in each area and, therefore, some level of confidence in that resolution.

It is, however, pertinent here to restate the nature of the area. The chalklands around Dorchester consist of a wide open downland plain bisected by the River Frome. The downlands are sharply defined north of Dorchester by the Frome and its floodplain. Immediately north of the Frome the undulating Chalk is locally capped with plateau gravels. These deposits are more extensive to the east of Dorchester at the confluence of the Frome and South Winterborne where extensive areas of Reading Beds are also mapped. In attempting to understand the nature of the farming economy of this area we must not forget the areas immediately off the Chalk down which may have contained other resources and farmed different crops and animals, but which formed a part of the wider prehistoric land-use and farming economy. In contrast to the chalkland, we have a relatively limited understanding of the landscape and environment to the north of the River Frome. This area of clayey alluvial soils and acid brown earths (on Reading Beds) probably played an important contributory role within past farming economies, but was not

investigated as the area falls outside the route of the By-pass.

Modifying the Wildwood; Mesolithic Activity on the Chalklands (pre-4000 cal. BC)

Evidence for extensive Early Neolithic clearance of the post-glacial woodland can be inferred at least along the Alington ridge (Fig. 120). There is some ambiguity as to whether the Dorchester chalklands were ever afforested in the Flandrian, Postglacial period. Only in one instance (Maiden Castle) has such an environment been convincingly argued (Evans and Rouse 1991a; b), based on mollusc evidence. Arguments for the antiquity of the downlands have been presented by Bush (1988; 1989) and Bush and Flenley (1987) but woodland must have been available in this area for the construction of the large timber monument at Greyhound Yard and for general domestic consumption. Here we will confine ourselves to the Tansleyian (1939) assumption that the Chalk of southern England was afforested.

Molluscan evidence indicates clearance at some time considerably before 3750 cal. BC. Furthermore, the lack of woodland indicators in a number of Early Neolithic contexts has been taken to indicate that this clearance may have been larger than the extremely localised clearances suggested at Maiden Castle and occurred prior to the Early Neolithic. Indications of clearances of Late Mesolithic date are not uncommon (Kinnes 1988, 3), but that they may have been fairly large on the chalklands is now more evident from a number of implied localised Mesolithic clearances at, for instance, Strawberry Hill (Allen 1992; 1994) and Stonehenge (Allen 1995a). At both these sites pine charcoals from otherwise undated features have given radiocarbon determinations of earlier Mesolithic date (Table 77) and indicate some Mesolithic woodland clearance.

The reasons for Mesolithic woodland clearances have been discussed (Dennell 1983; Mellars 1975). Some caution has been expressed about using this evidence to indicate the human exploitation of wild ungulate populations (Edwards and Ralston 1984) or even that clearances were anthropogenic as opposed to the result of natural lightening strikes (eg. Moore 1982). The dates quoted (Table 77) are from definite archaeological features and it is difficult to refute an anthropogenic origin. The relatively high level of human activity in the Dorchester landscape from the Early Neolithic, and the nature of the clearances, confirms that if woodland existed, felling must have occurred in the Mesolithic and was the result of human action; it was not the result of natural causes as Boyd (1982a; b) and Moore (1982) have suggested for some other early 'clearance' evidence. Some of the principal reasons suggested for clearances were for settlement *per se*, but also to improve browsing for wild ungulates (cattle and deer in particular) and to encourage the spread of a diverse understorey vegetation. Both deer and cattle would be attracted to the clearings thereby facilitating herding and, in particular, the 'management' of deer hunting (Dennell 1983).

Table 77 radiocarbon determinations for Mesolithic woodland clearance in southern England (all dates on *Pinus* charcoal)

Site / feature	*Lab. ref*	*BP determination*	*Date cal. BC (2 σ)*
Strawberry Hill, Wiltshire			
Ditch	OxA–3040	9350±120	8920–8080
Stonehenge car park, Wiltshire			
Post-pit 9580	GU–5109	8880±120	8090–7580
Post-pit 9580	OxA–4219	8520±80	7700–7420
Post-pit 9580	OxA–4220	8400±100	7580–7090
Post-pit B	HAR–456	8090±140	7480–6590
Post-pit A	HAR–455	9130±180	8820–7730
Itford Bottom, East Sussex			
Treehole	BM–1544	8770±85	8000–7570

Landscape: Woodland Clearance and Landscape Management (4000–500 cal. BC)

The understorey vegetation encouraged by clearfelling would have included a number of food plants (Mellars 1975) and undoubtedly also a number of grasses, among them cereals. Cultivation of wild or introduced cereals within initially localised, but eventually larger, clearfelled areas is likely. The widespread increase in cultivation from the 4th millennium BC can be seen to be the result of a number of factors, among them the fertility of the soils and climatic amelioration (Late Atlantic). Continued crop success resulted in an increased reliance on cereals as a main vegetable food, permanence of settlement, and increased population, as outlined by Harris (1977). Indeed, this evidence for the early establishment of successful agricultural communities confirms the hypothesis presented by Evans *et al.* that causewayed enclosures could only have been constructed after the establishment of sufficient numbers of such communities in any one region (Evans *et al.* 1988, 82).

The widespread clearance of the remaining woodland occurred through the Neolithic and was virtually completed by the later Neolithic/Beaker period (Fig. 120). Clearance can be seen to have been progressive with the exception of limited woodland regeneration on the hilltops of Maiden Castle and Mount Pleasant. The situation at Maiden Castle is particularly interesting as, contrary to some theories that causewayed enclosures lie in the centre of regions or defined territories (Drewett 1978; 1985), it has been postulated that Maiden Castle was situated outside the main settlement zone on the boundary of the territory of the community where it could be used as a focus not only 'for the organisation of internal community relationships but also the relationships between communities' (Evans *et al.* 1988, 82), and generally causewayed enclosures are now considered as being peripheral (eg. Bradley 1984; Gardiner 1988; 1991b). The centre of the settlement and agri-

cultural land is, therefore, precisely that area of Chalk of the central lowland zone bisected by the Dorchester Southern By-pass (Fig. 3), as suggested by the sites investigated along it. The postulated peripheral location of Maiden Castle has major implications for our perception of this landscape. The fact that it is located away from the centre of primary activities of the community indicates that the woodland regeneration recorded during the later Neolithic period (Evans *et al.* 1988) was not a widespread phenomenon. The evidence presented here suggests that large portions of the landscape remained open and thus perhaps the woodland was confined to the hilltop of Maiden Castle itself and temporary abandonment enabling the growth of a small copse on the knoll. One could envisage Maiden Castle in the later Neolithic rather as Danebury looked in the 1970s AD, even to the extent of being sited within a very open agricultural landscape. Nevertheless mature, large oak trees were used for the construction of the Dorchester timber monument, and later for the palisade at Mount Pleasant, but these need not necessarily have come from the Chalk.

Whereas in earlier periods the population had access to arable, pasture, and woodland, the large scale clearance of trees, accomplished by the later Neolithic/Beaker period for intensive agricultural use of the landscape, led to the availability of only restricted areas of woodland on the Chalk. Only Maiden Castle (temporarily), and perhaps the steeper chalkland slopes leading onto the Frome floodplain, contained any significant woodland. It is probably regeneration from these steeper slopes that can be seen at Mount Pleasant during the later Neolithic and Beaker period *c.* 2500–1800 cal. BC.

It is likely that the clay areas to the east of Dorchester would have remained forested for far longer than their chalkland counterpart, and could have been a major source of timber. If the populations within this area were separate communities then this resource could have been traded for agricultural produce from the chalklands. It is, therefore, possible to invoke social and economic links between local communities during the Neolithic.

Landuse: Managing a Food Resource and Procurement (4000 BC–AD 500)

By integrating the data and interpretation from excavations detailed here and the major analyses conducted previously, the land-use and farming of the Dorchester environs can now be seen from a landscape, rather than site specific basis. From this data we can see general trends in the development of farming rather than those isolated by individual sites. The basic information is summarised in Table 78 and illustrated in Figure 120.

Starting in the Chalk landscape (4000–3350 cal. BC)

In the earlier Neolithic (4000–3500 cal. BC), the evidence for activity in the central lowland zone is limited to the pits at Flagstones, the causewayed enclosure at Maiden Castle, and molluscan and colluvial evidence for clearance at Middle Farm. However, the open landscape suggested by the molluscan evidence implies more widespread use of the area. Wheat and barley were cultivated at Flagstones and the presence of *Galium aparine* suggests that they might have been autumn sown. Legumes (peas/vetch, etc) may also have been cultivated. The molluscan evidence indicates localised, disturbed, probably tilled, areas suggesting cultivation of small plots of land. Cereals have also been recovered from Early Neolithic contexts at Maiden Castle (Palmer and Jones 1991) and are implied from the peat sequences at Rimsmoor at *c.* 4230–3720 cal. BC (5150±90 BP; HAR–3919; Waton 1982; Waton and Barber 1987). Although the mollusc evidence indicates disturbed ground or tillage, this probably took the form of small plots of land rather than formalised fields, and it is likely that the cultivars only supplemented wild resources which may have been systematically collected. Clearance of woodland promotes the growth of fruit-bearing shrubs, as well as providing browse for cattle, the most common animal remains. At both Flagstones and Maiden Castle wild species were not important, or at least their remains were not disposed of in the areas excavated. The predominant species were cattle, pig, and sheep. Open woodland probably provided suitable browse for cattle, pannage for pigs as well as a variety of fruits and berries. The impetus for woodland clearance can be seen to be primarily for occupation, building, pasture and browse rather than for cultivation.

Pasture (3350–2500 cal. BC)

By the second phase of monument building in the Middle Neolithic (3300–3000 cal. BC) pasture was well established along the Alington ridge at least as seen at Flagstones enclosure and Alington long barrow. There is no indication of widespread cultivation, nor is there any evidence of field systems. Grazed grassland seems to be the predominant feature of an increasingly open landscape; livestock (cattle, pigs, and sheep) probably being more important than the cultivars.

Large areas of downland had been cleared and were under varying degrees of pasture by the time of the third phase of monument building in the later Neolithic (3rd millennium cal. BC). Light grazed grassland is suggested at Conygar Hill, but more intensively grazed, short cropped grassland at Flagstones, Fordington Farm, Mount Pleasant, and Maumbury Rings. It is difficult to ascertain how representative are the small faunal assemblages from many of these non-domestic monuments. Nevertheless, although cattle are generally predominant, pigs are relatively important, especially at Conygar Hill and Mount Pleasant. Although pigs have been interpreted as an indication of woodland, they will benefit from clearance and the increased food diversity this brings. Further, their occurrence at these two non-domestic sites may not be typical of domestic practices. Localised, larger scale tillage is evident by this time. Although no 'fields' have been identified, disturbed contexts indicative of localised tillage are seen at Alington Avenue and Flagstones. They were associated with small quantities of cereal remains from the lower fills of the ditches, which were subsequently ploughed and filled with ploughwash.

Tillage: the onset of arable farming (2500–1500 cal. BC)

By the Beaker period/Early Bronze Age (2300–1500 cal. BC), within an increasingly open environment, clearance had initiated and cultivation had encouraged colluviation in dry valleys, for example at Middle Farm, here associated with Beaker pottery, and possibly in Fordington Bottom. In both these cases limited cultivation of areas of brown earth soils may be suggested and was certainly taking place on Maiden Castle (Sharples 1991).

The lack of evidence for Neolithic or Early Bronze Age 'field' boundaries is consistent with evidence from elsewhere in the Dorchester environs. This is probably because fields had not been formally delineated by the construction of field boundaries. Early Bronze Age boundaries have been suggested at Poundbury (Green 1987, 26) and Alington Avenue (Davies *et al.* forthcoming), but these must remain both tentative and ambiguous. A boundary ditch in the base of Fordington Bottom is, however, more likely to be of this date. During this period (late 3rd–early 2nd millennia cal. BC) it is evident that agriculture became a significant component of food procurement for the first time. The combination of increased sedentism, the lack of wildwood, and its associated wild fruit and animals, may have resulted in a largely farmed landscape.

The increase in scale of agriculture and tillage led to higher rates of erosion including localised severe episodes. These can be seen at Middle Farm and may explain the truncation of the earlier soils in the valley bottom. The tops of hills and ridges, in particular, suffered badly from erosion. It is interesting, and probably significant, that these possibly less productive, areas were the location of barrows and linear cemeteries in the early 2nd millennium cal. BC. Admittedly this location of barrows is common, but perhaps it is more than coincidental that it is precisely these areas that may have been agriculturally less productive than the gentle slopes and valley bottoms.

Soil thinning would be particularly marked along the intensively tilled ridges. One manifestation of this may be the loss of soil structure with a potential for serious aeolian erosion. Indeed from the whole area only two sites produced aeolian deposits: Mount Pleasant (Evans and Jones 1979) and Alington Avenue (Allen forthcoming); both located on the eastern (probably down wind) end of the Alington ridge. Efforts may have been made to improve the soils on the slopes and hilltops by manuring. The fresh- and brackish water shells found on a number of sites might also indicate the inclusion of river derived soil or vegetation.

Arable landscape (1500–*c.* 450 cal. BC)

Nevertheless, from the 2nd millennium cal. BC onwards, not only was there increasing arable, but structured field systems are evident (Woodward 1991, 152). The earliest consist of linear ditches or lynchets/terraces on the sides and floors of dry valleys. By the middle of the 2nd millennium cal. BC they are seen to be set out around the heads of a dendritic pattern of valleys encompassing the deeper acidic silty clay loam soils over plateau drift on the ridges to the west of Dorchester, the deeper moderately calcareous soils in the colluviated dry valleys, and the thinned calcareous rendzina soils on the valley sides and chalk ridges to the east of Dorchester (Staines 1991; *above*). Evidence of these field systems was recovered from below Conygar Hill, Middle Farm, Bridport Road Ridge, Fordington Down, and Fordington Bottom. In addition evidence from other excavations and from aerial photography has allowed the identification of four further groups set out to the north and east of Maiden Castle (Woodward in Sharples 1991), and a fifth which may exist in and around the combe in which the Dorchester post monument (excavated at Greyhound Yard) was positioned (Woodward *et al.* 1993).

Most of the colluvial sequences at both Fordington Bottom and Middle Farm belong to this period; they are significantly more calcareous and indicate the erosion of thinner, more chalky, soils. Much of the central lowland zone may have been tilled. Although there is evidence from soil and molluscan evidence as well as the field boundaries for intensive cultivation, the products of cultivation (carbonised remains) are fairly sparse. As in preceding periods wheat and barley were grown. By contrast, there are considerably larger faunal assemblages. Red deer, which have been represented in earlier periods mainly by antler picks, are insignificant. Sheep and cattle increase in numbers; sheep dominate and this is consistent with the large areas of particularly short grazed grassland indicated by the molluscan evidence. The Middle and Late Bronze Age sheep from Middle Farm seem to be particularly large animals and this has been suggested as possible evidence for flocks of sheep being brought into this area. Most of the herds seem to have been for meat rather than dairy products.

The evidence indicates large scale, managed and systematic farming of the downland with much of the area under crop and planned stock control and husbandry. Extension of field systems would have led to a reduction in available cultivable land, and therefore possibly competition for land. This may explain the mid–later Bronze Age physical delimitation of individual fields and of possibly the construction of 'ranch boundaries' (cf. Bowen 1978; Bradley 1984; Bradley *et al.* 1995, for instance). Assuming land was passed down through extended family groups, then those farming units which started expanding first, or continued to do so more aggressively, would end up with a larger area of defined farmland once the whole agricultural area became spoken for. During a period of pressure and competition for a declining resource, those with larger 'estates' may have wielded more 'power' over farming units with smaller, almost unviable plots. Here, therefore, the archaeological consequence of soil erosion may have been to change the face of the landscape and prehistoric farming. Further, it is even possible that one of the consequences led to the hierarchical, stratified societies postulated during the Iron Age (Cunliffe 1982; Champion 1975). This, therefore, enables us to argue for an expansion in land-use which is readily detectable in the form of field boundaries and systems, *without* a concomitant expansion in population.

In order to retain a viable agricultural regime the population might have been better off relocating on more fertile soils in the region. However, the investment of

Table 78 site correlation of the chronological development of prehistoric land-use in the Dorchester area

Maiden Castle Farm						Barrow Arable				
Fordington Barrow						Barrow Pasture		Ditch fills Arable		
Middle Farm					Beaker occupation/ hillwash Cultivation					
Mount Pleasant				Pre enclosure, barrow & timber structure Clearance & grassland	Beaker Grazed grass	Aeolian I Arable/ grazing	Aeolian II Regeneration		Hillwash Arable	
Fordington Bottom					Gully 262 Pasture/ arable	Hillwash Arable			Ditches Pasture	
Conygar Hill				Pit rings Long grass						
Greyhound Yard				Post monument Long grass & shrubs						
Alington			Bank barrow Established grazed grass		Double barrow Arable		Ditch fills Arable		Field ditches & fills Arable	
Maiden Castle	Treeholes Woodland	Enclosure Woodland/ slight clearance	Bank barrow Open	Ditch fills Secondary woodland		Beaker occupation Cultivation	Bronze Age barrow Grassland		Iron Age hillfort Pasture	
Flagstones		Pit 00221 Established open long grassland	Enclosure Grazed grass	Ditch fills Grazed grass	Barrow Arable		Ditch fills Arable		Pits & ditch fills Pasture	
Date		4000	3500	3000	2500	2000	1500	1000	500	0
Landscape		Localised woodland, some with limited clearances in a 'savana' grassland		Predominantly pasture with localised & limited secondary woodlands	Pasture & tillage Increasingly larger areas under cultivation, some pasture & very localised shrub/secondary woodland regeneration		Ploughed landscape		Mixed arable & pasture but with an increasing predominance upon pasture	

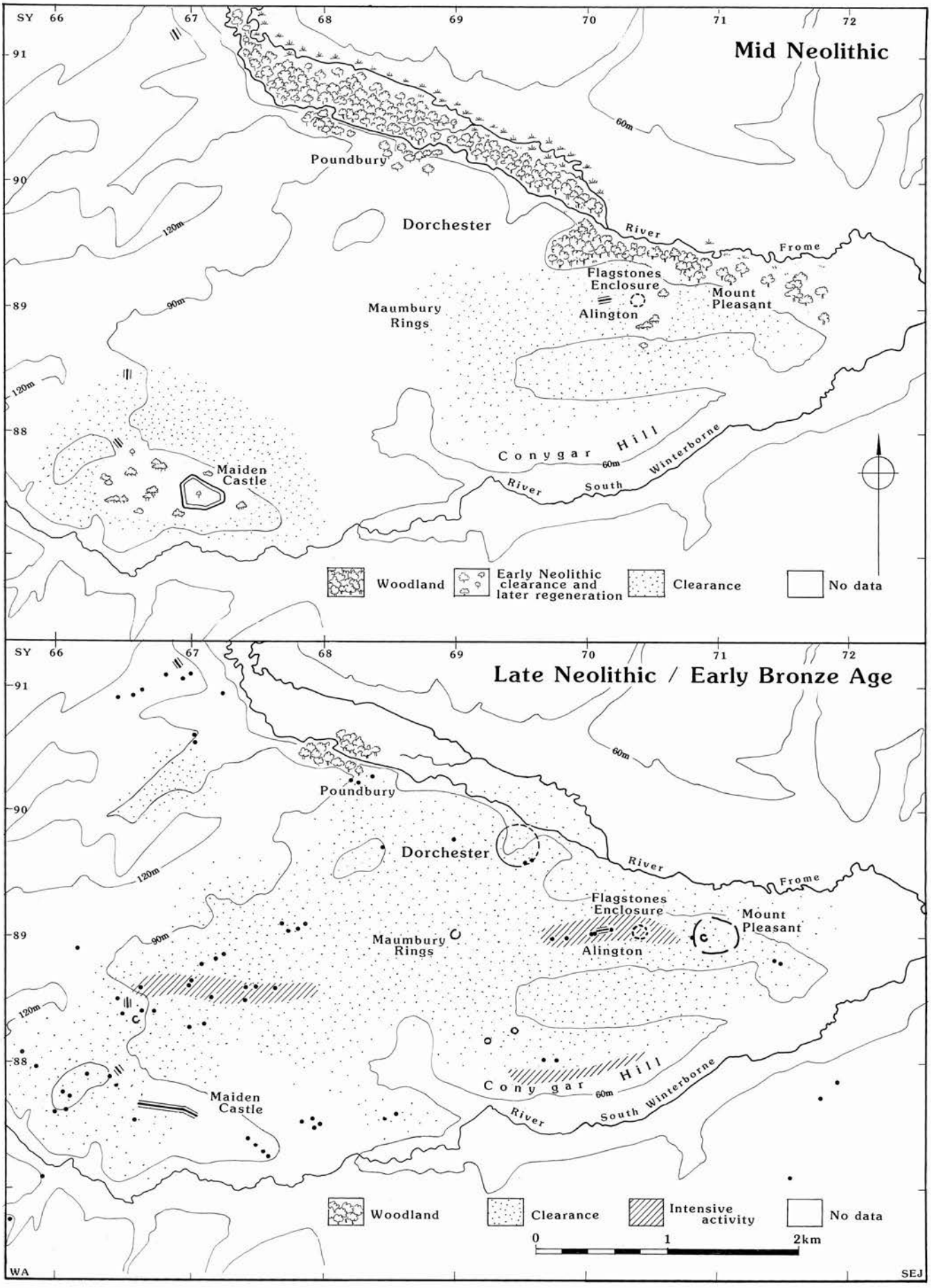


Figure 120 Hypothetical reconstruction of the Dorchester landscape

time, energy, and inertia in terms of physical settlement attributes would lead a community to continue to invest in their current landscape rather than move. There is little direct evidence from the excavated sites for the earlier Iron Age. Our environmental evidence is restricted to soil and mollusc evidence from the colluvial sequences and ditch fills. Continued tillage and intensive grazing regimes (as evidenced from the mollusca in the ditch fills) seemed to have depleted the organic and nutrient levels to such an extent that, during the Iron Age, cereal farming may have been largely unviable and although sheep were undoubtedly predominant the animals were noted to be significantly smaller possibly as a result of lack of nutrition.

Stored grain was obviously more vulnerable to theft than that in the fields. Trade and exchange with peripheral communities was established or strengthened. As mentioned above grain may have been bought in together with timber and pottery. Meat, dairy products, and textiles were probably produced on the downlands and available for trade and exchange.

A change in farming (*c.* 450 cal. BC ->)

During the later Iron Age continued tillage and intensive grazing regimes had led to depletion in soil depth and possibly to 'exhausted' soils. Although some new field systems were created (eg. on the Bridport Road ridge) significant changes are evident and the pattern of fields changed.

The tilled areas at Flagstones which existed from the 2nd millennium cal. BC reverted to longer, only lightly grazed grassland. More stable conditions are also suggested in Fordington Bottom, again perhaps land on the valley sides and on the Down was taken out of cultivation. Further evidence for this is the increase of false oat-grass (*Arrhenatherum elatius*) which can grow in abandoned arable land which is only lightly grazed.

This was not a universal picture, however, as the land surrounding the Fordington Farm barrow was taken out of pasture for the first time in a millennium and tilled. If this is representative it may indicate a reduction in cereal cultivation overall. If so then it would be coincidental with a change in crop composition. Spelt wheat was recorded for the first time (Flagstones) as well as the free-threshing form of bread wheat (*Triticum aestivum*), oats, and hulled 6-row barley. The depletion in soils is also generally coincidental with a change in cultivars; from bread wheats to barley. The latter is considerably more tolerant of poorer soil conditions. Further, the strong contrast in the weed taxa and the presence of heath bent grass (*Sieglingia decumbens*) which prefers acid soils may indicate that some of the cereals were not grown locally.

During the later Iron Age, it is possible that significant quantities of grain were not grown on the chalk within the Dorchester area locally but were imported. Surplus grain was stored in pits and it is perhaps no coincidence that it is during this period that we see the occurrence of defendable hillforts, possibly in part because stored grain is obviously more vulnerable to theft than that on the ear.

The establishment of *Durnovaria* engendered a dichotomy between a rural and an urban culture. Farming was necessary to feed residents in the town occupied in other employment. There is some indication that there was a temporary increase in tillage during the Romano-British period which may have been due to requirements of the town, but also, possibly to the use of the mould-board plough which was introduced into Britain at about this time.

Along the By-pass the evidence during the Romano-British period is one of general cultivation and livestock farming. Indications that some changes in livestock were a result of the demands of the Roman town is suggested by the faunal evidence. Within Fordington Bottom, a much richer and higher level of farming is depicted by the both the faunal and seed evidence. This may be a result of more formalised farming on a Roman estate, as opposed to that undertaken by the native populations in the surrounding area.

In the post-Roman period some of the field boundaries which previously existed as open dry ditches were replaced by ditches with hedged banks; the hedges provided extra fodder for browsing cattle. Soil erosion continued and is evident, for example, in the coombes at Middle Farm and Fordington Bottom, and lynchets were created on the steeper slopes of the Frome valley, at St Georges Road and Fordington Bottom, and the South Winterborne (Evans and Rouse 1991a). These may represent an individual episode of intensive arable activity which cannot be precisely dated, although sometime in the Middle Ages may be suggested at St Georges Road. These substantial soil movements may be linked to a phase of increased alluviation on the Frome floodplain (op. cit.). By the 17th century a water-meadow system had been laid out on the Frome floodplain and represents the latest and most intense exploitation of a resource undoubtedly heavily utilised since the Bronze Age (Whitehead 1967).

3 Communal Monuments and Burials

Neolithic and Bronze Age, by Frances Healy

Radiocarbon determinations relating to Neolithic and Bronze Age monuments in the Dorchester area are represented diagrammatically in Figure 121 and listed in Table 79. The monuments themselves are mapped in Figure 2.

The Flagstones Enclosure

A stone monument?

The former existence of a stone setting on the site of the Flagstones enclosure, demolished when the ditch was dug or very soon afterwards, is suggested by the presence of slabs and fragments of sarsen, limestone, and sandstone in the ditch segments and by shallow sockets almost coinciding with the circuit of the ditch and truncated by its weathered-back edges.

The possibility is enhanced by a local tradition of the monumental use of stone. Instances include the chambered long barrows of the Hell Stone, Portesham (RCHM(E) 1970, 432) and the Grey Mare and her Colts, Long Bredy (RCHM(E) 1952, 42), a possible monolith found near the entrance to Maumbury Rings in the 19th century (Bradley 1976, 15), and the sarsen cove which replaced the wooden structure on site IV at Mount Pleasant *c.* 2130–1820 cal. BC (Wainwright 1979a, 28–31).

Dating
Three of the four determinations relating to the construction of the Flagstones enclosure form a conformable sequence: HAR–9158 and OxA–2322 for samples from the base of the ditch and OxA–2321 for a burial cut into the initial chalk rubble fill. HAR–8578, for a further sample from the base of the ditch, falls rather later. If it is accepted that HAR–9158 and OxA–2322 date the construction of the enclosure, then this would have taken place *c.* 3300–3000 cal. BC.

The engravings
The engravings on the ditch sides (Fig. 23) may be exceptional by virtue of their survival rather than their original rarity. Other instances of carving on the sides of chalk-cut features include, in chronological order, the ditch segments of an oval barrow at North Marden, Sussex, a *terminus ante quem* for the construction of which is provided by a radiocarbon determination of 4710±110 BP (HAR–5544; 3550–3370 cal. BC; Drewett 1986, fig. 6, 6–8), the walls of a Late Neolithic mine shaft at Grime's Graves, Norfolk (Clarke 1915, figs 5–6), and the side of a grave pit containing two successive burials, both accompanied by Beakers, at Shrewton, Wiltshire (Green and Rollo-Smith 1984, fig. 12).

All of these consisted of simple, even random, linear motifs, like engravings B and C at Flagstones and like the carved chalk blocks found in a number of Neolithic and Bronze Age contexts which are listed by Varndell (1991, 106). Local examples have been found in the primary silts of the Maiden Castle causewayed enclosure (Laws 1991a, fig. 170:1), the shafts of Maumbury Rings (Bradley 1976, fig. 7), and the pits of the Wyke Down henge in Cranborne Chase (Barrett *et al.* 1991a, fig. 3.21).

Engravings D and, in particular, A at Flagstones stand out by their predominantly curvilinear motifs, executed with some deliberation on the evidence of changes in line direction, apparently to conform to a preconceived pattern (Fig. 23). The two successive stages of engraving A similarly suggest that its execution was a purposeful rather than a casual act. Parallels for this engraving in the art of some megalithic tombs (Woodward 1988, 272–3) combine with the context of the Flagstones engravings to suggest a measure of significance for them.

Affinities
The enclosure was built in a period from which relatively few monuments have been recognised. The small amount of pottery from primary contexts is plain Neolithic bowl. The slightly larger amount of struck flint invites comparison with later Neolithic industries in including a chisel arrowhead and in displaying less bladelike proportions than the assemblage from the earlier Neolithic pits on the site.

Some features of the monument itself relate it to the causewayed enclosures of previous centuries, others set it apart from other monuments. The most obvious similarities with causewayed enclosures are in plan and size. The presence of complete, articulated child burials in the ditch may also be matched in the earlier monuments, including Maiden Castle (Sharples 1991, 151). The stone slabs placed above them recall the flint cairns built over child burials in the ditch of the main enclosure on Hambledon Hill (Mercer 1980, 31).

Disarticulated human remains, which figured so prominently in the deposits of Hambledon and some other causewayed enclosures and were sporadic in later monuments, were, however, very rare at Flagstones and are almost all attributable to the later disturbance of articulated burials. Another contrast lies in the fact that there was no attempt to clean or recut the Flagstones ditch, which was left to silt up naturally. The cutting of one burial into the initial chalk rubble fills stands out as an isolated event. The monument's virtually circular plan is more easily matched among later Neolithic enclosures than earlier ones.

Also absent were rich deposits of artefacts and food remains, like those made at various stages in the use of the Hambledon ditch (Mercer 1988, 94–7) or the 'midden layers' which overlay the primary silts of some sections of the inner ditch at Maiden Castle (Sharples 1991, 51). Very little of the debris of living could be related to the construction and use of the enclosure. There were no elaborate or exotic objects and no hint of placed deposits apart from the burials. A tally of ten sherds, 147 pieces of struck flint, a chalk ball, six antler picks, and some 50 fragments of animal bone from the primary fills of the excavated half of the enclosure makes for a very clean monument. Far more artefacts and food remains entered the top of the ditch during the Bronze Age as a result of weathering and cultivation. In this, Flagstones is distinguished as much from later Neolithic enclosures with their rich artefact assemblages and carefully structured deposits as it is from earlier Neolithic ones. Like the near-contemporaneous first phase of Stonehenge, it combines elements of both while remaining *sui generis* (Cleal 1995, 113–4).

Implications
Given that the single most numerous artefact class, the struck flint, reflects the opportunistic use of the ditch as a quarry, there would have been virtually no artefacts had the ditch not been cut in flintbearing Chalk. This raises the possibility that other enclosures of the period may have escaped recognition because it was not the practice to deposit numerous or distinctive objects within them.

The Dorchester area

Middle Neolithic monuments
The importance of the Alington ridge, running east–west between Mount Pleasant and Maumbury Rings, as a monumental focus has been emphasised by Wood-

ward (1991) and Bellamy (1991b). The first monuments definitely built there were the Flagstones enclosure and the Alington Avenue long monument some 160 m to the west (Davies *et al.* forthcoming). A single radiocarbon determination of 4450±80 BP (HAR–8579; 3340–2920 cal. BC) for a cattle skull found on the base of the ditch of the long monument makes its construction indistinguishable in date from that of the enclosure. The beginning of monument building on the ridge is likely to have followed the construction of the Bank Barrow over the infilled and abandoned ditches of the Maiden Castle causewayed enclosure, at some time before *c.* 3350 cal. BC (Ambers *et al.* 1991, 105). Two long barrows north-west of Maiden Castle (RCHM(E) 1970, 432) are likely to have gone out of use at about the same time.

The artefacts from the primary fills of the ditches of the Alington Avenue long monument are comparable with those from Flagstones, although more abundant. The pottery consists of plain, flint-tempered body sherds which may be of Neolithic bowl. The struck flint shows more emphasis on blade production than the assemblage from the Flagstones enclosure, but like it reflects the use of the ditches as a quarry for material which was removed from the site after preliminary working (Bellamy forthcoming).

The long monument invites comparison with earlier long barrows, not least in the way in which its flanking ditches were dug in intercutting segments (Woodward in Davies *et al.* forthcoming). The near parallel alignment of its flanking ditches and its very narrow proportions (*c.* 10 m wide between the ditches and 75 m long) are, however, more reminiscent of bank barrows (Woodward in Davies *et al.* forthcoming). The degraded state of the monument makes it impossible to tell if the absence of burials was original.

Later Neolithic monuments

Later Neolithic monuments were built along the axis of the ridge — Mount Pleasant at its eastern end, near the Frome–South Winterborne confluence and Maumbury Rings to the west. On the evidence of the available radiocarbon determinations (Fig. 121) these and the Dorchester timber monument (Woodward *et al.* 1993), were in use together in the period *c.* 2900–2500 cal. BC. The two small pit-ring henges on Conygar Hill (Site 4) to the south must have been contemporaneous, on the evidence of their form and of the Grooved Ware found in one of them. Their overall plans recall that of the rather larger Wyke Down henge in Cranborne Chase (Barrett *et al.* 1991a, 92–108). Both the Conygar Hill pit-rings compare closely in size and plan with some of the smaller Late Neolithic enclosures at Dorchester-on-Thames, Oxfordshire (Atkinson *et al.* 1951). The predominantly Peterborough Ware associations and the funerary use of the Oxfordshire monuments are not, however, replicated in the Dorchester monuments. Since the existence of the Conygar Hill pit-rings was unknown until topsoil was stripped for the construction of the by-pass, other comparable sites may well remain undetected. There is an apparent, uninvestigated, hengiform in the Lanceborough barrow group north of Maiden Castle (Woodward 1991, 136).

Visual impact of the monuments

The visual impact of the monuments is difficult to imagine in their present, almost completely flattened, state. At Maumbury Rings a bank up to 3.7 m high enclosed an area some 80 m in diameter, itself ringed by shafts up to 10 m deep (Bradley 1976, 32). At Mount Pleasant the main enclosure bank stood 4 m high, on the evidence of the fragment protected by the Conquer Barrow, and enclosed an area measuring 370 x 320 m within which was a ditched timber structure with an internal diameter of 38 m (Wainwright 1979a, 4, 22). The Dorchester timber monument may have had a diameter of as much as 380 m and was formed of closely-spaced oak trunks each some 1 m in diameter (Woodward 1993, 355). While it lacked the ridgetop siting of the other two, its location across a coombe would, from the inside, have made the surrounding posts seem particularly tall and dominant, just as a comparable location still vastly enhances the effect of the earthen bank of Durrington Walls, Wiltshire.

Material associations

Maumbury Rings, Mount Pleasant, the Dorchester timber monument, and pit-ring *52118* on Conygar Hill were all built and initially frequented by users of Grooved Ware. The association of pig long-bones and skull fragments with Grooved Ware in the primary chalk fill of one segment of the pit-ring replicates the pork consumption evidenced in the larger enclosures (Bradley 1976, 20; Harcourt 1979b 221–3; Maltby 1993, 315). Elsewhere this is matched more readily in contemporaneous monuments and structured pit deposits than in settlements and may be the debris of feasting rather than of everyday diet (Bradley 1984, 64; Legge 1991, 65–6).

Structured deposits

Structured deposits, themselves often a feature of Late Neolithic monuments, have been identified at Maumbury Rings, the most striking being a red deer skull with its antlers found close to a chalk phallus (Bradley 1976, 18–22; Bradley and Thomas 1984). Current work by Julian Thomas may reveal patterning among the abundant artefacts and food remains of Mount Pleasant. There is no hint of purposeful deposition in the post-pits of the Dorchester timber monument, the flint industry from which seems, like the earlier assemblages from Alington Avenue and Flagstones, to represent the preliminary working of nodules extracted during the construction of the monument (Bellamy 1993a, 137; forthcoming; *above*).

The segregation of later Neolithic pottery styles

While Grooved Ware was the almost exclusive ceramic of the local Late Neolithic enclosures, Peterborough Ware, with Beaker, marked the continued frequentation of Maiden Castle, especially the Bank Barrow, by this time under secondary woodland. A bank between the two enclosure ditches may have been built at the same time (Sharples 1991, 55–7, 255–6; Cleal 1991a; Evans and Rouse 1991, 124). Grooved Ware was much scarcer, the few confidently provenanced sherds being confined to a pit outside the enclosure (Cleal 1991a, 182).

Table 79 Radiocarbon determinations for Neolithic and Bronze age sites in the Dorchester area between the Rivers Frome and South Winterborne

Site / context	*Material*	*Lab. ref.*	*BP determination*	*Date cal. BC 2σ*
MAIDEN CASTLE				
Inner ditch, fills				
Primary	C	BM–2449	5040±60*	3990-3700
Primary	B	OxA–1337	5030±80*	4000-3690
Primary	C	BM–2450	5030±40*	3970-3700
Secondary	B	BM–2454	4830±60*	3780-3380
Primary	H	OxA–1148	4810±80*	3780-3370
Secondary	B	BM–2447	4800±45*	3700-3380
Final	B	OxA–1142	4750±80*	3780-3350
Secondary	B	OxA–1143	4730±80*	3700-3350
Secondary	B	BM–2448	4710±70*	3650-3350
Secondary	B	OxA–1147	4690±80*	3650-3150
Primary	B	OxA–1144	4550±80*	3520-2930
Final		OxA–1141	4360±80*	3330-2780
Outer ditch, fills				
Primary	H	OxA–1338	4930±90*	3970-3520
Primary	H	BM–2451	4860±70*	3790-3380
Primary	B	OxA–1339	4740±80*	3700-3350
Primary	B	OxA–1340	4650±70*	3620-3200
Primary	B	BM–2452	4640±50*	3620-3140
Bank barrow ditch fills				
Secondary	B	OxA–1576	4790±100*	3780-3350
Secondary	B	BM–2456	4720±100*	3780-3140
Pit cut in primary fill of bank barrow ditch				
	A	OxA–1145	4660±80*	3640-3100
	A	OxA–1349	4660±80*	3640-3100
Bank barrow ditch fills				
Primary	B	OxA–1146	4650±80*	3630-3100
Final	C	OxA–1341	4460±80*	3370-2910
Final	B	BM–2455	3470±70*	2020-1630
Bank between ditches				
	C	BM–2453	4310±100	
	B	OxA–1336	4570±80	3600-3040
FLAGSTONES				
Pit *00221*	C	HAR-9161	4960±80*	3970-3540
Basal ditch fill				
Burial	H	HAR-9158	4490±70*	3370-2920
Fill	A	OxA–2322	4450±90*	3370-2910
Burial cut into fill	H	OxA–2321	4210±110*	3100-2490
Fill	A	HAR-8578	4030±100*	2890-2300
Central burial	H	HAR-9159	3560±70*	2140-1740
MIDDLE FARM				
Structure *03252*	C	OxA–2382	4800±70	3780-3380
Burial, ditch *03051*	H	HAR–9160	3200±90	1690-1260
ALINGTON AVENUE				
Long monument				
basal ditch fill	B	HAR–8579	4450±80*	3370-2910
?Double round barrow				
Burial, primary ditch fill	H	HAR–9662	3810±120*	2580-1920
DORCHESTER TIMBER MONUMENT				
Post-pits				
1631	C	HAR–6689	4140±90*	2920-2470
1635	C	HAR–6687	4090±70*	2890-2470
1631	C	HAR–6688	4080±70*	2890-2470
Church St	C	HAR–5508	4060±90*	2890-2390
4163	A	HAR–6664	4070±70*	2890-2460
1635	C	HAR–6686	4020±80*	2880-2340
4885	A	HAR–6663	4020±80*	2880-2340
MOUNT PLEASANT				
Pre-enclosure	C	BM–644	4072±73*	2890-2460
Conquor Barrow, ditch fill				
Primary	A	BM–795	4077±52*	2880-2480
Primary Ditch fill				
N. entrance	C	BM–792	4058±71*	2890-2460
N. entrance	C	BM–793	4048±54*	2870-2470
Ditch fill				
Buried soil	C	BM–791	3891±66*	2580-2140
Base, W. entrance	A	BM–645	3734±41*	2290-2030
Upper ditch fill				
N. entrance	C	BM–790	3619±55*	2140-1820
N. entrance	C	BM–788	3506±55*	2020-1690
N. entrance	C	BM–789	3459±53*	1920-1670
W. entrance	C	BM–664	3410±131	2120-1430
Site IV, ditch fill				
Primary	A	BM–667	3988±84*	2870-2290
Primary	A	BM–666	3941±72*	2860-2200
Primary	C	BM–663	3911±89*	2860-2140
Secondary, (cove construction)	C	BM–668	3630±60*	2200-1820
Tertiary	C	BM–669	3274±51	1680-1440
Palisade				
post removal	B	BM–794	3956±45	2590-2340
Palisade trench, construction				
	C	BM–665	3645±43*	2180-1900
	A	BM–662	3637±63*	2200-1820

Table 79 (continued)

Site / context	*Material*	*Lab. ref.*	*BP determination*	*Date cal. BC 2σ*
MAUMBURY RINGS				
Shafts				
1, base	A	BM-2282N	3970±70*	2860-2300
2, topmost Neo. fill	A	BM-2281R	3940±130*	2880-2040
FORDINGTON FARM BARROW				
Graves				
61	H	UB–3306	3844±30*	2460-2200
59	H	UB–3305	3767±47*	2350-2030
70	H	UB–3304	3715±54*	2290-1970
POUNDBURY				
post-hole, settlement enclosure	C	HAR–993	3380±70	1880-1520
upper fill, ditch *136*	C	HAR–994	3030±90	1510-1010

A = antler; B = animal bone; C = charcoal; H = human bone
* = represented on Figure 121

At Mount Pleasant, on the other hand, there were only six sherds of Peterborough Ware to 657 of Grooved Ware and they were confined to a 100 m length of the palisade trench in the north of the enclosure (Longworth 1979, table III). Since the palisade was built *c.* 2120–1970 cal. BC the few relatively localised sherds of Peterborough Ware may have been residual from an earlier episode, perhaps unrelated to the monument.

The segregation of the two styles from each other and often from Beaker is widespread. Its possible social dimensions have been discussed at length (Thorpe and Richards 1984; Thomas 1984). A functional dimension is equally likely: the relative scarcity of radiocarbon determinations securely associated with developed, ornate Peterborough Ware must be due at least in part to the ways in which the ceramic was used and deposited. There is also room for a chronological dimension in the sense of successive *floruits* for three overlapping but not entirely contemporaneous traditions, taking as a starting point the emergence of the Ebbsfleet sub-style in the course of the earlier Neolithic (Smith 1974, 112). Within this timescale, developed Peterborough Ware could have been in use before the widespread adoption of Grooved Ware.

It is possible to suggest, in the roundest of figures, that developed Peterborough Ware may have been most widely used *c.* 3500–2500 cal. BC (Gibson 1994, 175), Grooved Ware *c.* 2900–2100 cal. BC (Garwood forthcoming), and Beaker *c.* 2600–1800 cal. BC (Kinnes *et al.* 1991, 39). This would be consistent with the progressive replacement of Grooved Ware by Beaker as the most common ceramic in the ditch silts at Mount Pleasant (Longworth 1979).

The evidence from Cranborne Chase lends further support to the hypothesis. Although the Peterborough Ware there remains undated, there are *termini post quos* of 4575±77 BP (weighted mean of OxA–625 and OxA–626; 3500–3100 cal BC) and 4570±120 BP (OxA–624; 3510–3040 cal. BC) for Mortlake and Fengate Ware from the upper ditch silts of the Dorset Cursus, and 4740±130 BP (BM–2284R; 3690–3360 cal. BC) for sherds in the same sub-styles from the upper ditch silts of the Wor Barrow, while determinations of 4140±60 BP (BM–2406; 2880–2610 cal. BC), 4080±50 BP (BM–2407; 2870–2500 cal. BC), and 4040±90 BP (BM–2395; 2870–2460 cal. BC) relate to the two local assemblages of Grooved Ware (Barrett *et al.* 1991a, 51–2, 77, 92). It is surely pertinent that Peterborough Ware, derived from the Neolithic bowl tradition, was found, as elsewhere, in the upper ditch fills of older monuments while Grooved Ware was found, as elsewhere, in pits and in a newly-built Late Neolithic monument.

The transformation of Mount Pleasant

The late third millennium cal. BC saw the reworking of what was by then a centuries-old monument, overgrown with regenerated woodland (Evans and Jones 1979). The timber structure within the enclosure was replaced with a sarsen cove *c.* 2130–1920 cal. BC, and a palisade of contiguous oak posts 0.3–0.5 m in diameter, with just two extremely narrow entrances was built within and parallel to the line of the earthwork enclosure *c.* 2120–1970 cal. BC (Wainwright 1979a, 28–31, 48–64). The second of these events is the more remarkable in introducing an apparently defensive element into a ceremonial monument.

A linear barrow cemetery

A third event at Mount Pleasant formed part of more widespread developments: a round mound, the Conquer Barrow, was built on top of the main enclosure bank in the west of the circuit (RCHM(E) 1970, 504; Wainwright 1979a, 65–8). While the stratigraphic sequence of the enclosure and mound is clear, its time scale is not. The single radiocarbon determination of 4077±52 BP (BM–795; 2870–2500 cal. BC) for an antler pick from the primary rubble fill of what was taken to be the Conquer Barrow ditch is indistinguishable from determinations for the pre-enclosure surface and earlier than determinations for samples from the primary fill of the enclosure ditch in the nearby west entrance (Table 79). Possible interpretations are:

1. the single determination is aberrant,
2. the determination was made on residual material, which seems unlikely given the nature of the sample and its context,
3. the length of ditch exposed and sectioned close to the west entrance of the enclosure was not in fact the ditch of the Conquer Barrow.

To the west along the ridge a round barrow was built in the middle of the Flagstones enclosure, over a burial dated to 3560±70 (HAR–9159; 2030–1780 cal. BC). Further west again, at Alington Avenue, the east end of the long monument was transformed within the Early Bronze Age by the construction of what was probably a

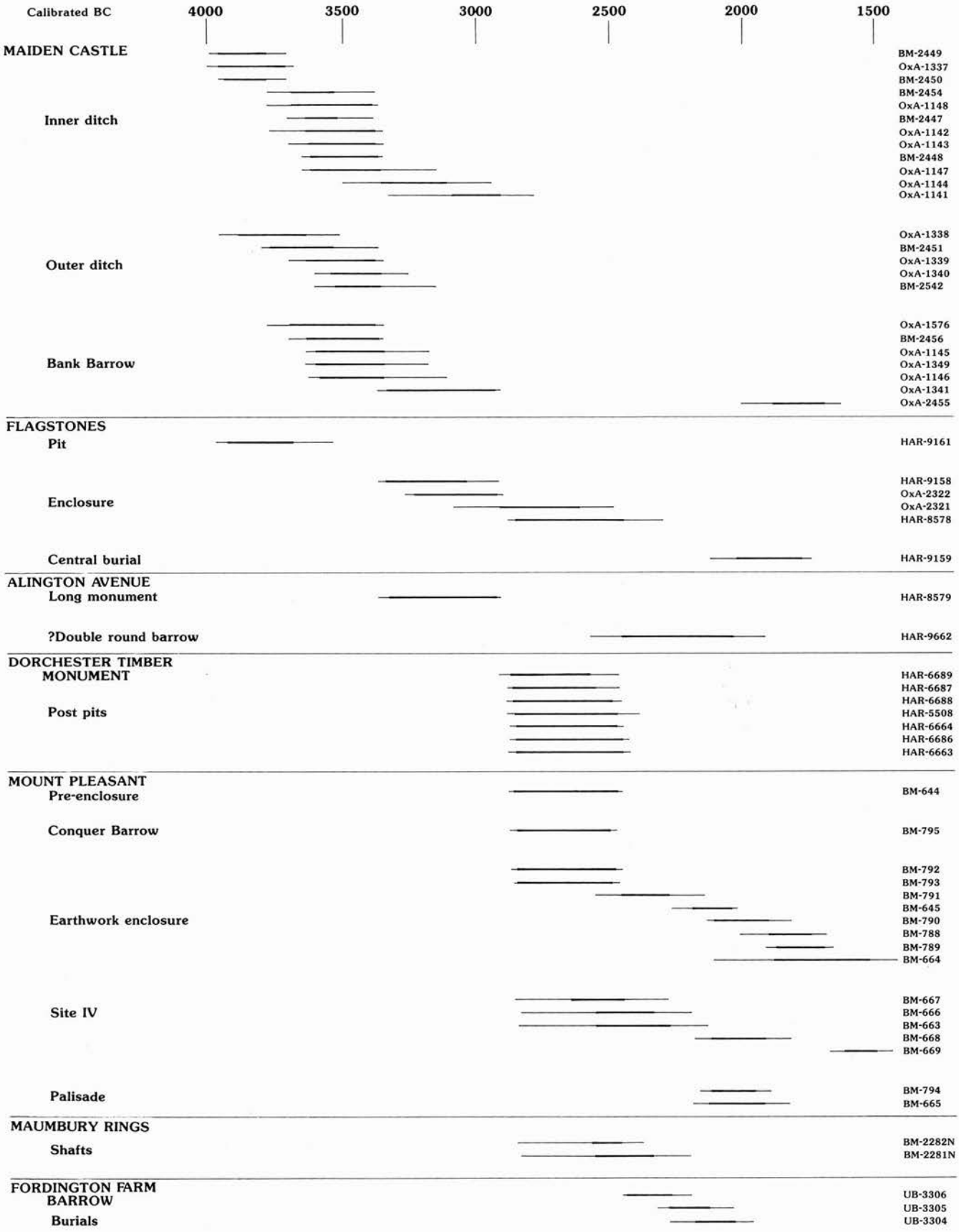


Figure 121 Calibrated radiocarbon determinations for Neolithic and Bronze Age sites in the study area

round barrow over its east end and of what was probably a double round barrow at its west end. One of the burials cut into the ditch of the latter yielded a radiocarbon determination of 3810±120 BP (HAR–9662; 2460–2050 cal. BC; Davies, *et al.* forthcoming). The sequence echoes the superimposition of a round barrow on the Broadmayne bank barrow and of another on the Whitcombe long barrow (RCHM(E) 1970, 431–2).

The barrows built on these three Neolithic monuments formed part of a row of at least seven mounds sited along the ridge between Mount Pleasant and Maumbury Rings over a distance of 1 km (Fig. 3; Bellamy 1991b). It may have been more extensive, including two mounds on Frome Hill to the east of Mount Pleasant (RCHM(E) 1970, 451), an east–west row of four, possibly five, ring-ditches false-crested below the highest point of the ridge at Coburg Road (Smith *et al.* 1992) and an east–west row of four barrows at Thomas Hardye School (J. Nowell pers. comm.) to the west of Maumbury Rings. These would extend the cemetery to nearly 4 km. Gaps to the east and west of Maumbury Rings (Fig. 3) correspond to built-up areas (Fig. 1) which may have obscured intervening barrows.

An alignment of enclosures was thus converted to one of barrows, some of which would have been particularly large and impressive. The Fordington Farm barrow became, after successive enlargements and elaborations, one of the largest bell barrows in Dorset, with a mound perhaps 30 m in diameter surrounded by a ditch with an internal diameter of 42 m (Bellamy 1991b). The Conquer Barrow, built on a 4 m high bank, would have been spectacularly visible even if it had not been exceptionally large. Even today it stands to an additional 3–4 m with an apparent diameter of 30 m. The larger lobe of the probable double barrow ditch at Alington Avenue had an internal diameter of some 30 m, rather larger than the 24 m of the ditch of the Flagstones barrow. All of these fall at the large end of the size range of local bowl barrows which peak at diameters of 16–21 Grinsell paces (13–17 m) south of the Frome and 13–15 Grinsell paces (11–13 m) to the north (Fleming 1971, fig. 13, areas 1 and 4a). The Grinsell pace measures approximately 0.83 m (Darvill and Grinsell 1989, 63). In the relatively treeless contemporaneous landscape the cemetery on the Alington ridge would have been a true landmark.

Little is known of the mounds composing it. The available radiocarbon determinations (Table 79) relate to burials made at early or uncertain stages in the history of the monuments. They show that barrows were being built on the ridge by *c.* 2200 cal. BC without indicating for how long they continued to be built or for how long burials were made in them. The reduced state of the recently investigated mounds has meant that their later phases have been all but destroyed. There is, for example, no evidence for the burials which may have been incorporated in the Flagstones barrow when material was added to it from groups of pits dug around its circumference.

Some hint of the deposits which may have been lost from these mounds is given by a pit cut deep into the Fordington Farm barrow, containing a cremation burial in a Collared Urn accompanied by a copper alloy knife dagger (Bellamy 1991b). This recalls the 'Wessex' burials found in mounds previously excavated in the area (Piggott 1938, 102–3), including the Clandon barrow to the west of Maiden Castle with its gold, amber, and shale grave goods (Drew 1937). An approximate date for such burials is given by a radiocarbon determination of 3120±120 BP (HAR–5620; 1520–1260 cal. BC) for a cremation burial cut into a bowl barrow at Cowleaze on the Dorset Ridgeway, where other nearby cremations were accompanied by 'Wessex' grave goods (Woodward 1991, 58–67; Gingell 1991).

Despite its Neolithic monuments and elaborate Early Bronze Age burials, the Dorchester area lacks any concentration of elaborate and exotic flint and stone implements, such as that which coincides with the complex of Neolithic and Early Bronze Age monuments in Cranborne Chase (Gardiner 1991, 64–9) and is matched by others focused on Rudston, Yorkshire (Manby 1974, figs 35, 38, 40, 41; Pierpoint 1980, 271–5), Arbor Low, Derbyshire (Bradley and Hart 1983, 182–6), and the Windmill Hill–Avebury area in Wiltshire (Thomas 1984, 173). The extensive fieldwalking campaigns of recent years have shown that the absence is a real one.

The view from the mounds

Despite their condition, the proximity of the ring-ditches at Maiden Castle Farm (Site 5) and Coburg Road (Smith *et al.* 1992) to contemporaneous or later settlements and land boundaries allows some further discussion of the nature of the Bronze Age landscape to the west of Dorchester. The barrow cemeteries were constructed on slopes that had been cleared since at least the later Neolithic and had already witnessed severe soil depletion and erosion due to tillage. This is most clearly seen at Middle Farm (Site 8), where the lowest, Bronze Age, sediments of a colluvial sequence were deposited on an eroded surface. Barrows may have been deliberately built on farmland that was topographically most susceptible to further soil erosion and was less able to support a regime of intensive cultivation.

Some of the barrows were built in pasture, others on recently tilled land. As arable became progressively more extensive cultivation extended up to the barrow ditches, which frequently filled with ploughwash and related deposits. The mounds would have become uncultivated islands in an increasingly tilled and grazed landscape, often used as flintknapping areas, where raw material collected from broken ground and weathering barrow mounds was worked out of the way of stock and crops. This resulted in the deposition of quantities of fresh debitage of Bronze Age technology over the mounds and in the already infilling ditches, a phenomenon observed at Maiden Castle Farm, Flagstones, Coburg Road (Healy 1992), and the Lanceborough Barrow Group (Woodward and Bellamy 1991, 32), as well as at Cowleaze on the South Dorset Ridgeway (Harding 1991, 74). At the Fordington Farm barrow an episode of this kind took place between two stages of barrow building, when the site was still in use as a burial monument (Bellamy 1991b).

Mount Pleasant, in its transformed, possibly defended, state, remained in use throughout the centuries of barrow building and modification in an increasingly arable landscape, material eroded from surrounding

cultivated land accumulating in its ditches (Evans and Jones 1979). This extended use is evidenced by large quantities of Early Bronze Age Food Vessel and Collared Urn from the later upper ditch fills and the palisade trench, and by smaller amounts of Middle Bronze Age Bucket Urn from the main enclosure ditch (Longworth 1979). The final event in its history was the apparently systematic destruction of the palisade (Wainwright 1979a, 239–41).

This span of perhaps 1000 years suggests that the monument had a lasting role, perhaps as a regional centre. Its extended use contrasts with the shorter lives of the other Dorchester enclosures. The ditch at Flagstones was under the plough in the Early Bronze Age, as was Maiden Castle (Evans and Rouse 1991b, 124). The posts of the Dorchester timber monument seem to have completely rotted by the same period, perhaps after being burnt down (Woodward 1993, 355), although the fact that only a small proportion of the monument has been investigated leaves room for uncertainty. The absence of Bronze Age material from Maumbury Rings also suggests early abandonment, unless later deposits were lost in the Romano-British truncation of the site.

Life and death in a partitioned landscape

As energy and priorities shifted to the construction and maintenance of substantial enclosed settlements, with fields permanent enough to become marked by lynchets, some of the barrow cemeteries were incorporated into active arable field systems, within which they were respected and preserved, as at Cowleaze on the South Dorset Ridgeway (Woodward 1991, fig 29), although seldom given a wide berth.

While most of the area of the earlier enclosures was ploughed, there is little sign that it was inhabited, Middle Bronze Age living sites lying instead to the south and west (Fig. 3). This may reflect a continued recognition of the monumental zone as well as, more prosaically, the impoverished state of the soils on the ridge as opposed to those of lower lying areas. The latter is suggested by the development of what may have been a Bronze Age field system over the Dorchester timber monument on the edge of the Frome floodplain (Woodward 1993, 358).

Extensive Middle Bronze Age settlement is accompanied by a puzzlingly scant record of burials other than the local 'Wessex' interments, which probably overlap with its early stages (Bradley 1981, 94). This is all the more surprising because the juxtaposition of settlement and cemetery is a feature of the period in some other areas (ibid., 99–102). Evidence for Deverel-Rimbury cremations is scant (RCHM(E) 1970, 444; Woodward 1991, fig. 70), the best documented of the older discoveries being three secondary burials, one of them in a Bucket Urn, in a barrow on Conygar Hill (Acland 1916, 41). Recent finds are confined to two cremations peripheral to the ring-ditches at Coburg Road, one in a straight-sided urn of Deverel-Rimbury type and the other unurned (Smith *et al.* 1992).

This scarcity persists despite the stripping and examination of substantial areas adjacent to the Maiden Castle Farm and Coburg Road cemeteries, as well as more limited areas adjacent to the Flagstones, Alington Avenue, and Fordington Farm barrows. Some cremation burials may have been lost through erosion: it is noteworthy that the Coburg Road cremation burials were in a narrow causeway between two ring-ditches, which may not have been ploughed while the barrows were standing. Others may have been destroyed by the subsequent ploughing down of barrow mounds.

These factors do not, however, wholly account for the imbalance between Middle Bronze Age burials and settlements. It is surely significant that the Dorchester area lies outside two concentrations of Middle Bronze Age cremation cemeteries: a major one to the east in the lower Stour valley on the coastal plain and a slighter one to the north-east in Cranborne Chase (Bradley 1981, fig. 7.1). On the South Dorset Ridgeway, barrows with primary Deverel-Rimbury deposits are more numerous in the south-east than they are closer to Dorchester (Bradley 1981, fig. 7.3) and Deverel-Rimbury burials of any kind are few (Woodward 1991, table 28, fig. 70).

It may be that the occupants of the Dorchester area were burying some of their dead in the cemeteries of the coastal plain, where settlement evidence is scant (Gardiner 1987, 334, ill. 229). It seems more likely, however, that many contemporaneous burials took a different, less recognisable form. In these circumstances, the unaccompanied inhumations found at Middle Farm (Site 8) are particularly important. The tightly flexed skeletons were found close together at the junction of the initial chalk rubble and subsequent soil fills of ditch *03051*. Given this common stratigraphic horizon, the single radiocarbon determination of 3200±90 BP (HAR–9160; 1600–1410 cal. BC) made on inhumation *03421* should relate to all of them. The mode of burial is matched by an unaccompanied crouched inhumation found in segment *2* of the Flagstones enclosure at the junction of the initial and final soil fills and cut by a Late Iron Age ditch. At both sites, the antiquity of the burials was recognised only because they were found in prehistoric ditches. Less surely dated is a crouched infant burial cut into a ditch forming part of a Middle Bronze Age structure at Poundbury (Green 1987, 29): the burial appeared to pre-date the deposition of Iron Age layers but may have formed part of the Durotrigian or Romano-British cemeteries on the site. Most bodies may have been buried or simply placed in hollows without grave goods and outside settlements. Such practices may account not only for the local scarcity of Middle Bronze Age burials but also for the general lack of recognisable burials in several periods of prehistory.

The argument finds some support in the recognition of Middle Bronze Age inhumations in Cranborne Chase, tightly flexed like those from Middle Farm and all but one of them without grave goods (Barrett *et al.* 1991a, 173–4, 211–4). To the further Middle Bronze Age inhumations cited by these authors and by Bradley (1995, 49) may be added unaccompanied, tightly-flexed inhumations secondary to a ring-ditch on Easton Down, Hampshire assigned to the centuries around 1500 cal. BC by radiocarbon determinations (Fasham 1982, 25–30). Further inhumations of the period are represented by skeletons in which fragments of Middle Bronze Age weaponry are embedded, one from Dorchester-on-Thames, Oxfordshire (Ehrenberg 1977, 22, 37:54, fig. 15, pl. 1), and another from Todmarton, Gloucestershire

(Rowlands 1976, 55, 192), the latter with a radiocarbon determination of 2927±90 BP (BM–542; 1300–1000 cal. BC). It should be borne in mind that while some areas, especially on southern chalk, have classic 'Deverel-Rimbury' settlements and cemeteries, others have one, the other, or neither.

The survival of barrow mounds into the Roman and later periods is a testimony to their maintenance and preservation during the Bronze Age, and perhaps further indirect evidence for the absence of intensive Iron Age cultivation. The way in which a Late Iron Age enclosure ditch turns a corner over the ditch of the Flagstones barrow suggests that the mound was then still standing. Few were to survive even as low earthworks, however, when they were incorporated into the medieval open field system. An exception was the Fordington Farm barrow, whose particularly large size ensured that it survived, albeit as a low earthwork, up to the present day.

Iron Age and Later, by Roland J.C. Smith

'Square' barrows

A second phase of burial monument construction, this time of 'square' barrows, has been suggested from soilmark evidence on the low ridge north of Maiden Castle (Woodward in Sharples 1991, fig. 14). The most eastern of five possible such features was cut across by the Southern By-pass at Maiden Castle Road.

'Square' barrows are normally considered to be of Iron Age or Roman date (Stead 1961; Whimster 1981). Few are presently recorded in Dorset or central–southern England (ibid., fig. 45). A possible Late Iron Age example was excavated near Handley (White 1970), while three possible square barrows on Cowleaze, on the South Dorset Ridgeway, have now been shown to be later medieval in date and probably associated with rabbit husbandry (Woodward 1991, 56).

The Maiden Castle Road square enclosure was sited on a spur above dry valleys to the north and east. It was certainly earlier than and separate from the late Roman settlement cemetery to the north and appears to represent an isolated burial feature on the periphery of contemporaneous settlement features. There was no evidence for an internal mound. The very shallow enclosure ditch would have provided little material with which to construct a mound and the late Roman boundary ditch cuts across the enclosure with no indication of the presence of such a feature.

The feature is more comparable in form to square ditched enclosures with single central burials recorded at the suburban Roman cemeteries at Poundbury (Farwell and Molleson 1993) and at Lankhills, Winchester (Clarke 1979). In both these cases the features were of late Roman, probably 4th century, date and they were associated with substantial suburban cemeteries. The Maiden Castle Road enclosure was at least twice as large as these features. The size and form of its ditch bears more comparison to the Handley barrow, although that feature was furnished with a central mound sealing a cremation burial (White 1970).

Further interpretation is hindered by the lack of precise dating. Although stratigraphically the enclosure pre-dates the 4th century, a range of 1st century BC (or earlier?)–3rd century AD is possible. Metalwork is recorded from Late Iron Age/early Roman burials at Poundbury (Farwell and Molleson 1993) and, as here, may represent grave furniture or goods rather than evidence for a coffin. Similarly the form of burial, flexed and within a shallow, wide grave is not dissimilar to early Roman burials at Poundbury. However, the position of the body with head to west and lying on the left side is the opposite of the characteristic 'Durotrigian' Late Iron Age burial rite (Sharples 1990, 92).

The feature, therefore, seems to fall somewhere between a 'square' barrow and the ditched burial enclosures. The absence of similar forms of burial structures on the periphery of other Late Iron Age and early Roman settlements around Dorchester at Poundbury, Fordington Bottom, and Alington Avenue is notable. However any implication for the status of associated settlement is not evident from the limited collection of early Roman material recovered from Maiden Castle Road and from the absence of accompanying grave goods from the central grave. If the enclosure is certainly of Late Iron Age or early Roman date the associated settlement features lie somewhere within the cropmark complex to the west. The enclosure may represent a minority burial rite associated with a distinct (but not necessarily high status) class or social grouping attached to the Maiden Castle Road settlement.

Burials

Deposits in storage pits

It has been suggested, notably by Hill (1989) and Cunliffe (1992), that the deposition of artefacts and of wholly or partly disarticulated animal bodies in disused storage pits may sometimes reflect as much purpose and structure as that of complete human and animal corpses. This view finds some support in the contents of the Flagstones pits. The skulls and articulated limbs of these assemblages figure repeatedly in deposits regarded as 'special' elsewhere (Grant 1984, 533–43; Wait 1985, 149–50). The concentration of horse and cattle limbs in two layers of a single pit (Fig. 34) is particularly remarkable.

Pit burials

Late Iron Age burials from Flagstones comprised three pit burials and four burials from shallow graves. The pit burials, including one from the base, and two within the fills of storage pits, add to the small number of such burials recorded in south Dorset from Maiden Castle (Wheeler 1943, 347) and Alington Avenue (Davies *et al.* 1985, 104). The characteristics of the Flagstones examples conform to those previously noted (Whimster 1981, 5). All are crouched, lying on their sides and none was accompanied by grave goods, except for the other 'special' deposits within pit *00302*. Accompanying material from the pits allows these burials to be dated to the 1st century BC confirming that the act of pit burial continued in south Dorset into that century (ibid., 39).

Interestingly, these pit burials were interspersed with unaccompanied, crouched burials in graves. In one instance a burial can be shown to be stratigraphically later than that in the pits, but still of a possible 1st century BC date confirming that, in this community, the transition from pit to grave burial occurred in that century. They do not wholly conform to the characteristics of Durotrigian burials; for example, none are accompanied by grave goods (ibid., 37), distinguishing those from the distinctly rich accompanied burials previously recorded along the Alington ridge, including burials immediately to the east in Max Gate (RCHM(E) 1970, 577). However it is likely that the Max Gate and Flagstones burials all represent Durotrigian burials from the same settlement, and that the Flagstones examples represent only the unaccompanied examples within the overall burial group.

Durotrigian burials

In addition to the four burials from Flagstones, a further 25 Durotrigian burials were recovered from Fordington Bottom. These provide an addition to the recorded number of burials of a distinctive character concentrated around the modern town of Dorchester that has been examined and discussed recently (Whimster 1981; Sharples 1990; Woodward in Farwell and Molleson 1993, 216).

None of the Fordington Bottom burials can conclusively be shown to be of pre-Conquest Late Iron Age date and this is supported by the absence of other early material at the site. It is likely they date from the mid 1st–2nd century AD, with the majority dating to the second half of the 1st century AD. A similar date is suggested for the majority of burials within the Durotrigian cemeteries at Whitcombe, Poundbury, Maiden Castle, and Alington Avenue, with burials at the latter site also continuing into the early 2nd century. It is clear that, while the origins and formation of the Durotrigian burial rite may date to the end of the 1st century BC, its use in the native settlements around Maiden Castle and Dorchester reached a peak immediately prior to and during the foundation of *Durnovaria* and may represent a final flourishing of tribal identity at a time when the political and social centre shifted from Maiden Castle to the new town.

The Fordington Bottom burials conform to the main criteria for Durotrigian burials (cf. Farwell and Molleson 1993, fig. 125). The majority occur within a defined burial area and they are invariably crouched, lying predominantly on the right side, with heads orientated to the east. They lie within shallow, oval graves and contain a range of distinctive grave goods (Table 46). Identified females outnumber males, although, here, there are seven adults of indeterminate sex from the assemblage (25) and this difference may not be significant. There is also a high incidence of animal bone offerings, low numbers of pottery vessels and personal ornaments and no rarer items such as weapons. In comparison with other small cemetery groups such as Whitcombe, Poundbury, and Alington Avenue, the Fordington Bottom burials can probably be considered as modest and relatively humble (Table 80).

The cemetery structure

The most striking feature of the Durotrigian cemetery at Fordington Bottom is the structure around which the burials were apparently laid out. Ordered Durotrigian burial areas have been recorded on Maiden Castle, where the 'peace-time' graves were regularly arranged in lines (Wheeler 1943, 348–9), and at Jordan Hill where supposed family groups were defined by low drystone walls (Whimster 1981, 43). The burials at Fordington Bottom are not so regularly arranged but do occur within an area defined by two shallow gullies and they cluster around a rectangular structure. The proximity of settlement remains to Durotrigian burials is not uncommon (cf Poundbury: Farwell and Molleson 1993). At Poundbury they have been interpreted as foundation burials within domestic or agricultural buildings. A group of seven adult males and females occurred within 12 m of the south of these structures.

However, the close association of burials for possibly a period of over one century and the peculiar design of the rectangular structure have been used to suggest the building served a funerary function or acted as a 'shrine' (Copson pers. comm.). The structure measured at most 5 x 4 m and was composed of two parallel lines of post-holes external to a narrow ?rectangular room defined by beam-slots (Fig. 96). A possible drip-gully ran external to the structure on all but the west side of the building. The dating evidence from the structure is very limited and it is impossible to tell if all these features were contemporaneous or if the building underwent modifications over time. First century AD rectangular earthfast post-buildings are recorded at Poundbury (Green 1987, fig. 39, R18) and rectangular timber beam-slot buildings of Flavian date are recorded within the Roman town (Woodward *et al.* 1993, Buildings *477* and *5502*), but none of these early buildings combine the two construction techniques. The Fordington Bottom building was also smaller in size and, if the interpretation of the structure as a central rectangular room with verandahs to east and west is correct, it is of unusual design.

Pre-Roman Iron Age rectangular 'shrines' provide the most immediate parallels for this structure, for example the Early and Middle Iron Age, rectangular, bedding trench, structures at Danebury (Cunliffe 1986, 116) or the 1st century BC bedding trench and post-hole structure at Lancing Ring Shrine, Sussex (Bedwin 1981). The Fordington Bottom structure is of similar size and can be considered of 'native' inspiration as it is surrounded by Durotrigian burials. However, it has been pointed out that 'shrines' rarely, if ever, are found near to domestic areas, as at Lancing Ring, but are always separate and that no such structures have yet been recorded from small rural farmsteads or hamlets such as Fordington Bottom (Wait 1985, 172–3). An exception is a Late Iron Age, rectangular shrine surrounded by domestic houses at Stansted Airport, Essex (Brooks 1993).

It has also been noted that 'shrines' are rarely closely associated with cemeteries (Drury 1980, 62) and in addition there is no material recovered from the structure that can be interpreted as anything other than redeposited domestic refuse. Indeed the majority of the recovered finds are of 2nd century or later date, in-

cluding New Forest and Oxfordshire ware and this casts some doubt on the contemporaneity of the structure and the cemetery.

Although there is, therefore, little supportive evidence that this structure represents a 'shrine', its unusual design and its circumstantial relationship to the burials, do suggest it served as some form of mortuary or cemetery structure. No similar structures have yet been identified in association with other known Durotrigian cemeteries.

The Fordington Bottom mortuary structure and its surrounding burial area were abandoned by the 2nd century and they were incorporated into the expanding later Roman settlement. The latest, most securely dated, Durotrigian burial is that containing the samian vessel grave good dated to the early AD 70s. Further burials at Fordington Bottom, from which no secure dating evidence was recovered, belong to a different burial tradition of late Roman type (Farwell and Molleson 1993). These consisted of extended burials, in wooden coffins, one of which had hobnails at the feet. None could be dated on finds or stratigraphic evidence. The abandonment of the Durotrigian burial tradition by the end of the 1st or possible early 2nd centuries is also evident at the other settlements around the town at Poundbury and Alington Avenue.

Later Roman burials

The late Roman burials at Fordington Bottom and Maiden Castle Road are similar to a widespread pagan burial practice recorded in suburban and rural cemeteries around *Durnovaria* from as early as the late 2nd century AD (Startin 1981; Davies *et al.* forthcoming) through to the late 4th century (Farwell and Molleson 1993). This burial practice is typified by extended burials, some with hobnails at the feet, in simple wooden coffins in graves of varying alignment, often accompanied by grave goods of pottery, jewellery, and meat joints.

The late Roman burials from Fordington Bottom cannot be precisely dated but their location on the periphery of the late Roman settlement suggests they may date to no earlier than the late 3rd century. The Maiden Castle Road cemetery contains some burials certainly of late 4th century date, although the precise length of time that the cemetery was in use cannot be determined. Both the Fordington Bottom and Maiden Castle Road burials were ranged along boundaries or enclosures and this is also evident at the late Roman settlements at Alington Avenue and Poundbury. At Alington Avenue most of the later Roman burials, probably dating from the late 2nd to early 4th century, were aligned on and within the ditches of a D-shaped enclosure containing associated settlement structures (Davies *et al.* forthcoming). The northern peripheral burial group at Poundbury, dating from the early 3rd to mid 4th centuries, was set within a ditched enclosure with the orientation of the graves taken from the surrounding enclosure ditches (Farwell and Molleson 1993).

When compared to the late Roman burials at Alington Avenue and Poundbury (Table 80), those at Fordington Bottom and Maiden Castle Road display a similar range of burial practices and grave goods. None of these cemeteries appears to confer a higher status on the contemporary settlement. However, it is notable in this respect that the lowly appearance of the Maiden Castle Road settlement structures in the late Roman period is not reflected in the burial of the settlement's dead. The presence of clearly 'high status' burials from these rural settlements is at present limited to a burial group from Alington Avenue dated to the late 2nd or early 3rd centuries.

While the burials from these four late Roman settlements are broadly similar, there are some notable features of the Fordington Bottom and Maiden Castle Road cemeteries. One of the Fordington Bottom later Roman graves, *167* is notable for its large size and for the presence of a nailed timber lining or vault (Fig. 104). Later Roman 'over-sized' graves are known from Poundbury (eg. 1248 and 1354), Alington Avenue (grave 579) and elsewhere in southern Britain (Philpott 1991, 69–70). It is likely, despite the absence of associated grave goods from the Fordington Bottom example, that this type of grave was reserved for those of some importance.

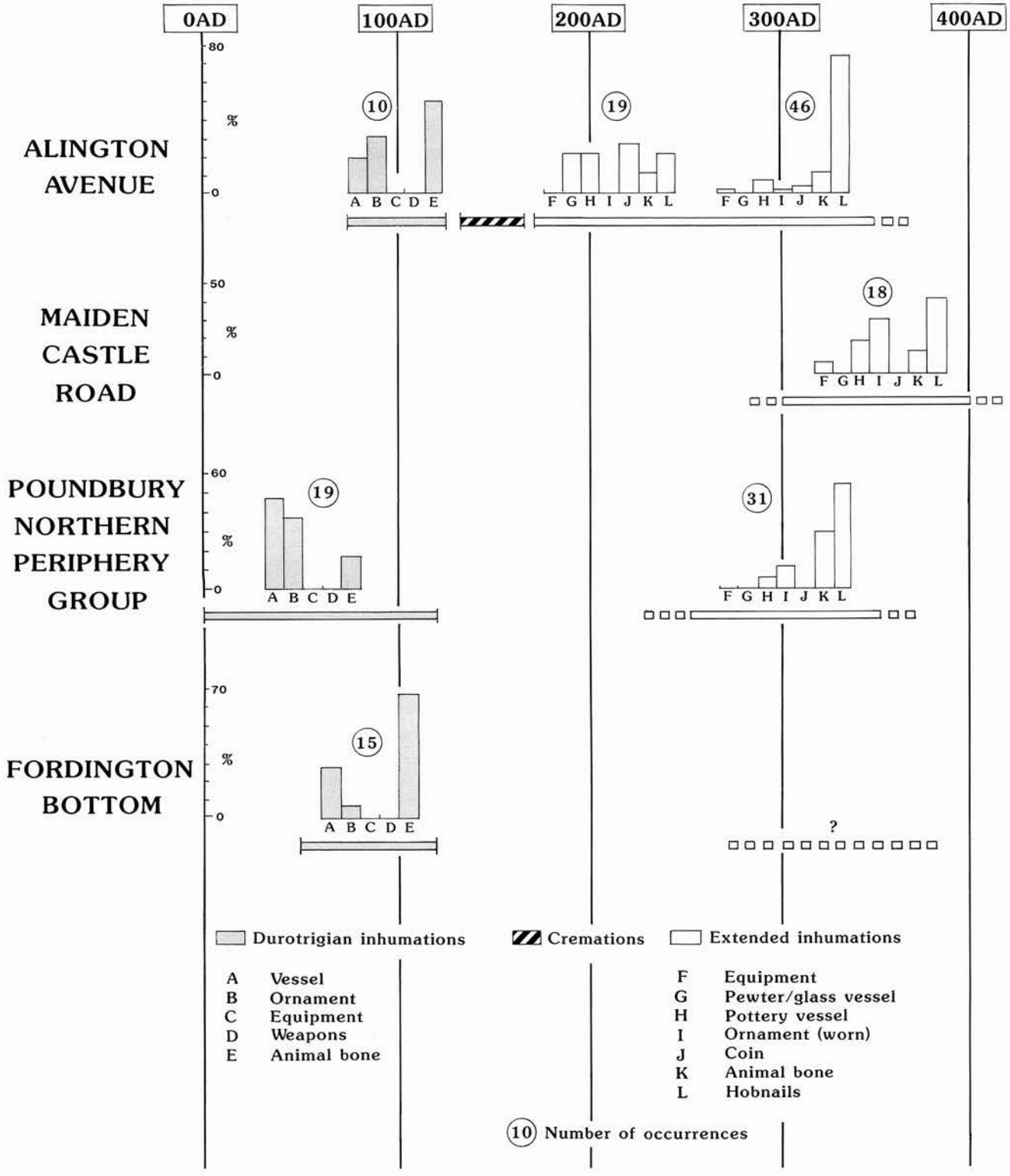
All the inhumations at Alington Avenue and Poundbury were buried with legs straight or slightly bent. At Maiden Castle Road there was a high percentage with legs flexed and two were crouched. Both burials were associated with iron nails — in one grave the position of these suggests that the burial was coffined (Fig. 47). These burials are both probably of late Roman date on grave good and stratigraphic evidence. Only one late (post-2nd century) example of a crouched burial (498) was recovered from the main cemetery at Poundbury, although it was only partially excavated and its associations are unclear.

There is a total absence of crouched burials from the late Roman cemeteries at Lankhills (Clarke 1979, 139) and Cirencester (Viner and Leech 1982, 83). The characteristic crouched 'Durotrigian' burial tradition is generally considered to have disappeared by the late 2nd century, although occasional late occurrences are known, for example one of possible 3rd century date at Wyke Regis (RCHM(E) 1970, 615). The Maiden Castle Road examples, incorporating crouched postures on the right-hand side and pottery grave goods, therefore appear to confirm the occasional survival of this native burial tradition into the late Roman period. Interestingly they occur alongside the extended Romano-British rite and can be shown stratigraphically to be interspersed with extended burials. The possibility that one of these crouched burials was placed in a coffin suggests the burial adopted some hybrid elements.

The range of grave goods accompanying the burials at Maiden Castle Road can be paralleled at the Poundbury and Alington Avenue cemeteries. The certain grave goods are restricted to adults and predominantly females. One artefact, a perforated chalk object (Fig. 77, 6), was recovered from the grave of a 1–2 year old. This could not be shown with certainty to be a grave good, but the shallow nature of the grave and its distance from settlement features suggests this may be the case. The object may be a favoured 'toy' of the dead child rather than a residual object of unknown function.

As at Alington Avenue and Poundbury hobnails were the most common grave good, but there was a

Table 80 comparative data for Late Iron Age/Romano-British cemeteries in the Dorchester area



higher number of worn ornaments, all of common late Roman type, and pottery vessels and fewer animal bone offerings at Maiden Castle Road. The use of Black Burnished and New Forest ware vessels as grave goods occurs at Poundbury and Alington Avenue, although only two examples of New Forest ware vessels were recovered from the whole of the late Roman cemetery at Poundbury (Davies 1993, fig. 74, 15 and 16). The use of one and possibly two such vessels within this small cemetery may, therefore, be significant.

4 Settlement

Neolithic and Bronze Age, by Frances Healy

Introduction

Fieldwalking survey in the course of the South Dorset Ridgeway and Maiden Castle Landscape Survey projects (Woodward 1991; Woodward *et al.* in Sharples 1991) has made it possible to take a broad overview of local pre-Iron Age settlement, although large areas remain uninvestigated, especially to the south-east and north-west of Dorchester. Over the years intensive excavation within the built-up area of Dorchester has led to an exceptional number of finds of Neolithic and Bronze Age material, many of them incidental to the investigation of sites of later date. It must be borne in mind that the evidence from the countryside is extensive and almost entirely lithic, while that from the town and its fringes has come from a number of restricted, fortuitously selected locations and includes pottery and archaeological features as well as worked flint and stone.

Earlier Neolithic

The contribution of the By-bass project

This project has added to the number of scattered findspots of earlier Neolithic material. At Flagstones (Site 3) there were two pits containing pottery, struck flint, and food remains, one of them with a radiocarbon determination of 4960±80 BP (HAR–9161; 3930–3692 cal. BC), a few Neolithic bowl sherds possibly contemporary with the construction of the enclosure, and further material residual in later contexts. On Conygar Hill (Site 4) the upper fills of pit-ring *5210* contained five plain, flint-tempered body sherds which may be of Neolithic bowl. At Maiden Castle Road (Site 6) possible quarry scoops and adjacent features contained a Neolithic bowl rim fragment and several probably contemporaneous body sherds. At Middle Farm (Site 8) there were two small, abraded body sherds possibly of Neolithic bowl and a residual earlier Neolithic element in the flint assemblage. A radiocarbon determination of 4800±70 BP (OxA–2382; 3700–3390 cal. BC) on charcoal from the post-holes of a probably Bronze Age building must relate to this earlier episode. On the Bridport Road Ridge (Site 9) there were also earlier Neolithic elements among the struck flint.

Relation to the existing record

These results combine with previous finds to point to three possible areas of settlement:

1. The east end of the Alington ridge: Flagstones pits and pre-enclosure occupation at Mount Pleasant (Wainwright 1979a, 7–8).
2. The Frome valley: five sherds possibly of plain bowl and a leaf arrowhead in the flint assemblage at Poundbury (Smith 1987; Saville 1987), further bowl sherds residual in the post-pits of the Dorchester timber monument (Woodward 1993), and a leaf arrowhead and slight blade component among the struck flint from Charles Street, Dorchester, also within the area of the Dorchester timber monument (Healy in prep.).
3. The relatively low-lying downland to the north of Maiden Castle, rising to the Bridport Road Ridge: Maiden Castle Road, Middle Farm, Bridport Road Ridge (Sites 6, 8, and 9).

Data from fieldwalking confirm and expand this picture. At Stinsford, on the opposite bank of the Frome to the Dorchester timber monument, there is an earlier Neolithic element in a surface scatter with a relatively high proportion and variety of retouched forms suggestive of settlement (Woodward 1991, 37, fig. 17). To the south and west of Sites 6, 8, and 9, a blade industry of comparable technology to that of the Maiden Castle causewayed enclosure figures in concentrations of struck flint near the Bridport Road Ridge and closer to Maiden Castle, especially to the south of the enclosure on both sides of the South Winterborne valley. This seems to have been a focus for settlement now and in later periods (Woodward and Bellamy 1991, 33–4). A similar element is present in a concentration coinciding with pit-ring *52118* on the west end of Conygar Hill (ibid., fig. 28).

Settlement character

Whether excavated or collected, the earlier Neolithic material is consistently a small component of collections dominated by artefacts of later periods and conveys the impression of small scale, short-lived occupations. The size of the stripped and excavated areas at Flagstones (Fig. 15) suggests that pits *00221* and *00274*, themselves 20 m apart, were indeed isolated. The same is true of a small group of pits excavated at Middle Farm Poundbury Development in 1992 (Smith 1992). This is consistent with previous discoveries of single pits containing South-Western style bowl pottery at Corfe Mullen (Calkin and Piggott 1938), Pamphill (Field *et al.* 1964, 352–60), Rowden (Woodward 1991, 43), Southbourne (Calkin 1947), and Sutton Poyntz (Farrar 1957), all found in circumstances in which it was impossible to tell whether further pits were present. It is doubtful whether pits were a feature of most settlements. The pre-enclosure occupation of Mount Pleasant may be more representative, surviving as artefacts and food remains in the pre-bank turfline and of apparently limited extent: almost all of the earlier Neolithic material was recovered from cutting XXXII, a 10 x 6 m trench through the bank, with almost none from the three other trenches which also exposed the pre-bank soil. The single radiocarbon determination of 4072±73 BP (BM–644; 2870–2490 cal. BC), often linked to this occupation, was made on a sample from cutting I, 125 m away, and may relate to Grooved Ware sherds and a chisel arrowhead which were found on the surface of the old land surface there in addition to earlier Neolithic material (Wainwright 1979a, 7–8, tables III and VIII).

Relation to the Maiden Castle causewayed enclosure

Some aspects of the relation of the causewayed enclosure and other sites can be singled out:

1. Where stylistic attribution is possible the bowl pottery from the living sites is of the same South-Western style as the large assemblage from the causewayed enclosure. The approximately 40% of shell temper in the enclosure assemblage (Cleal 1991a, table 54), is far higher than for the By-pass sites, where flint temper predominates (Table 7; Mf 10), as it does among the other small collections from Dorchester.
2. Although several flint axeheads have been found and many flint industries analysed in the Dorchester area, the debris of axehead manufacture has been identified only at Maiden Castle (Edmonds and Bellamy 1991, 218, 227–9), and finished axeheads, especially ground ones, are concentrated around the monument (Woodward 1991, fig. 14), as are leaf arrowheads (Woodward and Bellamy 1991, fig. 28). This cannot reflect restricted availabilty of suitable flint, which is widespread. It suggests the restriction of axehead manufacture to the enclosure. Some axeheads were used and 'consumed' on or near the site rather than distributed beyond it, since broken, burnt and reworked examples are frequent, some of them buried in pits (Edmonds and Bellamy 1991, 227–9).
3. The used and reworked state of many of the imported stone axeheads from the enclosure suggests a similar pattern of use and consumption (Roe and Edmonds 1991; Wheeler 1943, fig. 38). Of the 14 specimens from the Wheeler excavation listed by Clough and Cummins (1988, 150–1), seven are recorded as fragmentary, four as 'part', and one as reworked. Such consumption may have taken place alongside the onward exchange of complete axes from south-western sources proposed by Mercer (1986, 48).
4. The long-held view of Maiden Castle as a centre for the exchange and dispersal of chert from Portland, most recently expressed by Care (1979, 100; 1982, 281–2), has been revised. 'Portland' chert now seems likely to have been collected from local sources, especially drift-based Carstens series soils, an extensive area of which lies south of Maiden Castle (Woodward and Bellamy 1991, 31). Analysis of the Maiden Castle industry and several later assemblages from the area has shown that the chert fraction in them is pebble based and that it comprises all stages of the reduction sequence in the same proportions as the more numerous accompanying flint (Edmonds and Bellamy 1991, table 75; Table 25). There is every indication that 'Portland' chert was collected, brought to living sites, and worked together with local flint.
5. Local short distance transport of raw materials is also evidenced by small quantities of Tertiary gravel flint in industries from chalk sites. Source areas include the Bridport Road Ridge, the Conygar Hill Ridge, and Stinsford on the north side of the Frome valley. This material may have been brought to Maiden Castle in the form of prepared cores (Edmonds and Bellamy 1991, 218). Its continued use is evidenced by small quantities in the industries of Flagstones (Site 3) and Middle Farm (Site 8); it is also present in the essentially unstratified collection from Bridport Road Ridge (Site 9). The ridge and the area to the south of it seem to have been from the earlier Neolithic onwards a zone of flint collection and primary preparation as well as of settlement, yielding high frequencies of cores, worked lumps, and hammerstones (Woodward and Bellamy 1991, figs 19, 20, 28).

The general area

The overall picture is one of contrast between ephemeral living sites and the substantial communal monument built by their inhabitants and used and maintained by them over 500 years or more. The mobility implicit in exiguous settlement remains would have entailed the successive clearance and use of new tracts of land. This process was already well under way when pits at Flagstones were dug *c.* 3900–3700 cal. BC in established open grassland, in contrast to the slightly broken woodland which immediately preceded the construction of the Maiden Castle causewayed enclosure at broadly the same time (Evans and Rouse 1991b, 120). When Maiden Castle was abandoned, the Flagstones enclosure and the Alington Avenue long monument were built *c.* 3300–3000 cal. BC in grazed grassland (Allen forthcoming). This may suggest an at least equal antiquity for the grassland environments in which the Mount Pleasant and Maumbury Rings enclosures and the Conygar Hill pit-rings were subsequently built (Evans and Jones 1979, 196–7; Bradley 1976, 29; *above*).

The main components of the economy which made such an impact on the landscape are well attested. The balance between them is not. Pryor's view of cattle herding rather than cereal cultivation as the principal resource of the period (1988) would fit with the local preponderance of grassland over arable. Allen sees the beginnings of clearance centuries before the construction of the Maiden Castle causewayed enclosure. The building of the monument would call for an established population with a secure subsistence base and, at least seasonally, surplus labour. More important, such an undertaking presupposes a certain level of population density and social complexity (Evans *et al.* 1988, 82).

Antecedents?

In these circumstances, and in view of the environmental evidence reviewed here by Allen, one would expect to find evidence of a local population in the preceding millennia in the form of later Mesolithic material among the worked flint and chert from the area. The scale of recovery is expressed by the size of some of the larger collections: 46,789 pieces from the Maiden Castle Landscape Survey, 21,437 from the 1985–6 excavations on the site itself, 12,592 from the By-pass project, 5736 from Greyhound Yard, and 5701 from Alington Avenue — not to mention material from

smaller interventions. Despite these numbers, diagnostically Mesolithic material is so scarce as to be virtually invisible. There are two microliths, one from Stinsford found with a small quantity of other possibly Mesolithic material (Woodward 1991, 129) and one from Charles Street, Dorchester (Healy in prep.). Both sites lie in the Frome valley, which has also produced a small collection of possibly but not conclusively Mesolithic material from slightly farther upstream (Williams 1972; Wymer 1977, 69). There is a tranchet axe from near Maiden Castle and other possibly Mesolithic material has been recorded from the South Winterborne valley in Winterborne Monkton and Winterborne Herringston to the south of the site (Wymer 1977, 76–7).

This contrasts sharply with the record of Cranborne Chase, where numerous Mesolithic sites are concentrated on the clay-with-flints and where more than 700 microliths of both earlier and later Mesolithic forms have been found (Arnold *et al.* 1988, 117– 9). In Dorset as a whole later Mesolithic sites and finds are concentrated away from Dorchester, to the east close to the Hampshire border and to the south, including the coast (Gardiner 1988, fig 7.6). It is in this second area that radiocarbon determinations in the 7th–5th millennia cal. BC have been obtained for samples apparently associated with Mesolithic artefacts (Preece 1980; Palmer 1977, 145–6).

The scarcity of artefactual evidence for the occupation of the Dorchester area in this same period suggests two interpretations:

1. Settlement was indeed slight and confined to the river valleys, significant exploitation of the intervening chalk downland being a 'Neolithic' development, as proposed by Whittle (1990) for the Avebury area.
2. The chalk downland was already occupied and used in the 7th–5th millennia and before, its inhabitants leaving few distinctive and durable artefacts behind them.

The second scenario could apply if activities undertaken on the Chalk called for a few or no microliths. In this case some of the products and by-products of soft-hammer blade production from the area, interpreted as earlier Neolithic (Woodward and Bellamy 1991, table 3), could have been made by an ancestral population. The case for a no- or low-microlith Mesolithic presence on the Chalk is reinforced by the record of Salisbury Plain, where a group of post-pits near Stonehenge is radiocarbon dated to the earlier Mesolithic and has yielded a Boreal pollen spectrum and mollusc fauna but no contemporaneous artefacts (Allen 1995a). The people who dug the post-pits and erected the posts are not clearly visible in the local artefact record since, in the Stonehenge area like the Dorchester one, microliths are scarce and unambiguously Mesolithic material is virtually confined to the river valleys (ibid.; Richards 1990, 263). If microliths were little-used here they may have been equally little-used on other areas of Chalk downland with similar resources. Given that the Stonehenge and Dorchester areas both saw significant earlier Neolithic exploitation and the development of long-lived major monument complexes, pre-existing but subvisible populations seem more plausible than an uptake of little-used land in the 5th–4th millennia.

If these hypothetical no- or low-microlith industries of the Chalk became prevalent over wider areas in the 7th–5th millennia, perhaps reflecting a changing subsistence base, they could go some way towards filling a trough in the southern English settlement record, where the latest Mesolithic is rarely identified (Whittle 1990, 101). It is more credible for the latest Mesolithic population's archaeological visibility to have been low than for the Mesolithic population to have all but disappeared only to be replaced, after a long interval, by another population with a very similar lithic technology. The vegetation and land-use record of river valley and dry valley sediments remains the most effective means of establishing the intensity and impact of 7th–5th millennium activity in areas of subvisible population, provided that deposits of appropriate date and sufficiently rapid formation can be identified. Such deposits have, themselves, proved elusive, perhaps because valley bottoms of the period tended to be dry and the soils stable, as in the South Winterborne valley near Maiden Castle (Evans and Rouse 1991a) or, further north, in the Kennet valley in the Avebury area (Evans *et al.* 1993, fig. 41).

Living Around the Monuments: Middle–Late Neolithic and Early Bronze Age Occupation

The construction of the Flagstones and Alington Avenue monuments marked a change in the use of the ridge on which they stood. From *c.* 3300–3000 cal. BC the sporadic occupation of preceding centuries apparently came to an end. The debris of living was scarce to absent at Flagstones itself, the Alington Avenue long monument, the Fordington Farm barrow, Maumbury Rings, and, off the ridge, at the Dorchester timber monument and the Conygar Hill pit-rings. Bellamy sees a central monumental zone primarily reserved for ceremonial purposes, the flint assemblages from the monuments reflecting the preliminary working of nodules obtained during monument construction, prior to their removal for further working elsewhere. The molluscan evidence shows the monuments standing in pasture. At the east end of the ridge, the sheer mass of artefacts and food remains from Mount Pleasant set it apart from this otherwise consistent scenario.

The living sites of the builders and users of the Middle and Late Neolithic monuments and of the Early Bronze Age round barrows are particularly elusive, not least because of the infrequency with which they seem to be marked by subsoil features such as pits (Healy 1987), and because, on the surface, contemporaneous flint industries tend to be masked and swamped by more numerous and extensive Bronze Age material. There clearly was Late Neolithic settlement peripheral to the monumental zone, most obviously in the Frome valley at Poundbury, where a few pits contained small quantities of Peterborough Ware, Grooved Ware, and Beaker (Smith 1987). Initial assessment of the very large collection of worked flint from the site showed it to be 'Late Neolithic/Bronze Age in terms of technology . . . and implement types' (Saville 1987). The preponderance of Late Neolithic chisel and oblique arrowhead forms over others strongly suggests that much of the material

may date from this period, and that the excavated area may have lain within an extensive Late Neolithic artefact scatter like those of Cranborne Chase (Gardiner 1991a, 59–66). Concentrations of chisel and oblique arrowheads in Stinsford on the other side of the Frome and in the South Winterborne valley to the south of Maiden Castle may similarly represent contemporaneous settlement, as may an area to the east of Maiden Castle (Woodward and Bellamy 1991, 24–7, fig. 28).

The frequency of extensive artefact scatters and the near absence of substantial settlement traces in this period has been interpreted as the result of decreased mobility from that of the earlier Neolithic, with insubstantial settlements frequently changing location within circumscribed, well defined areas rather than across wide, ill-defined territories (Edmonds 1987, 174).

Intensified cultivation from the mid 3rd millennium cal. BC may have further reduced settlement visibility by eroding some living sites and obscuring others. An arc of three post-holes containing Beaker pottery at the base of a colluvial sequence in a dry valley at Middle Farm (Site 8: trench B) and two ditches beneath Bronze Age colluvium in Fordington Bottom may represent a more widespread phenomenon. At the end of the Early Bronze Age a settlement enclosure was constructed at Poundbury, again in a dry valley. Charcoal from one of a row of post-holes apparently defining a living area provided a radiocarbon determination of 3380±90 BP (HAR–993; 1750–1680 cal. BC). Within the area was a slight terrace edged by a rough arc of stake-holes on its upslope side. Small quantities of Biconical Urn were recovered (Green 1987, 22–31).

Substantial settlements

In the course of the mid 2nd millennium cal. BC the Poundbury settlement became more substantial, one of several in the area consisting of post-built structures within ditched enclosures surrounded by defined fields (Fig. 3), as at Middle Farm (Site 8) and perhaps Fordington Bottom.

The surrounding landscape was thoroughly occupied and used. Direct evidence for tillage, pasture and colluviation has been summarised above by Allen. Traces of certainly or possibly Bronze Age field ditches are widespread, as on Conygar Hill (Site 4), Bridport Road Ridge (Site 9), Alington Avenue (Davies *et al.* forthcoming), Middle Farm Poundbury Development (Davies and Pearce 1990; Smith 1992), and Coburg Road (Smith *et al.* 1992). Unexcavated but possibly contemporaneous cropmark enclosures are listed and analysed by Woodward (1991, 149, fig. 71). Bellamy (*above*) notes concentrations of Bronze Age flint-knapping debris away from living sites, whether in boundary ditches or over earlier barrows, within a general, low density spread of contemporary lithics.

Middle Bronze Age metalwork is locally concentrated in this settled and cultivated area between the Frome and the South Winterborne (Pearce 1983, fig. 4.20), with tools and ornaments more frequent than weapons (Rowlands 1976, map 27). Some of it was produced on local settlements, like Poundbury (Green 1987, 31).

There is some evidence for the incorporation of long boundary ditches into the existing mass of relatively slight field boundaries and settlement enclosures. At Middle Farm a ditch more than a metre deep was cut into one side of the settlement enclosure. Three slighter ditches cut the fills of the settlement enclosure ditch but stopped short at the inside edge of its bank, suggesting that it was still standing when they were cut. Another linear ditch of similar proportions and at least 500 m long changed direction around a row of barrows at Coburg Road (Smith *et al.* 1992). Another may be represented by ditch *50146* to the north of the Flagstones enclosure which had silted up by the time a Late Iron Age gully was cut across it.

This piecemeal construction of larger boundaries seems to have taken place within the Middle Bronze Age. A *terminus ante quem* for the Middle Farm ditch is provided by a radiocarbon determination of 3200±90 BP (HAR–9160; 1600–1410 cal. BC) for a burial at the base of its secondary silts. This is consistent with the presence of sherds in Early or Middle Bronze Age fabrics throughout its fills and of one Late Bronze Age sherd in its topmost fill. The Coburg Road ditch contained a single Late Bronze Age sherd in a comparable stratigraphic position, while the abundant worked flint of its secondary silts was in fresher condition than that from nearby Late Bronze Age pits (Smith *et al.* 1992). A single exception is a slighter ditch containing four sherds of Late Bronze Age pottery, sectioned during the Middle Farm Poundbury Development. The preliminary results of subsequent excavation confirmed that this ditch was an exceptional element within a coherent field system constructed and used in the Middle Bronze Age (Davies and Pearce 1990, 7; Smith 1992). At present, it seems that the end of local farmsteads and field systems may be marked by a radiocarbon determination of 3030± 90 BP (HAR–994; 1420–1130 cal. BC) for the final recut of the settlement enclosure at Poundbury, mollusca from which indicated undisturbed, overgrown conditions (Green 1987, 25). It was at about this time too that the Mount Pleasant enclosure finally went out of use, since the ceramic record of the ditches ends with Bucket Urn (Longworth 1979, 89).

This reflects the generally low level of evidence for local Late Bronze Age activity. The early 1st millennium BC assemblages of pottery from the post-built structures and pits of an unenclosed settlement at Coburg Road (Smith *et al.* 1992) and Middle Farm Poundbury Development (Smith 1992) are exceptional. Middle or possibly Early Bronze Age sherds far outnumber Late Bronze Age ones in the collections from the Middle Farm excavation and Fordington Bottom.

There is no unambiguously Late Bronze Age pottery from Poundbury. The fabric composition of sherds from the 'detritus' layer overlying the Middle Bronze Age features is, however, more varied than that of the assemblages from the features themselves. This has been interpreted as indicating 'some activity on the site at a time when the ditches, foundation trenches and post-holes of the Middle Bronze Age settlement were no longer open and which is marked in the ceramic record not so much by changes in typology as by a shift in sources of supply or in techniques of production' (Smith 1987, 114). Nearby settlement has been inferred from this, and it has been suggested that an uninvestigated cropmark enclosure immediately to the west of the

hillfort may be of Late Bronze Age date (Green 1987, 14, 26, 31). Both hypotheses remain to be tested.

At present, it appears that human use of the area declined from *c.* 1200 cal. BC. Woodward suggests a shift of focus to the north-west (1991, 149). Late Bronze Age metalwork is concentrated to the north-west and the south of the Dorchester area rather than in it (Pearce 1983, fig. 6.23).

Such a dislocation of settlement and social organisation was widespread at this time, coinciding with the emergence of hilltop fortifications, coastal, and riverine settlements, perhaps larger and more nucleated than the preceding farmsteads, and a greater investment of skills and materials in weapon production. It is matched in Cranborne Chase, where the settlement record does not resume until well into the Iron Age (Barrett *et al.* 1991a, 227–42).

The Dorchester area and Cranborne Chase contrast with Salisbury Plain and the Marlborough Downs, Wiltshire. In both these last-named areas extensive, articulated systems of Late Bronze Age linear ditches incorporated the earlier field systems (Richards 1990, fig. 160; Gingell 1992, fig. 96). In both areas too Late Bronze Age jar and bowl forms occur consistently alongside 'Deverel-Rimbury' urns and sometimes outnumber them (Richards 1990, figs 41, 42, 146; Gingell 1992, 100–3), suggesting continued use of the same living sites and farmland into the 1st millennium cal. BC.

The Wessex Linear Ditches Project has emphasised the progressive development of the long distance boundaries of Salisbury Plain in a continuously settled landscape. It has also highlighted the frequency there of open Late Bronze Age living sites, rendered exceptionally visible by the survival of pottery in the unploughed topsoil of the Military Training Area (Bradley *et al.* 1994, 138–42). If Coburg Road and the 'detritus' layer at Poundbury are representative of Late Bronze Age settlements in the long and heavily cultivated Dorchester area, other similar sites here may have been reduced to the same low level of visibility as their Neolithic and Early Bronze Age predecessors.

Iron Age, Roman and Medieval, by Roland Smith

Early and Middle Iron Age

The absence of evidence from the project for settlement from the earliest Iron Age (800–600 cal. BC) through to the 1st century BC adds weight to the view that from *c.* 600 BC there was near wholesale occupation of the Maiden Castle and Poundbury hillforts within the study area (Sharples 1990; 1991). The By-pass excavations produced only a handful of unstratified possible Iron Age sherds and the presence of some, for example those from Fordington Bottom, may be explained by the continued use of archaic forms rather than indicative of actual Iron Age occupation nearby. At present there is no evidence for any settlement from *c.* 800–200 cal. BC between the Maiden Castle and Poundbury hillforts and this is in contrast to the later Bronze Age, represented by the settlements at Middle Farm, Fordington Bottom, Poundbury, and Coburg Road/Middle Farm Poundbury Development. This last-named site, an open settlement, is the latest and probably dates within the period 10th–9th century cal. BC (Cleal 1992b). This still leaves a period of perhaps over two centuries where there is at present an absence of settlement within the study area prior to the construction of the two hillforts.

Evidence of settlement during the early Iron Age and extending to the 2nd–1st century BC is restricted to a handful of unstratified sherds of Early Iron Age pottery from Whitcombe (Sharples 1990, 90), sherds of 'Eldons Seat Period IIC' type pottery recovered from a feature of undetermined function at Stinsford (Speller 1985) and the 'extramural' Early and Middle Iron Age activity at Poundbury. This present evidence suggests that earlier Iron Age settlement was concentrated on the edges of the Frome and South Winterborne valleys, while the downland between the two valleys was devoid of settlement. Such activity may be linked to increased agriculture on and adjacent to the floodplain represented by evidence for increased alluviation in the first half of the 1st millennium cal. BC (Evans 1991, 251). This is in marked contrast to the absence of recognisable activity on the downland, either in the form of new field boundaries, use of existing field systems or as erosion events within the colluvial sequences examined for the By-pass project.

Late Iron Age

Reappearance of settlement

The Late Iron Age features recorded at Flagstones add to the evidence for the re-emergence of settlement outside the hillforts and within the study area by the 1st century cal. BC (Sharples 1990; 1991). The Late Iron Age phase at Flagstones includes the establishment of a ditched field system, one of two major new developments suggested by Sharples for this movement back into the landscape. The second, the appearance of the formal, 'Durotrigian', burial rite, does also occur at Flagstones and the settlement appears to span the transition from pit to grave burial.

Settlement pattern

The majority of these new, Late Iron Age, settlements, at Mount Pleasant, Flagstones, Alington Avenue, Poundbury, and possibly Fordington Bottom, are ranged along the edge of the Frome valley, in the former three cases 'reoccupying' earlier prehistoric enclosures. Other possible settlements occupy a similar location at, for example Charminster, possibly St Georges Road, and Stratton, 6.4 km north-west of Dorchester, (Hunt and Sutherland 1990). The Late Iron Age settlement of the Frome valley may represent a return to the preferred settlement location for the earlier Iron Age settlements for which evidence is presently limited and re-emphasises the importance of the river valleys in determining the location of the Maiden Castle and Poundbury hillforts (Woodward in Sharples 1991, 36).

There remains as yet little evidence for Late Iron Age settlement on the downland between the two hillforts; the recent discovery of a Late Iron Age settlement enclosure at Dorchester First School, Maiden Castle Road, being an exception (Bellamy *et al.* 1993).

Flagstones
Comparison of the Late Iron Age settlement at Flagstones with the other recorded settlements of this date in the study area is restricted because the full extent of the settlement remains undetermined, although storage pits, enclosure ditches, and a ditched field system are all evident elsewhere, and the range and type of material recovered from these features is similar to those recovered from Maiden Castle, Poundbury, and Whitcombe (and detailed in the relevant reports). Interesting differences do emerge in the detail of the pottery and animal bone assemblages, which suggest in the former a preoccupation with food preparation and in the latter case a preponderance of sheep of culling age, and in the presence of possible 'special' deposits in some pits.

Romano-British

Foundation of Durnovaria
The *civitas* capital of *Durnovaria* was founded in the late 1st century AD, probably no earlier than AD 65. Its establishment was marked by the rapid development of a gridded street plan covering as much as 25 ha over two spurs and a shallow coombe overlooking the River Frome. The early street plan was associated with simple timber houses constructed along the street frontages (Woodward 1993, 362) and marked the beginning of four centuries of continuous development. The site of the new town may have been preceded by a Roman military presence, a legionary camp or fortress constructed to guard a ford or bridge over the River Frome, although no structural evidence has been found to date. Early Roman activity on Maiden Castle, including structural evidence may represent a military occupation (Sharples 1991).

The immediate affect of the foundation of the town was to remove *c.* 25 ha of downland out of agricultural use, although the town may have been intentionally positioned to consume a Late Iron Age centre of some description and as yet unidentified (Woodward 1993, 358–9). The present evidence suggests that the majority of the land taken in for the new town had been under long term pasture throughout much of the Iron Age and up to the foundation of the town (ibid.). The road network emanating from the town comprised at least four major roads, and two that are presently conjectured. This road system and the aqueduct servicing the Roman town, were probably constructed during the later 1st century AD.

The road system
Although the By-pass crossed the line of all the known and conjectured Roman roads to the town, little additional information on the nature or alignment of the road network was recovered. The main roads to Exeter and Weymouth presumably lie below their modern counterparts, while there was no supportive evidence for the line of the conjectured roads to Purbeck and Lake Farm, Wimborne. Possible flanking ditches adjacent to the Bradford Peverell road support the possibility that this road marks the line of the Roman road to Ilchester. A curvilinear ditch examined to the west of the Wareham Road (Fig. 36, H) corresponds to the line of a recorded soilmark, which has been suggested to be associated with the conjectured Roman road from *Durnovaria* to settlements in the Isle of Purbeck (Woodward 1986b, 177). The ditch contained only Romano-British material, but it is likely that this abraded material is residual and associated with the Late Iron Age–Romano-British activity along the ridge to the north and the ditch is probably associated with the bridleway indicated on Simpson's 1779 survey of the Manor of Fordington (Woodward in Sharples 1991, fig. 11).

The effect of the foundation of the town and of a road network on the pre-existing rural settlements around Dorchester is difficult to determine, primarily because it is so difficult to place a precise date on occupation at the 1st century BC/AD sites around the town. At least four pre-Conquest Late Iron Age settlements are known within 2 km of the town; within Maiden Castle itself, and at Poundbury, Flagstones, and Mount Pleasant.

Occupation in Maiden Castle continued into the early Roman period, although it is unclear if this represents military or civilian occupation (Sharples 1991). The Late Iron Age settlement outside the hillfort at Poundbury may have been temporarily abandoned, perhaps in the mid 1st century AD and was superseded later in that century by a sequence of rectangular structures, although precise dating is difficult and continuity of occupation could still be represented (Green 1987, 149).

Flagstones and Mount Pleasant were probably abandoned prior to the foundation of the town. The Black Burnished ware assemblage from Flagstones is dated to the second half of the 1st century BC and first half of the 1st century AD. Three sherds of *Terra Nigra*, imported between *c.* AD 10–85, were the only imported material from a Late Iron Age context at Flagstones and on balance it is likely that the settlement was abandoned before the foundation of the town. The Flagstones and Mount Pleasant settlements were replaced by the establishment of a D-shaped enclosure and associated settlement at Alington Avenue sometime during the late 1st–early 2nd centuries AD. This shift in settlement may have resulted from competition between a number of communities and compounded by the loss of a substantial area of pastureland to the west due to the foundation of the new town. It is also interesting to note that the conjectured Roman road from *Durnovaria* to the Isle of Purbeck is suspected to pass across this low ridge to the east of Dorchester (Woodward 1986a, 177). Its line passes north of the D-shaped enclosure at Alington Avenue (Davies *et al.* forthcoming) and presumably perilously close to the enclosure at Flagstones and across its associated field system. It may have followed a pre-existing routeway, but its formal construction as a road, part of the network serving the new town, may have contributed to the establishment and ultimate success of the Alington enclosure and settlement.

Roman rural settlement pattern
By the end of the 1st century AD at least four rural settlements existed within 2 km of the new town of *Durnovaria*; at Poundbury, Alington Avenue, Maiden Castle Road, and Fordington Bottom. Two further settlements may also occur at Charminster (Woodward

1986b) and at Olga Road (RCHM(E) 1970, 570) although the status of these settlements is presently unclear. There is evidence from these four sites for activity, if not occupation, from the 1st–4th centuries and probably into the early post-Roman period, mirroring the occupation of *Durnovaria*.

Excavations on two of these settlements for the By-pass project, at Maiden Castle Road and Fordington Bottom, and the extensive excavations on the settlements at Poundbury (Green 1987) and Alington Avenue (Davies *et al.* forthcoming) provide an opportunity to examine the relationship and status of these rural farms/villages, all within 2 km of the *civitas* capital. Recent excavations within Dorchester (Woodward *et al.* 1993; Smith 1993) have allowed a comparison between the development of the *civitas* capital and the settlements within its immediate hinterland. Woodward has used available evidence to examine the nature of the relationship of the urban market and the rural economy (Woodward 1993, 369–75).

A number of factors allow comparison between these settlements to be made only on the most basic of levels. The following should be considered: only variable proportions of each settlement area have been examined and the extent of, for example, the earlier versus the later settlement areas can only be surmised from available evidence; accurate dating of structures was generally difficult because of the absence of vertical stratigraphy and securely dated artefacts. In consequence the following discussion will examine the sites only on a broad basis of early (pre-AD 200) versus late (post-AD 200) Roman; it is also difficult to compare the finds assemblages from the four sites because of their very small size, especially the animal bones, and the absence of basic quantification for some material types from the Poundbury settlement.

Location, size, and nature

The four settlements are regularly set out around the town and probably commanded approximately similar blocks of downland and valley. The foundation of the town need not have dramatically altered the nature of land allotment outside the town if the town itself was located over a pre-existing Late Iron Age settlement unit and associated field system (Woodward in Sharples 1991, 21). The settlement fields and, probably coincidentally, the road system, help define the likely extent of farmland associated with each settlement, with the block of downland south-west of Poundbury serving that settlement and the downland to the west of Fordington Bottom serving that settlement. It is interesting to note in this respect that the settlement at Alington Avenue probably lies on a road leading to the town, the settlements at Poundbury and Fordington Bottom lie close to main routes into the town, but the largest settlement, at Maiden Castle Road, lies isolated in downland some distance from the major road network. The ditched trackway linking the enclosures of this settlement can be traced, however, as a soilmark for some distance towards the town (ibid., fig. 12). This would pass close to the putative settlement and villa site at Olga Road and these two sites may also have had economic and commercial links.

None of the four settlements has been examined in their entirety. The most complete is probably Alington Avenue where as much as 75% of the total settlement area may have been recorded. At its largest in the later Roman period, the settlement may have covered as much as one hectare, although its plan is considerably more dispersed compared with the other sites. Throughout the Roman period the range of buildings in use at any one time appears to represent no more than a single, albeit large, farm.

The full extent of the Poundbury settlement is obscure. In the early Roman period, settlement may have covered no more than 0.4 ha. By the late Roman period there was a sharp increase in habitation area, probably trebling the size of the early Roman settlement. At this time the settlement probably consisted of two or three small farms, and might be considered a 'small hamlet' (Green 1987, 150).

The area of Roman settlement in Fordington Bottom may have covered as much as 6 ha, although from available evidence it is impossible to calculate how much of this area was occupied at any one time and it has been suggested that there may have been two separate settlement foci in the same coombe (RCHM(E) 1970, 624). It is clear from the By-pass excavations, however, that this area was probably substantially increased in the late Roman period and the settlement is comparable to, but probably larger than, Poundbury.

The most substantial of the four settlements is that at Maiden Castle Road. The extensive soilmark complex set out along this ridge covers in excess of 20 ha, nearly two-thirds the size of that enclosed within the walls of the Roman town (32 ha), although it is unclear how many of the apparent enclosures were associated with settlement and how many might have been occupied at any one time. The By-pass excavations only sampled *c.* 2% of the possible settlement area. The results suggest that it was probably at its largest, in area, in the 4th century. This appears to be supported by fieldwalking evidence which shows a concentration of samian pottery towards the core of the soilmark complex, while New Forest wares were recovered throughout (archive). From the limited evidence it appears that by the late Roman period the settlement may have comprised a series of small farms within a larger 'village' complex and its size is more reminiscent of the roadside settlement at Catsgore (Leech 1982).

Early Roman settlements

It is clear that there was an increase in the extent and size of the four settlements from the earlier into the later Roman period. The earlier Roman settlements were represented by few structures which were generally small and unsophisticated. Except for a rectangular, flint footed building of earlier 2nd century date at Alington Avenue and the building or complex of buildings R21 at Poundbury, the early Roman buildings had floor areas of less than 30 m^2 and were dominated by semi-sunken (semi-cellared) buildings. At least four pre-3rd century structures of this latter type were excavated at Maiden Castle Road, Fordington Bottom, and Alington Avenue. The dating of these structures appears to be secure on stratigraphic and artefactual grounds. Nowhere was the function of these buildings clear, but none

are suggested as domestic. Those at Maiden Castle Road and Fordington Bottom possibly served as stores or outbuildings, and one may possibly have been associated with sheep husbandry, while the example from Alington Avenue has been suggested as a *mausoleum* (Davies *et al.* forthcoming).

Other buildings included rectangular, timber, post-built structures of late 1st century AD date at Poundbury and a large (80 m^2) rectangular, flint footed, timber-framed building at Alington Avenue, dated to the earlier 2nd century. All the buildings were of simple design, (with only the large timber building at Alington Avenue showing evidence for internal subdivision) and construction. The semi-cellared building at Alington Avenue had mortared flint footings. The other buildings used other forms of foundation for timber frames, with probably plasterless cob walls and thatched roofs.

At each settlement the structures were associated with sporadic agricultural activities. In no case was this activity intensive or undertaken on a large scale. The Fordington Bottom settlement was associated with two small ovens/corndriers within a working area and a series of sporadic shallow pits and hollows, while the finds assemblage consisted exclusively of personal ornaments. The settlements at Alington Avenue and Poundbury show a similar pattern with only single, simple graindriers and a well, associated with the early Roman settlements. The early Roman finds assemblages from these sites also consisted primarily of food processing objects such as querns and mortars, and personal objects.

From the evidence of the buildings and associated features there is little to differentiate between the early Roman phases of these four settlements. All represent small mixed farming units, practising primarily cereal production and sheep husbandry, with virtually no evidence for other manufacturing industries (eg. smithing slag, ironworking tools, textile production, spindle-whorls, needles, weights, counters, etc). None developed buildings of any complexity or status and associated activities were limited and undertaken on a small scale.

From the limited evidence it is difficult to determine how much, if any, of the agricultural production of these early settlements was bound for *Durnovaria*, although their existence and success must partly be linked to the supply of produce to the emerging urban market. In this respect it is interesting to compare the quantities of certain categories of earlier Roman material from the settlements that might indicate differences in wealth and status not evident from structural remains. This comparison is, inevitably, on a very broad basis because of the small numbers involved and the other factors affecting their recovery, including site chronology, site function, extent of excavation, deposition processes, and residuality. To attempt to overcome some of these problems Table 81 has been calculated by totalling objects from all contexts, except for cemetery contexts, by the date of the object rather than its stratigraphic location. Numbers therefore include objects from unstratified contexts, but not undated objects. The percentage of finewares has been calculated only from stratified Roman contexts.

Table 81 comparison of certain finds assemblages from non-cemetery contexts from the four rural settlements on the By-pass and Western link route and in Dorchester

Site	*Personal Ornaments**		*Coins*	*Glass tablewares*	*Pottery finewares$*
	No.	%	No.	MNV	%**
Earlier Roman (AD50–200)					
Maiden Castle Rd	1	2	–	6	1.9
Fordington Bottom	16	27	3	2	1.3
Poundbury	35	59	7	>9	?
Alington Avenue	59	12	1	6	3.2
Total	59	100			
(County Hall)					3.2
(Greyhound Yard)					?
Later Roman (AD 200–400)					
Maiden Castle Rd	–	–	–	–	1.0
Fordington Bottom	12	33	16	5	2.0
Poundbury	21	58	86	>9	?
Alington Avenue	3	8	2	4	1.5
Total	36	100			
(County Hall)					3.3
(Greyhound Yard)					3.4

* = Brooches, pins, rings, toilet items, bracelets, hairpins
$ = (earlier Roman) samian, Corfe Mullen, Rhenish, New Forest colour-coat; (later Roman) New Forest and Oxfordshire wares
** = as % of all sherds from Romano-British contexts
MNV = minimum no. vessels; ? = data not available

Numbers have been calculated by date of object, not date of stratigraphic location. Undatable objects are therefore excluded

There is a considerable difference in the quantity of earlier Roman personal ornaments recovered from the four settlements. At Maiden Castle Road the low number may be explained by the peripheral location of the excavation area to early Roman settlement features. However, it is notable that Poundbury has over double the quantity compared to both Fordington Bottom and Alington Avenue, despite the small scale of associated settlement. This, however, may result from the high numbers (20 examples) of 'residual' brooches (dated to *c.* AD 50–100) derived from the 'Durotrigian' settlement (Davies 1987c, 95). It is more likely therefore that the collection from Fordington Bottom is more significant, especially as the main early Roman settlement area at this site lies outside the excavation area. This is also supported by the quality of some of the items, including a fine and rare, enamelled chatelaine brooch (Fig. 109, 4). This higher quality of personal objects from Fordington Bottom is evident from some other categories of

material, for example one piece of polychrome cast vessel glass (Fig. 112, 1) is an exceptionally rare site find. Otherwise quantities of 1st–2nd century glass tablewares, earlier Roman finewares, and amphorae at the four sites were broadly comparable.

There is, therefore, some limited and circumstantial evidence for higher status occupation during the earlier Roman period at Fordington Bottom. This is otherwise not represented by structural evidence or by the nature of the 'Durotrigian' burials at the site (*see above*). At Poundbury and Alington Avenue, there is also little direct evidence for the commercial success of these settlements in supplying crops and livestock to the town up to the end of the 2nd century. The small but consistent quantities of samian, amphorae, and glass tablewares at the four sites suggests the supply of goods from the town to the rural settlements was functioning adequately and with no preference for any one settlement.

It may be that settlements more distant from the town, for example at Whitcombe, which was abandoned by the end of the 1st century AD (Aitken and Aitken 1990), were the economic casualties in the first years of the *civitas* capital and that these settlements were reoccupied in the late Roman period only after occupation of the town was reaching its peak.

There is also little evidence that any generated wealth was being invested in private properties in the town whose development was distinctly slow up to the end of the 2nd century. Wealth instead may have been invested collectively in the creation of public buildings and services, for example the construction of the aqueduct, *forum*, and possibly the bath-house. This may also be used to explain the absence of high status settlements and villas around the town until the late Roman period. Such an act may result from the successful maintenance of power of the pre-Roman tribal elite into the newly founded *civitates*, where their power and influence remained and there was no need to compete in individual displays of wealth (Millett 1990, 82).

It has been shown that in the early Roman period at the central *insula* at Greyhound Yard, there was a low density of separate timber houses, occupying street frontage properties. Between the houses was access to enclosures at the rear for stock penning. The timber buildings were not replaced by stone cilled buildings until the end of the 2nd century. These revised structures bore some similarity to late Roman structures at Poundbury, and there were no substantial buildings until the late 3rd century (Woodward 1993, 365). Despite this, it has been pointed out that there was a wide range of imported finewares and amphorae and that during the 1st and 2nd centuries AD the town may have acted as a distribution centre with wide ranging contacts. Woodward has also suggested that the trade in Black Burnished ware through the town, stimulated by the military expansion at this time, was no doubt a vehicle for other trade also channelled through the town (1993, 370). It is possible therefore that the early Roman settlements around the town were not only competing against each other but with other production centres outside the immediate region to supply produce to the town.

Later Roman settlements

The major expansion of these rural settlements occurred in the late Roman period. This was represented by an increase in settlement area, in the number and size of buildings (except perhaps at Alington Avenue), an increase in the number of ancillary agricultural structures, a diversification of other manufacturing industries, and there is also a suggestion of a move from the exploitation of sheep to cattle and an intensification of cereal production. It is notable also that the settlement at Whitcombe was also reoccupied in the 4th century (Aitken and Aitken 1990). It is likely that these developments had taken place at the sites closest to *Durnovaria* by the late 3rd century. Precision is difficult because of the lack of good dating evidence from most of the buildings, for example at Fordington Bottom, although the majority contained very late Roman material from their backfillings and they were probably occupied up to the end of the 4th century.

Although the four settlements were all expanded during the late Roman period and share some broad similarities in development, there appear to be a number of significant differences between them compared with their earlier Roman predecessors.

The number of buildings at Fordington Bottom (at least 10) and Poundbury (at least 7) were increased and this also probably occurred in the later Roman settlement at Maiden Castle Road (3). The buildings were all of comparable design. They were rectangular with mostly unmortared flint walls, supporting a timber frame, set against shallow terraces cut into the natural slope. This basic foundation was variously complemented by earthfast posts, post-pads, and cill beams. There was little evidence for internal sub-division, no building being partitioned into more than two rooms. The floors were of rammed chalk, possibly mortar in one instance at Poundbury, or had raised wooden floors. The walls probably consisted of cob and the roofs were primarily thatched, although one in Fordington Bottom was probably tiled. R16 at Poundbury may have had a roof of stone tiles and a chimney, and this was also the only building that may have had internal walls of painted plaster (Green 1987, 68).

There was a slight increase in the size of the buildings from the earlier Roman period, the largest at Poundbury (R16: 67 m^2), Fordington Bottom (*5197*: 63 m^2) and Maiden Castle Road (*02309*: 43 m^2) all being double the size of the largest of their earlier counterparts. Despite this, they were all of simple plan and none reached the relative sophistication of the 3rd century simple stone footed structures recorded within the town (Woodward 1993, 364). These simple urban properties were subsequently developed into large, quality town houses from the late 3rd century up to the end of the 4th century. Very few of the rural buildings are interpreted as domestic structures and most are considered to have been workshops, stores, outbuildings, or general agricultural buildings.

The exception to this period of settlement expansion is Alington Avenue, where only one additional building was added, post-AD 200, to the existing settlement and all the buildings had probably fallen out of use by the

end of the 3rd century. This large, new, building, up to 102 m^2 in size, appears to have served a specialised agricultural function and contained a large drier and two cisterns and may have been linked with malting activities (Davies *et al.* forthcoming). This building was probably not used beyond the end of the 3rd century, as is suggested for the other Roman buildings at the site and is linked to a decrease in the quantities of late 3rd and 4th century material from the site, suggesting a decline in settlement activity. Continued agricultural activity after the abandonment of the buildings, however, is represented by the construction of five drier/ovens, at least four of which were of substantial construction, and the setting out of walled enclosures, possibly for animal penning, and a yard enclosing a well.

A similar increase in agricultural facilities was evident at Fordington Bottom. Here, in addition to the construction of several new agricultural buildings from the later 3rd century, a series of other structures was set out in the coombe, including a substantial graindrier and cistern set within a surfaced working area, four hearths, and two smaller oven/driers. At Poundbury, during the later Roman period, the expanded settlement was associated with two metalworking hearths, two oven/driers, and a number of domestic ovens. It is interesting to note that, despite the small area examined, no such structures were recorded at Maiden Castle Road in association with the 4th century buildings. There was also a notable lack of tools and equipment. Only querns for food processing were recovered and a minute quantity of smithying slag.

At the other settlements, the range of manufacturing activities taking place in the later Roman period was greatly expanded and is evidenced from both the structures and from the artefact assemblages. At Fordington Bottom agricultural activities are represented by bar shares, a scythe, bill hooks, whetstones, and hones. Textile production was suggested by the presence of spindle-whorls, shears, and weights. Small quantities of smithying slag were recovered and the cistern in the working area may have been associated with tanning and leatherworking. Malting was one use to which the graindrier was being put and the cistern may even have served as a brewing tank. Grain and food processing is indicated by the substantial graindrier and large number of querns, mortars, and millstones. The presence of these latter objects is especially interesting. If the larger examples were water powered, they were recovered some distance from the River Frome. It is possible that the Roman aqueduct immediately to the north of the settlement, or a leat from it, was utilised. If so, the use of a public service in this way probably had to be paid for on a rental basis from the town. Evidence for food and grain processing also occurs at Poundbury and Alington Avenue and also ironworking at the former and possibly leadworking at the latter.

The increase in the number and size of graindrying facilities at most of these rural sites suggests an intensification of cereal production around the town in the later Roman period. This may have been linked to an increase in the area turned over to arable cultivation. In addition to the existing settlement fields, new fields were established in the late Roman period at St Georges Road and possibly at Mount Pleasant (Wainwright 1979a, 34). Two corndrying ovens were recorded between the Maiden Castle Road and Fordington Bottom settlements (Sites 7 and 9) in areas that have been considered to have consisted of tracts of long term pasture (Woodward 1993, 375). In the colluvial deposits at Middle Farm there was a considerable depth of Roman ploughwash. The quantities of Black Burnished ware within this deposit suggest that the results of recent fieldwalking may have produced an unrepresentative spread of this material around the town (Woodward and Bellamy 1991, fig. 17) and this supports the view that larger areas were under arable cultivation in the late Roman period than have been suggested. The pressures on land use must inevitably have increased with the expansion of the urban population, the construction of the town walls, the establishment of large suburban cemeteries and the increase in the size of the rural settlements themselves.

It is clear that during the later Roman period there was a substantial investment in agricultural and other manufacturing production, both in terms of facilities and technology, at most of these settlements. This is testimony to the continued success of these farming communities in providing produce to the town and in turn because of the success and growth of the town itself. This was especially marked at Fordington Bottom where the late Roman settlement and structures appear to have been laid out in a planned and coordinated manner, and may have involved considerable expenditure. The exception is Maiden Castle Road where, although the settlement area was expanded, there is little evidence for investment and there was little evidence for the development of its agricultural economy from the early Roman period. It is also interesting to note (Table 81) that there was a complete absence of 'luxury' items from this settlement in the late Roman period.

It might, therefore, be suggested that the basic economy of the settlement was successful, hence its continued expansion and emergence as a 'village' by the 4th century, but that generated wealth was being collected and invested elsewhere, perhaps in the possible 4th century 'villa' at Olga Road (RCHM(E) 1970, 570) and probably linked to the Maiden Castle Road settlement by a ditched trackway. At the Roman 'village' of Catsgore, where, by the 3rd and 4th centuries, it comprised a series of 12 farms, it has been suggested that the village was subject to a villa lying some distance away (Leech 1982, 38) and a similar such arrangement may occur with the Maiden Castle Road settlement.

Evidence of a pattern of increased investment and diversification in the late Roman rural economy has previously been pointed out in Britain and these developments have been linked to the flourishing of villas at this time (Millett 1990, 203). It is therefore notable that there is a lack of villa development, with the exception of the enigmatic structure at Olga Road, around the town at this time (Woodward 1993, 375) and the nearest late Roman villas lie some 8 km from the town at Frampton (RCHM(E) 1952, 150), possibly at Charminster (Dewar 1960), Weymouth (RCHM(E) 1970, 615), and Preston (ibid., 618). However it is notable that all these structures, except at Weymouth which lies adjacent to the sea, occur on low lying ground

adjacent to rivers or streams. If such structures do occur around *Durnovaria* the valleys of the South Winterborne and especially of the Frome may be the places in which they will occur. Only small portions of these areas have been surveyed to date (Woodward in Sharples 1991, fig. 4), and some of this work has shown that the latest alluviation in the River Frome is of post-Roman date (Evans and Rouse 1991a, 17).

Although there was a major investment in agriculture, this was not associated with the construction of high quality buildings at Alington Avenue, Fordington Bottom, and Poundbury. Very small quantities of *tesserae*, stone tiles, and painted wall plaster were recovered from the settlements, but in no case in sufficient quantities to suggest an adjacent structure of any pretension. Most of this material was recovered from the Poundbury settlement where much of it was probably derived from the funerary structures associated with the large suburban cemetery (Farwell and Molleson 1993).

The absence of wealth is also reflected in the finds assemblages where there is no increase in the number or quality of items recovered (Table 81). The low numbers at Alington Avenue may be explained by the primarily agricultural function of the site structures in the late Roman period, while at Poundbury the numbers of personal ornaments and coins may be distorted by the encroaching late Roman cemetery. However, at Alington Avenue there were three 'high status' late Roman, possibly 3rd century, burials (Davies *et al.* forthcoming.) and it has been suggested that these represent a rural cemetery for members of the landowning elite that otherwise resided elsewhere and possibly within the town.

It has been suggested that the wealth from these settlements was instead invested in the town itself where major and affluent town houses were being constructed from the late 3rd–late 4th centuries (Woodward 1993, 365). Woodward identifies two 'urban farmsteads' within the town at Greyhound Yard and Colliton Park (RCHM(E) 1970, 553) and such establishments may represent the residences of those investing in, benefiting from and receiving the production of the rural settlements around the town. There is now some limited evidence that the Colliton Park establishment was the recipient of produce from outside the town, and brought in for its final processing and storage (Smith 1993). It is also interesting that at Colliton Park there was a substantial enclosure given over to metalworking, with furnaces, forges, and smithies, alongside quantities of ash, iron waste, and ironworking tools. There is a lack of evidence for metalworking in the rural settlements except at Poundbury, where a very specialised role (undertaking) has been suggested, and at Fordington Bottom on the Dorchester Ring Main (J. Mills pers. comm.). It is notable also that both urban farms were associated with 'aisled barn' buildings of considerable size (and capacity), while outside the town no granary or barn structure has yet been interpreted. This is especially noticeable at Alington Avenue where in the late Roman period there were at least four substantial graindriers, but no associated buildings for storage. The Colliton Park complex therefore seems to provide final processing, storage, and specialist metalworking facilities, perhaps for servicing the needs of the rural settlement that lies within the owner's land holdings.

Post-Roman settlement

Limited evidence for post-Roman structures and material was recovered from St Georges Road. This can be compared to the evidence recorded at Poundbury and Alington Avenue. The evidence from St Georges Road does not substantially advance the understanding of the development of the post-Roman landscape around Dorchester reviewed by Green (1987, 150–3) or of the development of the Saxon town (Keen 1984; Woodward 1993, 375), but does provide some important additional data for an as yet poorly understood period.

At Poundbury the late Roman settlement was superseded, possibly in the early 5th century, by a series of new, distinctive structures comprising rectangular post- or slot-buildings and sunken-featured structures. These were set within a new enclosure system based on the Roman enclosure plan. A similar situation may be represented at Alington Avenue although continuity from the late Roman period cannot be proven. It has been suggested that the late Roman settlements at Maiden Castle Road and Fordington Bottom also continued to be occupied into the post-Roman period (Woodward 1991, 36; 1993, 376). There is presently little evidence to support this; material from both settlements can be dated to no later than the end of the 4th century. This includes the latest coin issue of AD 367–375, 4th century glass and New Forest ware produced *c.* AD 340–400 from Fordington Bottom, and from Maiden Castle Road a New Forest ware grave good vessel produced *c.* AD 345–380.

The late Roman buildings at both settlements cannot be shown conclusively to date beyond the 4th century and the sunken-featured buildings are certainly of Roman date. However, a number of the settlement structures were associated with a very coarse Black Burnished ware fabric (Q107/E107), which may continue to have been used into the early 5th century. Unfortunately, at Fordington Bottom and Maiden Castle Road there is an absence of other identifiably post-Roman material. The Poundbury post-Roman settlement was associated with very few artefacts and these consisted of iron buckles and knives, composite bone combs, and bone pins (Ellison in Green 1987, 140). There was virtually no pottery and it has been suggested that much of post-Roman Dorset was aceramic (Woodward 1993, 378).

There is possible evidence for continuity of settlement from late Roman to post-Roman periods at St Georges Road. Here two undated structures can be compared to post-Roman structures excavated at Poundbury and Alington Avenue and elsewhere around the town. The sunken-featured building *01466* is similar to those recorded from Poundbury and especially similar to PR10 which was broadly dated to the 6th–7th century (Green 1987, 82 and fig. 58).

The rectangular building of earthfast post construction at St Georges Road (*01462*) is similar to buildings recorded at Alington Avenue, (building 4436), Poundbury (PR2b), and County Hall, Dorchester, (*571*), all of which are considered to be of post-Roman date. All

consist of simple, slightly irregular, post-structures. Few have clear evidence for an entrance and where partitions occur they take the form of a central line of posts, dividing the building into two long bays.

	Length	*Width*
St Georges Rd *01462*	8.4 m	<3.2 m
Alington Avenue *4436*	10.0 m	4.5 m
Poundbury PR2b	8.1 m	4.5 m
County Hall *571*	9.5 m	4.5 m

There were no finds which dated the St Georges Road structures. Both structures, however, are aligned on the ditches of the rectangular enclosure, probably laid out in the late Roman period. It is from one of the ditches of the enclosure that the only possible post-Roman object from the By-pass excavations was recovered. The pin-beater (Fig. 75, 10) can be compared to examples found within the town at Greyhound Yard where they have been used to suggest a 7th century presence (Woodward 1993, 378). The absence of other post-Roman material may reflect site function but is otherwise consistent with the evidence from Poundbury and Alington Avenue. It is interesting to note the absence of the very late Black Burnished ware fabric (E107/Q107) at St Georges Road, although this may reflect differences in site function, and it remains undetermined if the presence of this fabric at Maiden Castle Road and Fordington Bottom represents activity of 5th century date or later.

The possible post-Roman activity from St Georges Road adds to the evidence for post-Roman, 5th–7th century settlement clustering around the old town of *Durnovaria* and along the fringes of the Frome valley. If the Fordington Bottom and Maiden Castle Road settlements were abandoned shortly after the end of the 4th century, the beginnings of this shift in settlement away from the Chalk downland to the fringes of the river valleys may be of an early date. These new settlements probably continued to use, with some modification, existing Roman field systems. The post-Roman settlement remains were associated with very few finds. This makes it difficult to judge the relative status of each settlement, and it is only the structural evidence that may begin to provide some evidence of settlement hierarchy. The absence of sunken-featured buildings and the large scale of the timber structures at Alington Avenue may be significant.

The date of the abandonment of the St Georges Road structures may have occurred by the end of the 7th century if the Period 6B strip fields, which cut across the rectangular enclosure system (Fig. 14), are of Saxon origin and are a part of Keen's postulated middle Saxon field system (1984, fig. 72), although there is as little dating evidence for these field boundaries as for the structures. The Saxon field system formed the basis of the subsequent medieval open field system and the majority of the medieval ditches recorded from the project can be directly identified as those recorded on a survey of 1779 (Woodward in Sharples 1991, fig. 11). These include the hedged boundaries of the latest field system at St Georges Road. The north–south boundaries at Maiden Castle Road and Fordington Field, and the lynchet on the east side of the Middle Farm coombe can be linked to Keen's postulated field system, but none provides any corroborating dating evidence. The lack of evidence for other possibly early boundaries, especially to the south-east of the town, is disappointing. This must partly result from the intensity of subsequent agriculture, but also from their original form, probably as low lynchets or banks on more gentle slopes.

This post-Roman settlement pattern was ultimately followed by the medieval settlement and parish pattern set out along the rivers Frome and South Winterborne and around the emerging medieval town of Dorchester (Woodward in Sharples 1991, fig. 4). The evidence for the development of the medieval and later settlement and parish pattern around the town and of the development of the Saxon and medieval town of Dorchester has been described elsewhere (Woodward 1991, 17–18; Keen 1984; Woodward 1993, 375).

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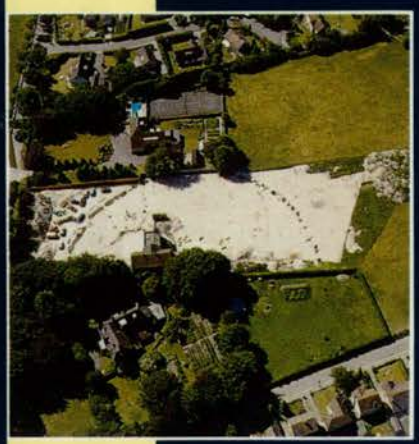
Index

by Lesley and Roy Adkins

Abbreviation Neo is frequently used for Neolithic, BA for Bronze Age, LIA for Late Iron Age, RB for Romano-British, med for medieval and post-med for post-medieval. Alphabetical order is used except for periods within sub-entries, which are grouped together and listed in chronological order: under pottery, for example, Neolithic comes before Bronze Age, and Romano-British before medieval. Mf. references relate to the microfiche.



This report presents the results of archaeological survey and excavation undertaken prior to and during construction of the A35 Southern By-pass and A37 Western Link Road around Dorchester, Dorset.

A series of sites was examined ranging in date from the Neolithic to post-medieval periods.

A Neolithic pit enclosure with associated burials and chalk carvings was excavated at Flagstones and Neolithic pit rings at Conygar Hill.

Evidence for Bronze Age field systems, occupation debris, and ring-ditches was recovered from several sites indicating intensive agricultural settlement. Early–Middle Iron Age material was sparse but Late Iron Age features, burials, and artefact assemblages were recorded.

Ample evidence was found for rural Romano-British occupation and farming in the hinterland of the town of *Durnovaria*.

The archaeological data was backed by an extensive programme of molluscan and soil analyses. The combined results provide a comprehensive and unprecedented picture of the development of occupation and land-use in the Dorchester area from the Neolithic to post-medieval times.

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