



making sense of heritage

The Old Dairy, London Road Amesbury, Wiltshire

Post-excavation Assessment and
Updated Project Design for Analysis and Publication



Planning Ref:S/2011/1135

Ref: 79291.07

February 2014



**THE OLD DAIRY, LONDON ROAD
AMESBURY, WILTSHIRE**

**Post-excavation Assessment and
Updated Project Design for Analysis and Publication**

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Summary

Archaeological excavations were undertaken by Wessex Archaeology on behalf of Mansell Partnership Housing at The Old Dairy, London Road, Amesbury, centred on National Grid Reference (NGR) 416200 142000. The work was undertaken as a condition of planning consent to redevelop the Site for residential use.

The results produced unexpected evidence for multi-phase activity, much of it linked with funerary use, extending from at least the Middle Neolithic to the Anglo-Saxon period. The fieldwork was undertaken between 22nd April and 5th June, and 18th to 19th December 2013.

The earliest activity was located on the crest of a ridge and was represented by stratified material, including Peterborough Ware pottery, from one of two pits that flanked the entrance to an otherwise poorly dated causewayed ring ditch. The pits also included a range of other artefacts, including faunal remains, much of it pig, with charred cereal remains, hazelnut shells and environmental material. These pits may well accompany an area of more extensive Neolithic activity: flint knapping debris and retouched tools, some undoubtedly of Neolithic date and indicative of domestic or ritual activity, were concentrated in the secondary fills of the causewayed ring ditch.

An additional cluster of pits that may also be of Neolithic date was concentrated, more densely, towards the north of the site but was poorly dated.

The most prominent features on the site comprised three ring ditches, the largest of which measured 28m in diameter and was constructed with a causewayed entrance. The monuments appear to represent a previously unrecorded Bronze Age funerary complex, located in an area that already boasts some of the densest concentrations of such monuments in the country. However, it remains possible that the causewayed ring ditch, which was apparently the earliest of the three such features on the site, was linked to the flanking pits and represents a Neolithic hengiform monument. Subsequent activity at the causeway was represented by a segment of ditch, which contained an inhumation burial in the terminus. This ditch segment was soon backfilled and was replaced by an adjoining ring ditch, the burial mound of which capped an unurned cremation burial. This mound, which overlay a primary turf-line in the terminals of the causewayed ring ditch, blocked the entrance causeway.

An additional ring ditch lay to the west of the causewayed monument and, although undated, is likely to represent a further barrow. Molluscan remains have indicated that these monuments were probably constructed in a landscape dominated by open grassland.

The site remained sufficiently visible to attract a small Anglo-Saxon inhumation cemetery spanning the late 7th - early 8th centuries (the Conversion period). Five inhumation burials, most with grave goods, were arranged around a central inhumation burial. This burial, which was surrounded by a



shallow ring ditch (marked with a small barrow), had been heavily disturbed and the bones rearranged, possibly within the Anglo-Saxon period.

The cemetery is of considerable interest having no clear parallels with other similar sites in the area, including Barrow Clump, Figheldean and Winterbourne Gunner (McKinley and Egging Dinwiddy in prep.; Musty and Stratton 1964; Cox pers. comm.) which are generally earlier in date and larger in size, although all of these sites were also located on or adjacent to Bronze Age burial sites.

The results of the archaeological mitigation have significantly enhanced the local and regional knowledge of both the prehistoric landscape interaction, as well as provide information on Anglo-Saxon burial practices.

As such, it is proposed that a programme of further stratigraphic, finds and environmental analysis be undertaken. This will take the form of specialist reports which will be made accessible through the Wiltshire Heritage Environment Record and the Wessex Archaeology website. The results will also be summarised in a short article in *Wiltshire Archaeological and Natural History Magazine*. It is also intended to publish the results through a popular publication, the format of which will be agreed in consultation with the Client and Wiltshire Council.



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This report was prepared by Phil Harding with individual artefact assessments undertaken by Lorraine Mephram (pottery), Phil Harding (worked flint), Jackie McKinley (human bone), Lorrain Higbee (animal bone), Sue Nelson (beads), Nick Cooke (Roman coins) and Lyn Wootten (conservation). The environmental samples were processed by Tony Scothern and the samples assessed by Sarah Wyles. This report was edited by Gareth Chaffey. The graphics were prepared by Rob Goller. The project was managed on behalf of Wessex Archaeology by Caroline Budd.



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1 INTRODUCTION

1.1 Project background

1.1.1 Wessex Archaeology (WA) was commissioned by Mansell Partnership Housing (the Client) to undertake a programme of archaeological mitigation on land known as The Old Dairy in London Road, Amesbury, Wiltshire (hereafter 'the Site'), centred on National Grid Reference (NGR) 416200, 142000 (**Figure 1**).

1.1.2 Planning permission was granted by Wiltshire Council (WC) in February 2012 (ref. S/2011/1135) for the construction of 14 houses and an associated access road, gardens, parking and landscaping.

1.1.3 A decision notice was issued by WC which included a condition stating the requirement for a programme of archaeological work. Condition 8 of the approval stated:

No development shall commence within the area indicated (proposal development site) until:

- *A written programme of phased archaeological investigation, which should include on-site work and off-site work such as analysis, publishing and archiving of the results, has been submitted to and approved by the Local Planning Authority; and*
- *The approved programme of archaeological work has been carried out in accordance with the approved details.*

1.1.4 Following consultation with the Assistant County Archaeologist at WC, archaeological advisor to the Local Planning Authority (LPA), it was agreed that a programme of archaeological trial trenching was required. The aim of the trial trenching (WA 2013a and b), which comprised two machine-dug trenches, was to establish the potential for the Site to contain archaeological remains.

1.1.5 Prior to the trial trenching the concrete foundation pads of the Old Dairy and areas of stockpiled demolition rubble were removed by a specialist contractor. It was anticipated that the construction of the dairy and its subsequent demolition would have had a detrimental impact on the survival of archaeological deposits and features across the Site.

1.1.6 However in view of the quantity of documented archaeology in the area, it was decided that a preliminary archaeological evaluation would be appropriate to, in the first instance, establish not only the presence/absence of archaeological remains but also their significance and level of preservation.

1.1.7 The likelihood that archaeological remains might be present on the Site was increased by the presence of the nearby Raftyn Barrow (dated to the Bronze Age period) and to the previous discovery of a circular enclosure ditch adjacent to the Site, dated to the Early Iron Age, within which were four inhumation burials (see below).



- 1.1.8 The two evaluation trenches, each 30m x 1.8m, were positioned across the line of proposed housing at the north and east sides of the Site. These trenches revealed two inhumation burials and two segments of a curving ring ditch, interpreted as a round barrow ditch. In the light of these significant findings it was agreed, in consultation with the Client and the Assistant County Archaeologist at WC, that a programme of archaeological mitigation via excavation to enable *preservation by record* was required.
- 1.1.9 In response to this a Written Scheme of Investigation (WSI) (WA 2013c and d) was drawn up, submitted to and approved by the LPA prior to fieldwork commencing, which set out the strategy and methodology by which the archaeological fieldwork would be implemented.
- 1.1.10 The fieldwork was undertaken between 22nd April and 5th June, and 18th to 19th December 2013.

1.2 The Site

- 1.2.1 The Site was located within the eastern outskirts of Amesbury, to the north of London Road (**Figure 1**). It occupied an irregular plot of land measuring approximately 0.36ha, bounded to the east by a motor repair garage, to the west by a vacant plot awaiting redevelopment and to the north by residential properties.
- 1.2.2 The Site was situated approximately 310m to the east of the River Avon, at an elevation of 91m above Ordnance Datum (aOD) on the crest and north facing slope of the Ratfyn Spur, which runs from east-west, overlooking Folly Bottom. The underlying geology for the Site is recorded as Upper Chalk of the Cretaceous period (Geological Survey of Great Britain, sheet 298).

2 ARCHAEOLOGICAL BACKGROUND

2.1 Introduction

- 2.1.1 A Heritage Statement was prepared (WA 2011) which recognised the potential importance of the location, lying 830m to the east of the Stonehenge, Avebury and Associated Sites World Heritage Site and within an Area of Special Archaeological Significance, as defined by *Salisbury District Local Plan 2011*.
- 2.1.2 The Heritage Environment Register (HER), held by WC, lists 12 monuments of interest to the north of London Road, of which two (MW1208 and 1259) are of medieval and post medieval date.
- 2.1.3 The greatest concentration of monuments lies at the west end of the Ratfyn Spur, on land overlooking a steep river cliff and meander of the River Avon. Of these monuments the Ratfyn Barrow (HER-MW 1219), approximately 300m west of the Site, is the only extant feature. A cluster of seven monument records lies immediately north-west of the Ratfyn Barrow within and to the rear of 'Millmead'. This concentration includes 'three very low barrows' (MW 1236, 1235 and 1220) aligned south-west north-east along the ridge overlooking the River Avon and reported by Hawley in 1920. These barrows may be those featured by William Stukeley in his depiction of the area recorded in his 'On the road to Ratfyn' in 1724.
- 2.1.4 Other associated records to the rear of 'Millmead' include five Late Neolithic pits (MW1189), Bronze Age and/or Iron Age ditches (MW1230 and 1196) and other prehistoric material including Grooved Ware pottery (MW1187).



- 2.1.5 The HER also lists a large circular earthwork (MW1195), thought to be of Early Iron Age date, approximately 100m east of the Site. This monument was investigated during the construction of a railway at the beginning of the 20th century. Four inhumation burials (MW1197), considered to be of Romano-British date due to the presence of hob-nails, were recorded from the ditch.
- 2.1.6 Subsequently the Site appears to have been agricultural land until after the Second World War, when the dairy was constructed. Given the context of the immediate post-war period, it is unlikely that any archaeological discoveries would have been allocated any importance.

3 METHODOLOGY

3.1 Aims and objectives

3.1.1 The methodology for all mitigation works was set out in detail in the updated WSI (WA 2013d). The archaeological excavation aimed to:

- *Confirm the findings of the trial trenching by determining the presence of these and further archaeological remains and, where present to ensure their preservation by record to the highest possible standard;*
- *Determine or confirm the date or date range of the remains, by means of artefactual or other evidence;*
- *Determine or confirm the extent of the remains;*
- *Determine the condition and state of preservation of the remains;*
- *Determine the degree of complexity of the horizontal and/or vertical stratigraphy, where present;*
- *Assess the associations and implications of the remains encountered with reference to the surrounding historic landscape;*
- *Determine the implications of the remains with reference to economy, status, utility and social activity;*
- *Determine or confirm the range, quality and quantity of the artefactual evidence present;*
- *Determine the potential of the Site to provide palaeoenvironmental and/or economic evidence and the forms in which such evidence may be present;*
- *Prepare a report on the results of the fieldwork including recommendations for any analysis and publication of the results, where warranted;*
- *Enable/encourage public/community engagement.*

3.2 Fieldwork methodology

3.2.1 The entire Site, covering c. 0.36ha (**Figures 1 and 2**), was subjected to archaeological excavation. The area was stripped mechanically under constant archaeological supervision. The machine was used to remove all intrusive evidence of the demolished dairy while, at the same time, restricting damage to archaeological deposits through excessive machining.

3.2.2 The evaluation trenches were dug using a wheeled backhoe excavator fitted with a 1.8m toothless grading bucket while the excavation area was stripped using a 13 tonne tracked



mechanical excavator equipped with a similar bucket. Excavation proceeded to the level of the underlying Chalk or to the upper parts of the undisturbed archaeological deposits, whichever was encountered first.

- 3.2.3 Once exposed areas were planned and cleaned, any archaeological features or deposits were excavated by hand.
- 3.2.4 Hand excavation of archaeological features was undertaken to achieve a comprehensive understanding of all features and stratigraphic relationships; to minimize the possibility that satellite burials may go undetected; to retrieve a representative sample of artefacts from all features; and to examine all areas of the Site that were most at risk of destruction by the development.
- 3.2.5 The level of investigation was agreed with WC on behalf of the LPA in advance as sufficient to achieve a total understanding of all aspects of the Site as set out in the aims and objectives of the WSI (WA 2013d).
- 3.2.6 In the first instance the following sampling strategy was employed:
- *All discrete features of medieval or earlier date were sampled and recorded. At least 50% by volume of each pit was excavated and significant features were completely excavated;*
 - *The ring ditches were sampled sufficient to examine and record all areas of archaeological interest but as a minimum to examine 20% of each feature by length.*
- 3.2.7 Excavated spoil was stockpiled on site; with the agreement of WC, areas of the Site that were devoid of archaeological features, after inspection, were commandeered as storage areas. Spoil was routinely searched for pottery and other artefacts.
- 3.2.8 The archaeological work was routinely monitored by WC in a number of site visits to assess progress on behalf of the LPA and to determine issues of outstanding interest.

3.3 Survey

- 3.3.1 Site survey was carried out using a Leica Viva series GNSS unit using the OS National GPS Network through an RTK network with a 3D accuracy of 30mm or below. All survey data was recorded using the OSGB36 British National Grid coordinate system.

3.4 Recording

- 3.4.1 All recording was undertaken using standardised WA *pro forma* recording sheets comprising written, drawn and photographic elements. Appropriate soil samples were also taken from inhumation and cremation burials, pits and ditches for processing at a later date, to retrieve artefacts, ecofacts and dating evidence.
- 3.4.2 A complete drawn record of archaeological features and deposits was compiled, comprising both plans and sections, drawn to appropriate scales (1:20 for plans, 1:10 for sections). The Ordnance Datum (OD) levels of all principal features and general site topography was calculated and plans/sections annotated with OD heights accordingly.
- 3.4.3 A full photographic record was maintained using digital photography. This aspect illustrated the detail and general context of the principal features, artefacts *in situ* and the Site as a whole.



3.5 Specialist strategies

Artefacts

- 3.5.1 All artefacts from excavated archaeological contexts were retained, except those from features or deposits of obviously modern date, unless they were of sufficiently clear local historical interest to warrant being retained. Most of the material observed on the spoil heap was otherwise clearly related to the construction/demolition of the dairy and was not retained.

Environmental Sampling

- 3.5.2 Bulk environmental soil samples for charred plant remains (charcoal and charred seeds etc), plant macro fossils, small animal bones and other small artefacts were taken from appropriate well dated and sealed archaeological contexts.

Human Remains

- 3.5.3 Human remains were found in Trench 1 of the trial trench evaluation. Consultation between the Client and the Assistant County Archaeologist at WC concluded that the development would unavoidably disturb any additional human remains present. The WSI (WA 2013d) therefore included contingency to fully excavate, record and remove from the Site all inhumation and cremation burials subject to compliance with the relevant Ministry of Justice Licence which was obtained by WA.

4 ARCHAEOLOGICAL RESULTS

4.1 Introduction

- 4.1.1 The trial trench evaluation and subsequent mitigation excavation were undertaken as a continuous programme of work. Context numbers commencing with the digit 100 were allocated to Trench 1, numbers commencing 200 to Trench 2 and 300+ to the excavation.

4.2 Trench 1

- 4.2.1 Trench 1 was located in the north-western corner of the Site (**Figure 2**). Most of the natural soil profile had been removed during construction of outbuildings associated with the dairy. The surface of the natural Chalk (**103**) was, in places, well jointed and bedded, but elsewhere characterised by patches of periglacial chalk in a creamy paste matrix.
- 4.2.2 The trench produced an undated inhumation burial (**105**) aligned approximately east-west and lying within a shallow grave [**104**]. The grave was unavoidably truncated and disturbed by the removal of overburden.
- 4.2.3 A second inhumation burial [**107**] was confirmed in the north-east corner of the evaluation trench. This grave which was also aligned east-west was excavated subsequently as [**324**]. At the time of their discovery both of the inhumation burials were undated, but were shown later to form part of a small Anglo-Saxon cemetery.

4.3 Trench 2

- 4.3.1 Trench 2 was located in the south-eastern corner of the Site (**Figure 2**). Towards the central section of this trench, which was aligned north-south, the ground had been heavily disturbed by the demolition of the dairy, although the two ends were relatively undisturbed.



- 4.3.2 Part of ditch [206], with a curving inner edge, extended from the section at the south end of the trench. The feature measured 0.56m deep with a steep, regular inner edge and a flat base.
- 4.3.3 The ditch was sealed by colluvium (plough soil) (203, 204) and a stabilisation turf-line (205), which capped secondary (207) and primary (208) ditch silts. The survival of the overlying colluvium made it possible to reconstruct the stratigraphic sequence overlying the Chalk and to confirm the natural topography on the south side of the Site.
- 4.3.4 A single sherd of Middle Neolithic pottery was found in the upper fill of the ditch.
- 4.3.5 A curving ditch, approximately 3m wide, was also exposed at the north end of the trench. A small extension to the trench area made it possible to calculate the radius of the arc, from which it was concluded that these two ditch segments represented a previously unrecorded ring-ditch approximately 28m in diameter.

4.4 Excavation

- 4.4.1 As a result of the archaeological evaluation it was agreed that the Site should be entirely stripped, excavated and recorded to fully understand the archaeological remains prior to it being returned to the Client for redevelopment.
- 4.4.2 This phase of work revealed three ring ditches, several prehistoric pits, and additional Anglo-Saxon inhumation burials related to those discovered during the evaluation.

4.5 Summary of the Excavation Results

- 4.5.1 The following section summarises the excavation results by major periods. More detailed accounts of the results can be found in the database and the original archive.

4.6 Ring ditch 375

- 4.6.1 This feature, the most westerly of the three ring ditches, lay immediately below the crest of the slope and faced north across Folly Bottom. The monument comprised an unbroken circuit of ditch approximately 24m in diameter (Figure 2).
- 4.6.2 The entire circuit was exposed, apart from the western and south-western fringes, which extended into the adjacent plot of land which is currently awaiting redevelopment.
- 4.6.3 The ditch circuit was sectioned at six locations; four slots, each 2m wide, and two more measuring 1m wide. The locations were targeted to examine areas most at threat by the redevelopment, provide a representative sample of deposits across the ditch, indicate whether the monument had been constructed as a series of interconnecting quarry scoops and establish the presence or absence of secondary burials.
- 4.6.4 Two opposing slots [411 and 348] were deliberately placed across the slope, making it possible to reconstruct a complete profile of the surviving barrow.
- 4.6.5 The monument was relatively well preserved, although areas of the natural Chalk had been truncated, most notably on the east side where the foundations of the dairy were most destructive.
- 4.6.6 Section [411], on the southern side of the ring ditch, preserved not only a complete profile of the ditch and its contents but also deposits overlying the surface of the natural Chalk. This made it possible to calculate the amount of truncation to the upper ditch profiles across the remainder of the monument.



- 4.6.7 The ditch profile in section [411] (**Figure 3**) measured 2.42m wide and 0.80m deep, similar to that in section [404] immediately to the east. The depth of the ditch reduced dramatically on the eastern side, in sections [380] (**Plate 1**) and [375], where the foundations of the dairy were most destructive. At these locations the ditch measured only 0.44m deep, suggesting that as much as 0.36m of the upper profile and tertiary fills had been removed. Sections [364], [348] (**Plate 2**) and [390] on the north side of the ring ditch averaged 0.68m deep, a loss of only 0.12m.
- 4.6.8 The ditch comprised a single continuous feature with a flat base, angular corners and steep, almost vertical sides that splayed out into a weathering cone near the surface. There were no variations in the level of the base or in the outline of the plan to indicate that it had been formed by conjoining quarry scoops.
- 4.6.9 The ditch fills, in all excavated sections, were both remarkably similar and symmetrical around the entire ring ditch circumference. The sediments, which were typically represented in section [411] (**Figure 3**) comprised by-products of natural weathering, showing no hint of preferential silting from a mound or adjacent bank or of any deliberate backfill.
- 4.6.10 The lower parts of the primary fills (**412, 413**) were composed typically of poorly sorted, open-framework, freshly weathered, sub-angular chalk rubble. This deposit, in which poorly developed tip lines could be seen, was concentrated in the angles of the ditch base and spread towards the centre of the ditch.
- 4.6.11 In the upper parts the primary fills were frequently contained within a matrix of light grey silty clay, derived from the slowing of the silting process, from downward migration from the overlying secondary silts or from elements of both. The primary fills could be traced upwards to the base of the weathering cone, where this had not been truncated by later developments.
- 4.6.12 The primary silts continued upwards into the secondary silts, themselves also products of natural weathering.
- 4.6.13 The central weathering cone (**414**) of each ditch section was filled by concentrations of angular and sub-angular flint nodules, up to 85mm across. These had undoubtedly weathered in with the chalk sediments and had migrated down-slope into the centre of the ditch.
- 4.6.14 Sedimentation slowed as the ditch filled and was followed by a phase of stabilisation (**415**), which was evident as an established, stone-free turf line.
- 4.6.15 Throughout this period the monument is likely to have been visible as a low earthwork; however all traces of it undoubtedly disappeared when it was levelled by agriculture. The turf line was covered and the slight ditch depression filled by a deposit of light-mid grey brown silty clay (**416**) containing poorly sorted, sub-rounded chalky inclusions up to 30mm across and typical of plough soil accumulations.
- 4.6.16 No traces of any inhumation or cremation burials were present. The centre of the monument coincided with an area of disturbance related to the dairy and it is likely that the surrounding Chalk surface had been truncated.

4.7 Ring ditch 420

- 4.7.1 This causewayed ring ditch measured 28m in diameter, the largest and probably earliest of the three ring ditches on the Site. The monument straddled the crest of the ridge with a causeway entrance 7.3m across on the eastern side (**Figure 2**).
- 4.7.2 Nine sections ([429], [456], [438], [502] (**Plate 4**), [421], [481], [494], [544] and [572] (**Plate 3**)), were dug across the ditch, in addition to section [206] from the evaluation. Sections [456] and [438] examined and completely emptied the entrance terminals.
- 4.7.3 Five slots ([429], [502], [421], [481] and [494]), each 2m wide, and slot [572], which measured 1m wide, were dug to provide a minimum 20% sample of the circumference. Individual sections were positioned to examine areas likely to be destroyed by redevelopment: sections [429] and [502] (house foundations) and sections [421], [481] and [494] (service trenches within the access road). These sections aimed to characterise the nature of the ditch construction and its fills, collect artefact assemblages and establish the presence or absence of secondary burials.
- 4.7.4 An additional slot [544] which measured 1.82m wide, was dug adjoining the north side of section [494] to retrieve additional worked flint from the ditch.
- 4.7.5 The most complete ditch profile was recorded in the north face of slot [544] (**Figure 4**), which lay close to the crest of the ridge. The profile demonstrated that the feature measured 3.55m wide and 0.91m deep with a flat base, approximately 2m across, and sharply angled corners with sides that sloped down steeply from a flared weathering cone. Like ring ditch [375] this feature also showed no signs of having been dug as a series of conjoining quarry pits but was apparently excavated as a continuous feature.
- 4.7.6 The effects of truncation on the natural Chalk and tertiary ditch fills by the construction of the dairy were increasingly apparent across all of the north side of the monument. Surface reduction was most marked in ditch sections [421] and [502] where the feature measured only 0.64m deep, a loss of approximately 0.27m. Despite this reduction the lower parts of the ditch sequence were undisturbed.
- 4.7.7 Truncation of the Chalk was also apparent in the northern ditch terminus [438] where only 0.40m of the lower sedimentary sequence was preserved. Nevertheless it was possible to record and correlate deposits with those in the southern ditch terminus, [456], where the evidence was better preserved and the sequence confirmed.
- 4.7.8 The sedimentary ditch sequence was repeated around the entire circumference of the ditch. This comprised primary chalk rubble (545), (546), (547) and (548), with a flint filled weathering cone (549), a stabilised turf line (550) and upper tertiary colluvial silts (551 and 552) (**Figure 4**).
- 4.7.9 The ditch fills, like those in ring ditch [375], were characterised by processes of natural sedimentation (**Figures 4 and 5**). The deposits were noticeably symmetrical, with no apparent preferential silting from either the interior or exterior of the ditch. It was therefore difficult to speculate on the form of the monument as it was first constructed, the presence or absence of a central mound, a berm or an inner or outer bank.
- 4.7.10 The base of the ditch was virtually sterile; relatively small numbers of flint flakes were recovered from the primary and secondary fills. The density of these artefacts was sufficiently low to indicate that they were undoubtedly derived from natural silting rather

than episodes of human activity directly related to the construction and use of the monument.

- 4.7.11 The greatest variation between the artefact assemblages in ring ditches **375** and **420** was in the quantities of worked flint. This formed the largest component in ring ditch **420** and was distributed evenly around the entire circumference of the ditch. Artefacts were principally recovered from the central weathering cone of the ditch and the sorted horizon at the base of the stabilisation turf line. These horizons produced approximately 64% of the worked flint with only 6% being recovered from the primary silts.
- 4.7.12 The ditch sediments were more complex in the two ditch terminals, **[456]** to the south and **[438]** on the north. The sequence in these sections was identical but was more complete to the south where construction of the dairy had not intervened (**Figure 5**).
- 4.7.13 The basal sequence of primary/secondary fills, (**491** in **[456]** and **440/441** in **[438]**) was again overlain by the stabilisation turf line (**490** and **442** respectively) as seen elsewhere (**Figure 5**). This sequence demonstrates that sufficient time had elapsed for the formation of the turf line, before the next phase of deposition.
- 4.7.14 Fragments of disarticulated human bone were recorded from the turf line (**442**) in the north terminus. However the upper parts of this terminus were disturbed by demolition of the dairy making it difficult to allocate artefacts to their correct context with any certainty.
- 4.7.15 Additional deposits of chalk rubble (**489** and **443**) overlay the turf line. The deposit on the south side thickened upwards towards the butt end of the ditch but feathered out at the base to merge with the flints in the weathering cone of the ditch.
- 4.7.16 These deposits of chalk undoubtedly represent trail from the mound of the adjacent and chronologically later ring ditch **[543]** to the east which was constructed and sealed off the mouth of the causeway of ring ditch **420**.
- 4.7.17 The perimeter of this satellite mound was apparently defined and probably revetted, at least on the south, by a line of stakes, possibly supporting a woven wicker fence. Four stake holes, **[464]** in the side and **[466]**, **[468]** and **[530]** across the floor, were aligned obliquely across the butt end of the causewayed ditch **[456]** (inset, **Figure 2**).
- 4.7.18 Each stake hole measured approximately 0.06m in diameter and penetrated into the solid Chalk to a depth of 0.16m; however stake hole **[468]** was exposed in the longitudinal section of the ditch. This demonstrated that the stake was driven from the upper surface of the lower turf line **[490]**, a total depth of 0.55m. Stake holes were not present in the northern ditch terminal.
- 4.7.19 Two pits **[447]** and **[563]** lay 1.35m and 1.47m respectively beyond the outer edge of the ring ditch and 4.41m and 5.01m from the butt ends. The apparent symmetry of these pits in relation to the causewayed entrance is unmistakable and it is possible that they formed part of the causewayed ring ditch. The date of these features is therefore a vital consideration towards the interpretation, date and function of the causewayed ring ditch **420**.
- 4.7.20 The interior of the monument was closely examined to identify any potential pits, post holes or graves, especially near the centre; none were found, possibly due to the truncation of the bedrock during demolition of the dairy. The surface of the Chalk was marked by pockets of disturbance, filled with demolition debris, and 'tooth-marks' caused by the machine bucket used during the demolition of the dairy.

4.8 Ring ditch 543 and ditch 450

- 4.8.1 Ring ditch **543** lay across the crest of the ridge and symmetrically sealed off the entrance causeway to ring ditch **420** (**Figure 2**). The feature was represented by an arc of ditch **[543]**, which measured 15m in diameter. The two ends **[558]** and **[476]** stopped short of the ditch terminals of ring ditch **420** by approximately 1m on the north and 3m to the south.
- 4.8.2 The ditch terminal **[476]** at the south end of ring ditch **[543]** cut through an earlier ditch segment **[450]** (**Figure 5**), which measured approximately 3m long, 1.70m wide and 0.70m deep. It was cut with almost vertical sides, sharply angled corners, a flat base and a neatly squared terminal at the west end.
- 4.8.3 The section showed conclusively that this ditch segment **[450]** had been cut through pit **[447]**, which was tentatively associated with causewayed ring ditch **[420]**. An inhumation burial (**461**) (**Plate 5**) lay on the base of the ditch segment terminus **[450]** perpendicular to the ditch axis.
- 4.8.4 The ditch segment **[450]** appeared to have been backfilled deliberately soon after its construction, possibly contemporary with the inhumation burial, there being no grave cut. The ditch fills (**451**, **462**, **452**) were, in addition, composed of poorly sorted chalk rubble, with no hint of finer graded secondary and tertiary chalk silts near the surface. Finally the ditch sides retained their acute profile to the ground surface, there being no developed weathering cone.
- 4.8.5 The segment **[450]** was therefore apparently of short duration and of unknown extent. Its eastern end was removed by the construction of ring ditch **543**, which may have been dug as a direct replacement of ditch segment **[450]**. In addition a small indistinct pit **[473]** was also cut through the deliberate backfilling of ditch segment **[450]**.
- 4.8.6 Pit **[473]** measured approximately 0.31m deep with gradual sides and an irregular flat base. It was filled with chalk rubble (**474**) in a light brown silty clay matrix that contrasted with the surrounding backfill of ditch segment **[450]**. The pit was capped by a deposit of dense angular flint nodules (**475**) that filled the weathering cone of the pit and extended across the base of the overlying tertiary silts (**472**) of the ditch.
- 4.8.7 Ring ditch **543** was approximately 2m wide at the surface, 1.20m at the base and 0.55m deep. This ditch, like the others, was cut with steep sides and a flat base. The silting sequence also followed that of ring ditches **375** and **420**, comprising primary and secondary silts (**477**, **478** and **479**) that were overlain by a flint rich sorted horizon and stabilisation turf line (**480**) and a capping of tertiary plough soil/colluvium (**472**).
- 4.8.8 A circular, relatively shallow pit **[555]** was located at the approximate centre of ring ditch **[543]** and at a point which coincided with the approximate midpoint of the ring ditch **420** causeway. The pit, which measured approximately 0.70m in diameter and 0.15m deep was cut with regular sloping sides and a flat base and contained an unurned cremation burial (**557/568**).
- 4.8.9 The cremation burial was excavated stratigraphically or in spits 0.05m thick where identifiable deposits were thicker. All sediment was retained and individual spits were planned at a scale of 1:10 and photographed.
- 4.8.10 The primary cremation deposit (**557** on the west and **568** on the east), which measured approximately 0.10 m thick, contained large quantities of burnt flint, cremated human

bone, charcoal and ash, presumably pyre debris. Cremated human bone was most densely concentrated in the south-eastern corner of the lower spit of **568**.

- 4.8.11 The cremation deposit was capped by a layer of chalk pellets in a light brown silty clay matrix (**556** and **567**) which undoubtedly represents subsequent backfill or barrow mound construction that filled the slumped cone of the cremation pit.
- 4.8.12 Two conjoining pockets of heavily periglaciated Chalk lay immediately inside the arc of ring ditch **543**. The most northerly of these two pockets [**517**], lay 4.5m east of cremation burial pit [**555**]. The filling was characterised, on the surface, by a circular band of mid grey-brown silty clay (**521**, **522**), approximately 0.15m wide, with burnt flints and reddening of the matrix.
- 4.8.13 The band of apparently burnt material could be traced in the section through the feature, which was ill-defined, to a depth of up to 0.40m. There was nothing to indicate that this burnt deposit filled a deliberate feature but probably represented an area of *in situ* burning, traces of which had percolated down through the filling of the solution feature/tree throw.
- 4.8.14 It could not be demonstrated how this area of burning might have been associated with the construction of ring ditch **543** or, more importantly, may have marked the location of the pyre for the cremation burial [**555**].

4.9 Pits

- 4.9.1 Twenty pits which include pits [**447**] (**Figure 5**) and [**563**] (**Figure 6**) flanking the entrance way to causewayed ring ditch **420**, the central cremation burial pit [**555**] of ring ditch **543** and pit [**473**], which cut through the filling of ditch segment [**450**] at the west terminal of ring ditch **543** were excavated. Some of these pits, most notably pit [**447**] undoubtedly contained material evidence of the earliest activity on the Site.
- 4.9.2 Pit [**447**] on the south side of the terminus of ring ditch **420** measured approximately 1.09m in diameter and 0.45m deep with concave sides and a flat base. It was filled with a primary fill of dark brown silty clay (**448**) that contained an assemblage which included possible Early Neolithic pottery, struck flint and animal bone. The upper fill (**449**) was lighter in colour, but of similar character, and also contained similar pottery and worked flints.
- 4.9.3 Pit [**563**] on the north side of the causewayed entrance measured 1.13m in diameter and 0.51m deep, with convex sides and a shallow concave base. The filling comprised a deposit of deliberate back-fill containing dark grey-brown ashy material (**564**) and refuse which included sherds of Middle Neolithic pottery, animal bone, worked flints and charcoal.
- 4.9.4 The primary filling was overlain by mid grey-brown silty clay (**565**) and (**566**) which also contained burnt and worked flint with animal bone.
- 4.9.5 The pits elsewhere across the Site ranged from 1m to 0.5m in diameter and from 0.7m to 0.10m deep. Most were cut with steep slightly concave or straight sides with flat bases and were filled with dark brown or grey brown silty clay.
- 4.9.6 A distinct oval cluster of nine [**344**], [**346**], [**379**], [**337**], [**335**], [**329**], [**355**], [**359**] and [**524**] closely spaced pits lay at the north end of the Site (**Figure 6**). They covered an area of

approximately 4.5m by 3.3m on the southern fringes of the central Anglo Saxon inhumation burial [361].

- 4.9.7 The cluster included both the largest, averaging 0.9m in diameter, and deepest, average 0.4m, pits on the Site. Artefacts were rare; a fragment of antler was found on the base of pit [355] while pit [359] contained animal bone, also in the primary fill. Pit [329] contained unclassified prehistoric pottery, worked flints and charcoal. Pits [379], [337], [335] and [524] all contained worked flints in the tertiary fills.
- 4.9.8 Pits [355] and [359], which were truncated by the central Anglo Saxon grave [361], were both capped by a plug of chalk rubble which was probably derived from the upcast of the burial.
- 4.9.9 The remaining pits occurred both as isolated or paired features. They included three isolated pits, [323] and [307], at the north end of the Site and [333] to the south of ring ditch 375, two heavily truncated inter-connecting pits [303] and [305] at the north end of the Site and a pair of pits [531] and [569] immediately east of ring ditch 420. These features were all relatively shallow averaging only 0.14 m deep.
- 4.9.10 Pit [307] contained worked flints and fragments of prehistoric pottery, which were too heavily decayed to be processed. Pit [333], which measured approximately 0.5m in diameter, also contained worked flint and burnt flint, Bronze Age pottery and animal bone, while worked and burnt flints and animal bone were recovered from pits [303] and [305].

4.10 Anglo-Saxon cemetery

- 4.10.1 A small inhumation cemetery was discovered in the northern part of the Site. The cemetery comprised five satellite graves [309], [315], [312], [104], [324] that were arrayed around a central grave [361]. Grave [104] was found in evaluation Trench 1. Additional burials may well have existed to the north and east, beyond the margins of the Site but have probably been destroyed during development in those areas.
- 4.10.2 The central grave [361] containing burial (363) (Plate 6) was aligned north-south and measured 2.10 m long, 0.78 m wide and 0.63 m deep and was well cut with vertical sides and a flat base. It was cut through the fills of two prehistoric pits [359] and [355], located to the west and south respectively of the grave cut.
- 4.10.3 The inhumation burial (363) comprised the heavily disturbed remains of an adult male of which only the feet and distal ends of the lower limbs remained articulated. The remaining components of the skeleton had been heavily disturbed, probably by robbing in antiquity, but had been redeposited in approximate anatomical order. No grave goods were present. The grave was filled with yellow brown silty clay mixed with chalk rubble (362) which seems likely to represent reworked material from the original burial.
- 4.10.4 The grave was surrounded by a shallow ring gully [492] of 2.8m radius from the grave. This feature demarcated an area around the grave and is likely to have provided material to create a low central mound. The gully measured 0.40m wide and 0.15m deep with shallow sides and a flat base. It was filled with grey-brown silty clay and was apparently cut through a number of prehistoric pits [337], [379] and [329]. However the stratigraphic relationships of these intersections were not at all clear in the sections and seem unlikely in view of the anticipated date of the pits.
- 4.10.5 The remaining five graves in the cemetery were aligned approximately south-west north-east. The largest grave [324] measured from 2.1m long, 0.96m wide and 0.96m deep



while the smallest [309] was 1.6m long, 0.7m wide and 0.7m deep. Grave [104] was too badly truncated to reconstruct its dimensions.

- 4.10.6 All burials were laid in a supine posture with the head at the west end. Bone condition was generally poor, possibly due to the relative shallowness of the graves.
- 4.10.7 The inhumation burial (310), grave [309], was accompanied by a large iron knife, while burial (313), grave [312], was found with five beads and a short length of copper alloy wire at the throat and an iron object at the pelvis. Burial (325), grave [324] was interred with two coins and a bracelet of Portland shale (Plate 7). All graves were backfilled with deposits (311), (317), (314), (106), (326) of brown/grey brown silty clay mixed with quantities of chalk rubble.

5 ARTEFACTUAL EVIDENCE

5.1 Introduction

5.1.1 A finds assemblage of moderate size was recovered from the Site. This appears to derive from four phases of activity:

- Pottery and flint from pits; two pits flanking the entrance to the causewayed ring ditch were respectively of possible Early and Middle Neolithic date with further material from less well dated pits; flint possibly of the same date found in other features but not well stratified and likely to be residual;
- Human remains from one inhumation placed on the base of a ditch, and one unurned cremation burial centrally placed within a ring ditch, both assumed to be of Bronze Age date; worked flint and Bronze Age pottery from these and other associated features, including two other undated ring ditches, one causewayed;
- Late prehistoric pottery (Middle Bronze Age to Iron Age) and animal bone from the secondary and tertiary fills of the ring ditches, probably redeposited;
- Human remains and associated grave goods from a small Anglo-Saxon cemetery.

5.1.2 There are also a few incidental finds of modern date. All finds have been quantified by material type within each context, and the totals are given in **Table 1**. The finds are discussed by material type below.

Table 1: Finds totals by material type

Material type	Number	Weight (g)
Pottery	144	689
<i>Early Prehistoric</i>	67	283
<i>Late Prehistoric</i>	61	352
<i>Prehistoric unspec</i>	15	52
<i>Anglo-Saxon</i>	1	2
Ceramic Building Material	14	160
Worked Flint	1705	-
Burnt Flint	2121	120,732
Stone		
<i>Beads</i>	3	-
<i>Other</i>	2	791
Glass		
<i>Beads</i>	7	-
<i>Other</i>	4	1515
Metal	16	-



	<i>Coins</i>	1	-
	<i>Silver</i>	3	-
	<i>Copper Alloy</i>	4	-
	<i>Iron</i>	8	-
Shale		1	-
Human Bone	<i>Unburnt bone</i>	min 6 individuals +redeposited	-
	<i>Cremated bone</i>	-	905
Animal Bone		386	1478

5.2 Pottery

5.2.1 With the exception of a single Anglo-Saxon sherd, the pottery assemblage is entirely of prehistoric date. Condition ranges from fair to poor; the assemblage is highly fragmentary, and sherds have suffered high levels of surface and edge abrasion. Mean sherd weight is 4.7g. The poor condition, combined with the scarcity of diagnostic material, means that many sherds cannot be closely dated with any degree of confidence, and a significant proportion of the assemblage remains at this stage only very broadly dated as 'late prehistoric' or just 'prehistoric'.

Table 2: Pottery totals by ware type

Period	Ware type	No. sherds	Weight (g)
Early Prehistoric	?Early Neo sandy ware, rare flint	44	185
	Peterborough ware	19	86
	Grog-tempered ware	4	12
Late Prehistoric	Rock-tempered ware	29	251
	Sandy ware, rare flint	1	20
	Sandy ware	10	16
	Flint-tempered ware	19	63
	Shelly ware	2	2
Prehistoric	Flint-tempered ware	8	32
	sandy ware, rare flint	7	20
Anglo-Saxon	Organic-tempered ware	1	2
	OVERALL TOTAL	144	689

Early Prehistoric

5.2.2 A group of 44 sherds from pit [447] (fills 448 and 449) are in a relatively soft-fired sandy fabric with rare flint inclusions. Two rim sherds appear to derive from vessels with an open or neutral profile; these are not particularly chronologically distinctive but, when combined with the fabric could be dated as Early Neolithic, although this dating remains very tentative at this stage.

5.2.3 A small group of 18 sherds from pit [563] (fills 564 and 565) are clearly diagnostic of the Peterborough Ware tradition. All are body sherds, heavily abraded, and most carrying the impressed decoration characteristic of this ceramic tradition. One other small abraded sherd of Peterborough Ware was recovered from a secondary fill of the causewayed ring

ditch **420**. In addition, a very degraded section from the rim of a Peterborough ware bowl was found in pit [307] (not included in **Tables 1** or **2**) and blocklifted for subsequent attention by a conservator. It was identified by the rim profile, and the decoration visible on the inside of the rim.

- 5.2.4 Four sherds in grog-tempered fabrics have been tentatively dated as Early Bronze Age, possibly belonging either to Beaker or Collared Urn traditions, although all are small and completely undiagnostic. Three came from a tertiary fill of the causewayed ring ditch **420**, while the fourth came from ring ditch **375**. In both cases the sherds were associated with later (probably Iron Age) pottery.

Late prehistoric and prehistoric unspecified

- 5.2.5 Of the remainder of the prehistoric assemblage (76 sherds), some sherds can be dated more confidently than others, mostly on fabric grounds.
- 5.2.6 A group of 29 sherds from pit [333] are all in the same fabric and probably represent a single vessel. The fabric is unusual for the area, tempered with crushed rock fragments which appear to be igneous in origin, clearly non-local, and a source in south-west England is a possibility. In the absence of any diagnostic sherds the form and ceramic tradition is unknown, but this could be a Trevisker-related vessel, of Early/Middle Bronze Age date. Although at least one other Trevisker-style vessel is known from Amesbury, this is in what is likely to be a locally produced grog-tempered fabric (AC Archaeology 2004, 15, plate 4), and there are no other known examples of rock-tempered Trevisker pottery in the area.
- 5.2.7 The remaining sherds are in flint-tempered and sandy fabrics, some of the sandy fabrics also containing sparse flint inclusions similar to those observed amongst the possible Early Neolithic group (see above). At the coarser end of the spectrum some of the flint-tempered wares could be Late Bronze Age, although some with better-sorted inclusions could fall anywhere between the Middle Bronze Age and Middle Iron Age. The sandy wares, including those with sparse flint inclusions, if not Early Neolithic could be Early or Middle Iron Age.
- 5.2.8 Eighteen sherds came from secondary and tertiary fills of the ring ditches (**375**, **420**, **543**), but are likely to be chronologically mixed and, judging by sherd size and condition, are most likely to represent redeposited material rather than primary dating evidence. Other sherds came from various pits, but again quantities are generally small and cannot be taken as firm dating evidence. Seven sherds were residual in Anglo-Saxon grave [361].

Anglo-Saxon

- 5.2.9 A single small, abraded body sherd in an organic-tempered fabric is of Anglo-Saxon date; this came from ring ditch **420** (fill **580**).

5.3 Ceramic Building Material (CBM)

- 5.3.1 One small fragment of CBM, undiagnostic but almost certainly Romano-British, was a residual find in the backfill of Anglo-Saxon grave [312]. The rest of this category consisted entirely of post-medieval and modern brick fragments (intrusive in upper fills of ring ditch **375** and ring ditch **420**); these have been discarded.



5.4 Worked Flint

- 5.4.1 The flint assemblage has sorted and catalogued by type (see **Table 3** for totals, excludes flint subsequently extracted from soil samples). The total is modest and was found predominantly in the ditch of the large causewayed ring ditch (**420**). Artefacts were predominantly from the secondary fills and from the overlying 'sorted horizon'. This aspect of the assemblage, the paucity of well stratified material, is unfortunate; however there is much to be positive about.

Table 3: Flint totals by type

Type	Number
Flakes	846
Broken flakes	488
Blades	72
Broken blades	19
Broken bladelets	3
Flake cores	38
Broken cores/core frags	22
Debitage	40
Crested pieces	1
Rejuvenation tablets	13
Scrapers	16
Other tools	12
Denticulates	1
Core tools	3
Microdenticulate	5
Miscellaneous retouch	20
TOTAL	1599

- 5.4.2 The assemblage is undoubtedly derived from more than one industry and is therefore mixed. The question therefore remains as to how much it might be possible to separate the two elements.
- 5.4.3 The site produced evidence for two separate phases; a Middle Neolithic phase with pits and a Bronze Age phase, represented by funerary monuments. It seems that these two broad phases can be recognised in the composition of the flint assemblage. There are a number of well-made, large end scrapers from the causewayed ring ditch **420**, together with microdenticulates, axe rough-outs, discoidal cores and flakes, often very elongate with faceted butts. This material is placed with the Middle Neolithic activity, as there is, as yet, no firm evidence for a Late Neolithic presence.
- 5.4.4 The Bronze Age component is somewhat more difficult to recognise; however, there are a number of flakes and poorly developed cores that might be better placed within this chronological period than in an earlier one. Further work might be able to separate the two components with more certainty. At present the visual assessment has suggested that the earlier material might be slightly more heavily patinated (whiter), and, as might be expected, demonstrate a more sophisticated technology, in terms of platform preparation, possibly include elements of soft hammer mode and discoidal cores. The later element might be characterised by a slightly lighter patina (greyer), include more hard hammer mode, less platform preparation and include elements of core preparation, namely cortical flakes and reject cores.

5.4.5 At present it has not been possible to analyse the distribution of material. It is interesting, possibly significant, that the largest assemblage of diagnostic tools and technological pieces come not from stratified pit contents but from the causewayed ring ditch **420**. None of the material comes from the primary fills; however, the question remains as to how much of this material may have been dumped in the ditch, how much has silted in from the surrounding landscape and why the largest component of worked flint should coincide with the location of the causewayed ring ditch? Regrettably nothing of the pre-ring ditch land surface remains nor of the post-barrow surface, so it is impossible to know how much material may once have lain about on the ground beyond the limits of the ring ditch. What is beyond doubt is that the flint shares a similar distribution to that of the causewayed ring ditch, no worked flints in any quantity having been found in the other ring ditches. It is possible that the causewayed ring ditch was cut through earlier pits, although the likelihood is slim given that no other pits were found around the periphery of the ditch, apart from the two which were located immediately outside the causeway; nor was worked flint plentiful in any of the other pits.

5.5 Grave goods from Anglo-Saxon graves

5.5.1 Grave goods were recovered from five graves ([**309**], [**312**], [**315**], [**324**] and [**361**]). These include personal items, knives and some miscellaneous objects. Their condition has been assessed and recommendations for conservation are included in **Appendix 1.1**. No definite items of weaponry were recovered.

Personal items

5.5.2 Necklace groups were found in two graves. The group from [**312**] is the larger, comprising two amethyst quartz, one possible gypsum and six glass beads and two copper alloy *bullae*, accompanied by some fine copper alloy wire fragments. Grave [**324**] contained a single glass bead with fragments of silver wire associated, together with a plain silver disc pendant.

5.5.3 Of the six glass beads in grave [**312**], four are small wound disc beads (Evison type BO1) or possibly Brugmann's (2004, 41) 7th-8th century 'doughnut' (Dghnt). Further examination would be needed to ascertain this. Two are drawn cylinders (type CO1). At the Dover Buckland cemetery the drawn cylinders do not extend beyond AD 575-625 although the disc beads continue to occur in small quantities until the late 7th and early 8th centuries (Evison 1987, 79-81). Brugmann regards the drawn cylinder beads as a Late Roman type and calls them Roman Cane beads (Brugmann 2004, 74). The single bead from grave [**324**] is a short cylinder with straight sides (type B04). This form peaks in the early to mid-7th century at Dover (*ibid.*, 79). All the glass beads are monochrome with blue the predominant colour. Three are greenish-blue and one is yellowish-brown.

5.5.4 The possible gypsum bead from grave [**312**] is irregular and roughly rectangular. This white mineral is probably gypsum as it has a lustrous surface with a fibrous composition when examined macroscopically (Pellant 1992, 110), making it a more likely candidate than the apatite or magnesium carbonate suggested by Evison for the white composition beads at Dover (Evison 1987, 60). The bead is drilled latitudinally and slightly off-centre.

5.5.5 Of the two amethyst quartz beads from grave [**312**], one is a small teardrop shape (Evison type A05) and the other is a long barrel shape (type A06), both drilled lengthways. Geake (1997, 41) considers amethyst beads to be indicative of a post-AD 600 date and at Dover they were found in graves of later 7th century date (Evison 1987, 60). Taken in conjunction with the other beads in the group, a mid-7th century date seems likely. Their distribution covers the whole of England, although there is a particular concentration in Kent.

- 5.5.6 The *bullae* from grave [312] are small (diameter 8mm) and are hemispherical with a flat back and a small attachment loop. The dating of these objects covers the second half of the 7th century, perhaps extending into the 8th century; their distribution covers the whole of England. While gold, and perhaps silver *bullae* may be indicators of high status, copper alloy examples are not necessarily so (Geake 1997, 37). Chadwick Hawkes (1973, 191) says that 'the earlier fashion for great strings of amber and multi-coloured glass beads gave way in the 7th century to necklets composed of comparatively small numbers of mainly monochrome glass beads, often threaded together with silver or bronze wire rings, and, in richer graves, with pendants...' This seems to perfectly describe this small assemblage.
- 5.5.7 A shale armlet was found in Anglo-Saxon grave [324], together with a possible chatelaine set (see below) at the waist, and possibly all held together in a bag. The nearest source for the shale is the deposits at Kimmeridge on the Dorset coast; this source is not known to have been exploited in the Saxon period, and this armlet is therefore presumed to be Romano-British. One other parallel is known from a grave at Alvediston in Wiltshire, where part of a Kimmeridge shale armlet, also presumed to be Romano-British, was found.
- 5.5.8 A small iron oval buckle, incomplete and with a fragment of the buckle plate surviving, was found in grave [363].
- 5.5.9 Fragments of an iron chain composed of S-shaped links were recovered from grave [312]; the X-radiograph shows some possible rod fragments associated with the chain links. This was found by the pelvis, and the most likely interpretation is a chatelaine (a chain hanging from the waist and carrying a collection of objects).
- 5.5.10 Chatelaines components may also have been present in two other graves, represented by three strip/rod fragments (possibly key shafts) from grave [315], and three strip fragments from grave [324], the latter found with the shale armlet (see above), although the latter may have been contained in a bag. Chatelaines do form part of the 6th-century grave-good repertoire, but these are generally distinguishable from later chatelaines as seem to be represented here, and which had their *floruit* in the late 7th or early 8th century. Their attachments (including keys and toilet instruments) could be purely practical but have also been suggested as having amuletic qualities (Geake 1997, 57-8). They are found all over England although, as for the amethyst beads, there is a concentration in Kent.

Knives

- 5.5.11 A complete large whittle tang knife (blade length 170mm, total length 240mm) came from grave [309], found at the waist; this has a straight cutting edge and angled back. This corresponds to Böhner's type C which, although first appearing in the 6th century, was very popular during the 7th-8th centuries. A smaller, incomplete knife from grave [324] also from the waist area, appears to be of the same type. The length of the knife might qualify it for use as a defensive weapon rather than a purely domestic utensil (Evison 1987, 114).
- 5.5.12 A small strip fragment from grave [361] could be part of a knife blade, but is too small to ascertain type.

Miscellaneous objects

- 5.5.13 Three objects from grave [361] are all of unknown function: these comprise an iron loop, a small iron rod fragment, and a copper alloy strip fitting with a rivet *in situ* (this grave had been badly disturbed).

- 5.5.14 A copper alloy Roman coin was found at the feet of the individual in grave [324], possibly disturbed from its original position. This is a heavily worn *nummus* of the emperor Valens (AD 364–78). The degree of wear suggests that it was in circulation for some considerable time prior to its loss or deposition.

5.6 Burnt Flint

- 5.6.1 Burnt, unworked flint was recovered in some quantity. This material type is intrinsically undatable, although frequently taken as an indicator of prehistoric activity. In this instance, by far the two largest deposits (100kg from pit [329] and 10kg from a tertiary fill of ring ditch 375) were associated with pottery which is probably Iron Age. The remainder was deposited in much smaller quantities in various features (prehistoric and undated) across the Site.

5.7 Stone

- 5.7.1 Two pieces of stone were recovered (excluding the amethyst beads which are discussed above). A large, rounded, ovoid pebble shows signs of heavy wear, and has apparently been used as a hammerstone (tertiary fill of ring ditch 420). A small piece of reddish sandstone from the backfill of Anglo-Saxon grave [361] has one smooth, possibly utilised surface, but is of uncertain function.

5.8 Vessel Glass

- 5.8.1 Three modern (late 19th/early 20th century) glass vessels were recovered from the overburden. Two are bottles belonging to a Salisbury mineral water manufacturer (H Martin & Sons, Castle Street), and the third is a large preserve jar carrying the mark of Gillard & Co., London (listed in 20th century trade directories as sauce and pickle manufacturers in Westbury Road, Waltham).

5.9 Human Bone

Introduction

- 5.9.1 Human bone from 15 contexts was subject to assessment. The majority of the bone is unburnt (13 contexts), and includes the remains of one Early-Middle Bronze age and a minimum of five Early Anglo-Saxon inhumation burials, together with one cremation burial.
- 5.9.2 The prehistoric remains were associated with one of two inter-connected ring-ditches in the south-east area of the site (420 and 543), the burial having been made in the southern terminus of the smaller monument 543. Redeposited unburnt bone was also found in the same location and in the northern terminus of ring-ditch 420. The cremated bone was recovered from grave 555, situated almost central to ring ditch 543 and equidistant between the terminals of the larger monument 420.
- 5.9.3 The Early Anglo-Saxon burial group (dating centred on the 7th century) lay on the northern margins of the site. One grave located centrally within a small ring-ditch appears to have formed the focus of the group, the other four (possibly five) graves being dispersed around it (4-10m distant) over a 21m wide area. It is likely that further graves will have (and possibly still do) existed to the north and east outside the area of investigation.

Methods

- 5.9.4 All the material was subject to a rapid scan to assess the condition of the bone, demographic data, and the presence of pathological lesions. The potential for indices recovery from the unburnt remains was assessed, and the presence of pyre goods/debris

amongst the cremated remains was recorded. The cremation-related deposit type was assessed from the combined osteological and site context data. Any unburnt animal bone or non-osseous material was separated-out for assessment by the appropriate specialist.

- 5.9.5 Assessments of age and sex were based on standard methodologies (Beek 1983; Buikstra and Ubelaker 1994; Scheuer and Black 2000). Grading for preservation of the unburnt bone follows McKinley (2004a, fig 6).

Results

- 5.9.6 A summary of the results is presented in **Appendix 1.2**. The condition of the unburnt bone is variable but generally poor, with extensive cortical degradation (grade 4-5; predominantly root etching) and the loss of much of the trabecular bone in several cases. The remains from the Anglo-Saxon grave [361], apparently disturbed and redeposited in the eastern half of the grave in antiquity (after skeletalisation), are the best preserved, possibly due to the presence of a protective mound. The grave had also survived to a substantially greater depth than all the others (range 0.17-0.63m, mean 0.35m). Much of the bone is also heavily fragmented, showing both old and fresh breaks. Skeletal survival and recovery is generally relatively low (<70%) with 90% or more surviving in only one case (**Appendix 1.2**). Post-depositional degradation of the bone appears to represent the major influence on bone survival, though loss due to disturbance is a probable factor in the case of the possible grave [104].
- 5.9.7 The cremated bone is in good visual condition and the deposit includes a representative proportion of trabecular bone (generally subject to preferential loss in an aggressive burial environment). The grave had survived to a relatively substantial depth (0.16m) and appears to have maintained its original protective capping (556; redeposited natural), consequently no bone will have been lost due to disturbance.
- 5.9.8 A minimum of nine individuals is represented within the overall assemblage, three prehistoric and six Anglo-Saxon. The former comprise the unburnt remains of a juvenile and a minimum of one adult male, and the cremated remains of an adult male. The Anglo-Saxon assemblage comprises one immature individual (juvenile) and five adults (three males and two females). This is likely to represent part of a small family cemetery associated with an individual household/farmstead, although the possibility of these graves forming the southerly extent of a larger cemetery cannot be wholly dismissed.
- 5.9.9 Pathological lesions were observed in the remains of all except one of the inhumed individuals and in the cremated remains. Mild-extensive dental lesions were seen in four adult dentitions, the patterns of which may provide insights into the nature of their diet and potentially, thereby, their social status. Lesions indicative of osteoarthritis in the remains of several individuals, together with other joint lesions, are indicative of physical stress potentially related to occupation and lifestyle. Two individuals have lesions generally interpreted as childhood stress indicators (cribra orbitalia), suggesting most were free of extended periods of food shortage or illness in childhood. Lesions in the endocranial surface of the Anglo-Saxon juvenile are suggestive of a metabolic or possibly an endocrinal condition.
- 5.9.10 Most of the cremated bone is white in colour indicative of full oxidation, however, there is also blue and/or grey bone demonstrating less efficient oxidation. The most probable cause would be a lack of time for complete oxidation to occur due either to insufficient fuel being used to construct the pyre or adverse weather conditions (i.e. rain).



5.10 Animal Bone

- 5.10.1 The assemblage comprises 383 fragments (or 1.351kg) of animal bone. Once conjoins are taken into account this drops to 285 fragments. Bone was recovered from three prehistoric ring ditches **375**, **420** and **543**, and a number of pits [303], [305], [333], [335], [355], [359], and [447].
- 5.10.2 This report follows general guidelines for the assessment of animal bone assemblages (English Heritage 2002; Payne 1991). The assemblage was rapidly scanned and the following information recorded where applicable: species, skeletal element, preservation condition, fusion and tooth ageing data, butchery marks, metrical data, gnawing, burning, surface condition, pathology and non-metric traits. This information was directly recorded into a database and cross-referenced with relevant contextual information.

Results

Preservation condition

- 5.10.3 Bone preservation varies from good to poor. The best preserved remains are from pit [563], which is associated with the causeway entrance to ring ditch **420**. The bones from this feature show little sign of root etching and corrosion, unlike the material recovered from most other features.
- 5.10.4 Gnaw marks were noted on only three fragments, all from pit [563]. The lack of such evidence is undoubtedly due to poor surface preservation.

Species represented

- 5.10.5 Approximately 28% of fragments are identifiable to species and skeletal element. The following species have been identified and are listed in terms of their relative frequency: pig, cattle, sheep/goat, red deer, and dog.

Bone from pits

- 5.10.6 Only a small proportion of the animal bone recovered from pits was identifiable to species. Pit [563], which has already been mentioned above in relation to preservation condition, contained a relatively large number of pig bones, including both cranial and post-cranial fragments. The bones are from a minimum of at least two individuals, aged c. 14-21 months (mandibular wear stage D, after Hambleton 1999). There are no obvious signs of butchery on any of the bones, most are complete, but were found in a disarticulated state. Concentrations of disarticulated bones from one or two animals are usually an indication that whole carcasses were prepared for consumption rather than individual meat joints, and because of the amount of meat that a whole carcass provides, it is more than likely that these animals were cooked as part of a communal feast (see for example Serjeantson 2006, 131).
- 5.10.7 The other pits contained just a few identified bones each, these include a few pig bones and teeth from [305] and [333], a cattle third phalanx and radius from [447] (associated with ring ditch **420**), a sheep/goat metatarsus from [359], and a piece of red deer antler from [355] (ON 24).

Bone from ring ditches

- 5.10.8 Eight bone fragments were recovered from ring ditch **375**. All of the identified fragments belong to cattle and include several loose teeth and piece of scapula (glenoid cavity).
- 5.10.9 Thirty-three of the 101 bone fragments recovered from the circuit of ring ditch **420** were identifiable to species. Cattle bones and teeth are common, followed by sheep/goat, red deer, pig and dog. Small concentrations of bones and teeth were noted from slots [481]

and [502]. The remains from slot [481] include the right frontal part of a red deer skull. The right antler appears to have been removed from the frontal bone by chopping through the base of the pedicle. This evidence indicates that deer were hunted for meat and that their antlers were a valuable resource that could be modified into crude digging tools or more decorative items. Dog is represented by a single fragment of maxilla from slot [429].

5.10.10 Only a few bone fragments were recovered from ring ditch 543. The remains include a few cattle teeth.

6 ENVIRONMENTAL EVIDENCE

6.1 Introduction

6.1.1 A total of 20 bulk samples were taken from a range of features and phases on the site. They were processed for the recovery and assessment of charred plant remains and charcoal.

6.1.2 The bulk samples break down into the following phase groups:

Table 4: Sample Provenance Summary

Phase	No of samples	Volume (litres)	Feature types
Neolithic/Bronze Age	4	120	Pit
Bronze Age	12	116.75	Pits, Cremation
?Prehistoric	3	45	Pits
Undated	1	10	Tree throw
Totals	20	291.75	

6.1.3 A series of 11 mollusc samples were taken from three ring ditches 420, 543 and 375.

6.2 Charred plant remains

6.2.1 The bulk samples were processed by standard flotation methods; the flot retained on a 0.5mm mesh, the residues fractionated into 4mm, 2mm and 1mm fractions and dried. The coarse fractions (>4mm) were sorted, weighed and discarded. The flots were scanned under a x10 – x40 stereo-binocular microscope and the preservation and nature of the charred plant and wood charcoal remains recorded in **Appendix 2.1**. Preliminary identifications of dominant or important taxa are noted below, following the nomenclature of Stace (1997) for wild plants, and traditional nomenclature, as provided by Zohary and Hopf (2000, Tables 3, page 28 and 5, page 65), for cereals.

6.2.2 The flots varied in size with generally low numbers of roots and modern seeds that may be indicative of stratigraphic movement and the possibility of contamination by later intrusive elements. Charred material comprised varying degrees of preservation.

6.2.3 Moderately small quantities of charred cereal remains were observed in samples from Middle Neolithic pit [563]. These included grain fragments of hulled wheat, emmer or spelt (*Triticum dicoccum/spelta*), and possibly of free-threshing wheat (*Triticum turgidum/aestivum* type). The charred plant assemblages from the pit included large numbers of hazelnut (*Corylus avellana*) shell fragments and a few seeds of vetch/wild pea (*Vicia/Lathyrus* sp.) and bedstraw (*Galium* sp.).

6.2.4 The samples from probable Neolithic pit [447] and the currently undated pit [329] contained a few wheat (*Triticum* sp.) grains. There were also small quantities of hazelnut

shell fragments and seeds of vetch/wild pea in pit [447], a similar suite of material to that from pit [563].

- 6.2.5 The Bronze Age cremation related deposits from pit [555] produced small charred plant assemblages. These included low levels of cereal remains, including free-threshing wheat grain fragments, seeds of vetch/wild pea, a tuber of false oat-grass (*Arrhenatherum elatius* var. *bulbosum*) and a few stem/root fragments.
- 6.2.6 Moderately small quantities of cereal remains, including possible hulled wheat grain fragments, were retrieved from the three prehistoric pits, while relatively high numbers of hazelnut shell fragments were present in two of them and a few vetch/wild pea seeds in one of them.
- 6.2.7 Charred plant assemblages dominated by wild food remains, particularly hazelnut shell, are typical of those assemblages generally recovered from Neolithic deposits. The assemblages at Old Dairy are similar to those recovered from other sites in the area such as Land South of Amesbury (Wyles and Stevens in prep), King Barrow Ridge, Amesbury (Carruthers 1990) and Old Sarum Water Pipeline (Powell *et al* 2005). The dominance of hazelnut fragments and other wild food remains may be indicative of the exploitation and general reliance on these wild food resources during this period (Moffett *et al* 1989; Stevens 2007; Robinson 2000).
- 6.2.8 The presence of a small number of possible free-threshing wheat grains within a few Late Neolithic/Bronze Age and Bronze Age deposits may be contaminants as free-threshing wheat is more typical of Saxon or later deposits (cf. van der Veen and O'Conner 1998). On other sites, such as Land South of Amesbury (Wyles and Stevens in prep), a number of free-threshing wheat grains from early contexts have been proved to be intrusive by radio-carbon dating. The general pattern on the mainland is that cereal agriculture appears to have been rare or absent in the later Neolithic (Stevens and Fuller 2012).
- 6.2.9 False oat-grass in particular has an association with cremation related deposits (Godwin 1984) and has often been recovered in assemblages from Middle-Late Bronze Age cremation related deposits (Stevens 2009). It is possible that the presence of the tubers in the assemblage is a result of the creation of a fire break rather than simply the collection of such material for tinder (Stevens 2009).

6.3 Wood charcoal

- 6.3.1 Wood charcoal was noted from the flots of the bulk samples and is recorded in **Appendix 2.1**. Moderate quantities of wood charcoal fragments greater than 4mm were retrieved from probable Middle Neolithic pit [563].

6.4 Land and aquatic molluscs

- 6.4.1 A total of 11 samples of 2000g from three ring ditches **420**, **543** and **375** were processed by standard methods (Evans 1972) for the recovery of land snails. The flots (0.5mm) were rapidly assessed by scanning under a x 10 – x 40 stereo-binocular microscope to provide some information about shell preservation and species representation. The numbers of shells and the presence of taxonomic groups were quantified (**Appendix 2.2**). Nomenclature is according to Anderson (2005) and habitat preferences according to Kerney (1999). The presence of these shells may aid in broadly characterising the nature of the wider landscape.
- 6.4.2 Low shell numbers were recovered from the three lower samples from section [544] of ring ditch **420** and a rich assemblage from the upper sample (sample 47). The

assemblages included open-country, intermediate and shade-loving species, with the open country species, in particular *Vallonia costata*, *Vallonia excentrica* and *Pupilla muscorum*, being dominant in the upper fill (548). The presence of the rarity *Truncatellina cylindrica* is noteworthy. This species, an obligatory xerophile, favours short dry grassland. It has been observed in other assemblages of Neolithic and Bronze Age date in the area such as Land South of Amesbury (Wyles in prep), Durrington Walls (Evans 1971), Figheldean (Allen and Wyles 1993), Woodhenge (Evans and Jones 1979), and King Barrow Ridge (Allen and Wyles 1994). The assemblages may be reflective of a generally open downland landscape with some small areas of a shadier niche environment, possibly of longer grass and/or scrub/woodland, in the vicinity.

- 6.4.3 Moderate mollusc assemblages were recorded in the two samples from section [476] of ring ditch 543. These were dominated by the open country species, again by *Vallonia costata*, *Vallonia excentrica* and *Pupilla muscorum* in particular. This series of assemblages may be indicative of an open downland environment.
- 6.4.4 The sequence of samples from section [411] of ring ditch 375 contained moderate to high shell numbers in four of the five samples. The assemblages were dominated by the open country species, with *Vallonia costata*, *Vallonia excentrica* and *Pupilla muscorum* being predominant. *Helicella itala*, *Vertigo* sp., *Trochulus hispidus* and *Cochlicopa* spp. are also more numerous in the upper assemblages. A few shells of *Truncatellina cylindrica* were observed in two of the samples within the sequence. Again the assemblages appear to be indicative of a generally open downland landscape.
- 6.4.5 Molluscs were also noted in the bulk sample flots. The samples from probable Middle Neolithic pit [563] include shells of the open country species *Vallonia costata*, *Vallonia excentrica*, *Pupilla muscorum*, *Helicella itala* and *Vertigo pygmaea*, the intermediate species *Pomatias elegans*, *Trochulus hispidus*, *Cochlicopa* spp., *Cepaea* sp., *Euconulus fulvus*, *Punctum pygmaeum* and *Vitrina pellucida*, and the shade loving species *Discus rotundatus*, *Aegopinella pura*, *Aegopinella nitidula*, *Oxychilus cellarius*, *Vitrea* spp., *Acanthinula aculeata*, *Helicigona lapicida*, *Clausilia bidentata*, *Cochlodina laminata*, *Carychium tridentatum*, *Merdigera obscura* and a sinistral *Vertigo*. There appears to have been a greater shady environment in the vicinity of the pit. A number of the shade loving species, such as *Acanthinula aculeata*, are more indicative of woodland environments rather than long grassland.
- 6.4.6 The mollusc assemblages in the samples from pit [329] and probable Early Neolithic pit [447] include the open country species *Vallonia costata*, *Vallonia excentrica*, *Pupilla muscorum*, *Helicella itala* and *Vertigo pygmaea*, the intermediate species *Pomatias elegans*, *Trochulus hispidus*, *Cochlicopa* spp., *Cepaea* sp., *Euconulus fulvus* and, *Punctum pygmaeum*, and the shade loving species *Discus rotundatus*, *Aegopinella pura*, *Aegopinella nitidula*, *Oxychilus cellarius*, *Vitrea* spp., *Acanthinula aculeata*, *Helicigona lapicida*, *Clausilia bidentata*, *Cochlodina laminata*, *Carychium tridentatum* and *Merdigera obscura*.
- 6.4.7 The mollusc samples from Bronze Age cremation related deposits contained in pit [555] include shells of the open country species *Vallonia costata*, *Vallonia excentrica*, *Pupilla muscorum*, *Helicella itala* and Introduced Helicellids, the intermediate species *Pomatias elegans*, *Trochulus hispidus* and *Cochlicopa* spp., and the shade loving species *Discus rotundatus*, *Aegopinella nitidula* and *Oxychilus cellarius*.
- 6.4.8 The mollusc assemblages in the samples from Bronze Age pit [333] and pits [323] and [344] include the open country species *Vallonia costata*, *Vallonia excentrica*, *Pupilla muscorum*, *Helicella itala* and *Vertigo pygmaea*, the intermediate species *Pomatias*

elegans, *Trochulus hispidus*, *Cochlicopa* spp., *Cepaea* sp., and *Vitrina pellucida*, and the shade loving species *Discus rotundatus*, *Aegopinella pura*, *Aegopinella nitidula*, *Oxychilus cellarius*, *Vitrea* spp., *Acanthinula aculeata*, *Clausilia bidentata*, *Cochlodina laminata* and *Carychium tridentatum*. There was also a shell of *Planorbis planorbis*, an aquatic species, in the assemblage from pit [333].

7 UPDATED PROJECT RESEARCH THEMES AND FURTHER POTENTIAL

7.1 Statements of Potential

Overview of stratigraphic potential

- 7.1.1 The excavations at Old Dairy, London Road, Amesbury, undertaken to record any archaeological remains before their destruction by redevelopment of the Site, have produced unexpected evidence for multi-phase activity, extending from the Early Neolithic to the Anglo-Saxon period. Much of this activity appears to be linked with funerary use of the area.
- 7.1.2 The overall relative site chronology was well established during the excavation and has been described in detail in this assessment report. There are few outstanding issues which remain to be resolved. The most important concerns remain the understanding of the absolute chronology, which it is hoped can be reconstructed in more detail using radiocarbon dating.
- 7.1.3 Assessment of the ceramic assemblages has indicated that activity may have commenced as early as the Early Neolithic period. This activity is represented by stratified material, including the confirmed presence of Peterborough Ware pottery (Middle Neolithic) from one of two pits that flank the entrance to a causewayed ring ditch. The contents of this pit also included a range of other artefacts, including faunal remains and environmental material. Pig bones were prevalent; a species much beloved by Late Neolithic communities at the Durrington Walls henge (Wainwright and Longworth 1971).
- 7.1.4 It is anticipated that these assemblages can, with additional study, provide invaluable information documenting human activity, when it happened and the landscape character on the Site at that period. The location of the two pits is also a crucial consideration in any discussion regarding the date and function of the causewayed ring ditch itself, which is otherwise poorly dated.
- 7.1.5 An additional cluster of pits that were concentrated more densely towards the north of the Site may also be contemporary with these Neolithic pits. In contrast to the pits associated with the causewayed ring ditch they contained virtually no pottery; one sherd was tentatively assigned to a Middle Neolithic (Peterborough) date before it crumbled. However two other pits did contain sufficient bone and antler that could prove suitable for radiocarbon dating.
- 7.1.6 In addition, it has already been possible to make encouraging conclusions from the environmental analysis. These data have produced not only moderate amounts of charred cereal remains from the Middle Neolithic pit but also quantities of hazelnut shells, which were also present in the poorly dated pits to the north. Exploitation of these 'wild' foods supplement results from a number of other sites of comparable date in the local area.
- 7.1.7 The establishment of a more absolute chronology for this site, through its material, is crucial to understanding how these monuments related to one another and fitted into the local landscape. Activity in the immediate area during the Early and Middle Neolithic

periods is relatively unknown, being acknowledged for discoveries of Late Neolithic pits containing Grooved Ware pottery (Stone 1935) at Ratfyn. Significantly no Grooved Ware pottery was found during the excavation suggesting a shift in activity along the ridge from the Early/Middle Neolithic into the Late Neolithic.

- 7.1.8 The most prominent features on the site remain the three ring ditches. The chronological relationships of the causewayed ring ditch to the pits flanking its entrance remains unclear. As such it is currently impossible to confirm whether the causewayed ring ditch may represent a Neolithic hengiform monument or, by analogy with the other ring ditches at the site, a Bronze Age burial site, including conjoined monuments of the type excavated at Old Sarum (WA 2013e). Nothing in the ditch infills of the larger monuments survived to indicate the presence, location or size of a covering mound. It is, therefore, impossible to reconstruct the barrow type; nor was there any indication of a central burial in either of the two larger monuments. Traces of chalk rubble in the ditch terminals of the causewayed entrance suggest that the smallest ring ditch was probably covered by a central mound.
- 7.1.9 Irrespective of this, these features represent a totally new complex of monuments, unrecognised, and probably invisible to early antiquaries, including Stukeley and Colt Hoare. Preliminary suggestions that these monuments might be those shown by Stukeley now seem unlikely.
- 7.1.10 Stratigraphic relationships suggest that the causewayed ring ditch was the earliest of the three ring ditches on the site. The possible Early Neolithic pit to the south of the southern terminus was cut through by a segment of ditch, which was itself a precursor to an adjoining ring ditch. This ditch segment was apparently backfilled soon after its construction and included an inhumation burial in the terminus, which will hopefully provide a radiocarbon date. The construction of this burial mound, which capped an unurned cremation burial, blocked the causeway, arguably ending any significance that the earlier monument had, but continued to exploit the location on the crest of the ridge. This burial may also provide a construction date for this monument, traces of which were preserved by a layer of chalk rubble which overlay a primary turf line in the terminals of the causewayed ring ditch.
- 7.1.11 The location of the causewayed ring ditch is therefore of significance, if of no greater importance than to dominate the crest of the ridge on which it lies. This location may have been already familiar to local communities. The secondary ditch fills of this monument contained the largest concentrations of worked flints. This included not only flint knapping debris but also retouched tools, indicative of domestic or ritual activity from the Site. It remains to be seen whether this is a purely coincidental reuse of an existing site or whether the monuments and artefact collections are linked.
- 7.1.12 An additional ring ditch to the west of the causewayed monument also remains undated, with no prospect of resolving the issue through lack of datable material. It seems most probable that this was also constructed as a burial monument in the Bronze Age.
- 7.1.13 Results of molluscan remains have provided a picture of the wider landscape in which these monuments and human activity took place. They indicate an environment of open grassland with limited areas of more shade, possibly provided by woodland or longer grass.
- 7.1.14 The results of additional analysis, aided by techniques of radiocarbon dating, will hopefully provide a chronological framework to reconstruct a picture of prehistoric activity on the site in the prehistoric period. The results will help to enhance discussion on the likely origins

and function of the causewayed ring ditch in particular by analogy with other hengiform monuments and double Bronze Age burial mounds.

- 7.1.15 The results of the excavation demonstrated that the site remained sufficiently visible to have been used as a small Anglo-Saxon burial site, at a period spanning the late 7th - early 8th centuries. This Site therefore joins a number of much larger cemeteries from the area, including Barrow Clump, Figheldean and Winterbourne Gunner (McKinley and Egging Dinwiddy in prep.; Musty and Stratton 1964; Cox pers. comm.) that have utilised or been within sight of Bronze Age burial mounds.
- 7.1.16 This small 'late' cemetery is therefore of considerable interest having no clear parallels in the locality.

Archaeological potential

- 7.1.17 The Old Dairy site lies on the eastern bank of the River Avon and as such has tended to be excluded from inclusion in the overall discussion of the area. However excavations to the south of Amesbury, including the discovery of the Amesbury Archer burial, have increased awareness that this area is one of high potential and one that has much to offer in understanding of the Stonehenge landscape.
- 7.1.18 The Early Neolithic period is most strongly represented across the Stonehenge Landscape by long barrow burial mounds which are concentrated on the western bank of the River Avon. The discovery of potential activity of this period on the site is a significant addition, especially as it has been suggested (Lawson 2007) that the Ratfyn barrow may itself have Early Neolithic origins.
- 7.1.19 The firm identification of Peterborough Ware material at the site also extends the spread of Middle Neolithic activity eastwards at a time at which the embryonic earthworks were constructed at Stonehenge.
- 7.1.20 Occupation at the Old Dairy at this time appears to have been concentrated on the crest of the ridge creating a strong vantage point overlooking the surrounding landscape.
- 7.1.21 The discovery of an entirely new monument complex with ring ditches, of some at least are likely to be of Bronze Age date is also an important feature, marking continued use of the site from the Neolithic period. The work at Old Dairy has provided an opportunity to demonstrate initial Neolithic activity and related use in the Bronze Age on the same site.
- 7.1.22 Individual Bronze Age barrows and others in formal cemeteries are distributed across this part of the chalk downs. Some of these, including New Barn Down (Ashbee 1985) Earl's Farm Down (Christie 1964) and Solstice Park (Robinson and Valentin 2004) within a radius of 1700 m to the east, have been excavated, providing a wealth of comparable data. In addition an unexcavated linear barrow cemetery, of which only the Ratfyn Barrow remains extant, once occupied the ridge overlooking the River Avon valley, approximately 500 m to the west.
- 7.1.23 Activity at New Barn Down could be traced, like that at Old Dairy, from the Middle Neolithic although the evidence was restricted to a few sherds of pottery from a number of natural hollows. Similarly early Neolithic pottery sherds were found in the turf stack forming the core of the mound at Earl's Farm Down, although in none of these instances was material found in pits.
- 7.1.24 Currently radiocarbon determinations exist for New Barn Down, dated to 1700BC and for Amesbury G71, a multi phase monument with dates ranging from 2450BC for a Phase II

inhumation burial to 1900BC for the Phase III monument. These determinations provide the basis of a framework to which results from the Old Dairy site can be applied.

- 7.1.25 The newly discovered monuments enhance the spread of monuments within this existing distribution and successful radiocarbon determinations will help to place individual monuments within this framework.
- 7.1.26 The Site is also significant for its recovery of inhumation burials of Anglo Saxon date and for the implications of the development of Anglo-Saxon settlement in Amesbury. Documentary sources record settlement in the town from at least the 9th century AD (Lawson 2007) in a charter of Swithen, Bishop of Winchester. However previous archaeological excavations in the area (Lawson 2007) have identified Anglo-Saxon structures east of the Countess Road, which indicate the origins of settlement from the fifth to eighth centuries AD. Anglo-Saxon brooches, typical of those often found in graves have also been found in the area of the Countess Roundabout.
- 7.1.27 The cemetery at Old Dairy is therefore an extremely interesting addition to this corpus of material, not only for its reuse of a site defined by earlier Bronze Age burials but also for its small size, date and burial rite. It unclear whether this small cemetery is related to settlement at Anglo-Saxon Amesbury or possibly represents an independent burial ground, possibly in view of inhabitants of Ratfyn, a small farmstead also with Anglo-Saxon origins.
- 7.1.28 The practice of defining Anglo-Saxon burials within an enclosing ring ditch (Hogarth 1974) and covered by a low mound has origins (Shephard 1979) in the mid-late sixth century AD. Such burials often formed part of a flat cemetery. The distribution of graves of this type is most common in Kent although examples have been found as far west as *Hamwic* (Southampton) (Grinsell 1936), making the occurrence at Old Dairy unusual but not unique.
- 7.1.29 In form the ditched inhumation burial at Old Dairy conforms to others of this type, which are generally extended and unaccompanied or only sparsely furnished (McKinley 2004c) with grave goods. It is unclear whether the inhumation burial from Old Dairy also contained no grave goods or whether objects were taken when the grave was re-entered.

Finds Potential

- 7.1.30 The finds assemblage recovered is of moderate size. Of particular interest are the human remains and associated grave goods (knives, personal items) from a small Anglo-Saxon cemetery. Chronological evidence provided by these grave goods suggests a 7th century date for the cemetery, probably focusing on the second half of the century and possibly extending into the early 8th century (i.e. Conversion period). As such this is an interesting 'late' cemetery which does not have parallels within the immediate area. The grave goods could enable an (albeit limited) exploration of the cultural associations of the individuals buried here, and also of mortuary practices and the use of space within the grave.
- 7.1.31 Full analysis of the human bone will provide more detailed demographic data regarding the minimum number of individuals (MNI), and their age and sex. Although some extensive reconstruction of the skeletal elements will be required (generally of skulls), this will enable the recovery of metric data and it should be possible to calculate some indices for most of the Anglo-Saxon adults, though the data is likely to be limited.
- 7.1.32 Currently, the Early Anglo-Saxon cemetery appears of a slightly different form from others (of slightly earlier date) in the vicinity such as Aldbourne and Collingbourne Ducis to the north (Stoodley *et al.* 2012; Egging Dinwiddy and Stoodley forthcoming) which are

substantially larger and clearly served more extended communities. Cemeteries at Barrow Clump and Winterbourne Gunner (McKinley and Egging Dinwiddy in prep.; Musty and Stratton 1964; Cox pers. comm.) were both directly associated with Bronze Age barrows, but again appear somewhat larger than that apparently represented at The Old Dairy. Comparative demographic and pathological data from these contemporaneous cemeteries will enable us to better comprehend the form, nature and status of the population who buried their dead here.

- 7.1.33 Finds from prehistoric contexts have a more limited potential. The pottery assemblage is small, in relatively poor condition, and lacking in much diagnostic material. Some further refinement of the preliminary spot-dating may be possible, but this is unlikely to contribute significantly to an understanding of the Site, particularly since much of the assemblage is likely to be redeposited. The presence of a small group of non-local sherds (probably from a single vessel, possibly Trevisker-related) is of interest, although not at this stage securely dated.
- 7.1.34 The flint assemblage is also chronologically mixed, and while further analysis might allow two chronological components (Neolithic and Bronze Age) to be distinguished, the provenance (much of the assemblage derived from secondary and tertiary fills of the causewayed ring ditch **420**, where associated pottery suggests redeposition), and the lack of secure stratification serve to restrict the conclusions that could be drawn here.
- 7.1.35 The cremated bone from prehistoric contexts is in good condition and will provide good quality data for all areas of analysis. Although very few pathological lesions were observed amongst the cremated remains in the scan, it is probable that others will be observed with more detailed analysis. A full record and study of the pathological lesions will enable a broad assessment of the health status of individuals/temporal groups and, by comparison with contemporaneous data, some indication of their social status. These prehistoric remains join a growing corpus of high quality comparable data from the region (e.g. Amesbury Down, Porton Down and the Salisbury Plain Training Areas, Wiltshire; Egging Dinwiddy forthcoming; McKinley forthcoming a; b; in prep.). In each of these assemblages there are both variations and similarities in terms of the form and location of the burial remains, demographic make-up of the assemblages and reflected health/status of the populations/individuals. Analysis of the Old Dairy assemblage will enhance our understanding of these contemporaneous population groups, their mortuary rites and their attitudes to the dead, and place them within their temporal context.
- 7.1.36 The small size and poor condition of the animal bone assemblage limits its potential for further more detailed analysis. No further analytical work is proposed, however given the contextual significance of the assemblage, it is recommended that a brief summary and quantification table should be included in any future publication of the fieldwork results.

Environmental Potential

Charred plant remains

- 7.1.37 The analysis of the charred plant assemblages from the Middle Neolithic pit **[563]** has the potential to provide some limited information on the nature of the settlement and the local environment during this period.
- 7.1.38 The results of this analysis, when contrasted or combined with material from pit **[447]** could provide a comparison with the data from deposits of this date from other sites in the local area, such as Land South of Amesbury (Wyles and Stevens in prep), King Barrow Ridge, Amesbury (Carruthers 1990) and Old Sarum Water Pipeline (Powell *et al.* 2005).

Land and aquatic molluscs

- 7.1.39 The analysis of the mollusc assemblages has the potential to assist in defining the nature of the local landscape during the Neolithic/ Bronze Age periods in more detail. It may be possible to ascertain whether the open downland included areas of both grazed grassland and arable environments in the vicinity of the site and the nature of the shady niche environments exploited by some of the snails, such as whether the open landscape included areas of long grass, scrub and/or open woodland.
- 7.1.40 These results could be compared with other assemblages studied from Neolithic and Bronze Age deposits from other sites in the vicinity such as Land South of Amesbury (Wyles in prep), Figheledean (Allen and Wyles 1993), Old Sarum Water Pipeline (Powell et al 2005) and King Barrow Ridge (Allen and Wyles 1994).

Scientific dating

- 7.1.41 Radiocarbon dating can be used to provide precise dates for features where the date is ambiguous (e.g. inhumation or animal burials). It can also be used to provide precise age estimates for various parameters (the start of construction, duration of events, abandonment) by combining radiocarbon measurements with stratigraphic information using the methodology developed by Bayliss, Bronk Ramsay and others (Bayliss and Bronk Ramsey 2004, 25-41).
- 7.1.42 Material for radiocarbon dating is present in a number of samples across the Site. Selection of the material should be made after careful consultation with the archaeologist and relevant specialists in order to define clear archaeological/palaeoenvironmental questions.
- *A provisional list of themes suggested for resolution by radiocarbon dating is presented as follows:*
 - *Charred cereal within a selection of the early pits will be dated in order to test that the cereal is contemporaneous and not intrusive;*
 - *Undated cremation deposits will be dated to provide a precise date (Middle Neolithic, Late Neolithic or Early Bronze Age) for each;*
 - *In situ bone deposits (eg, skull vault) that will help interpret the construction history of the ring ditches and phasing with various key pit deposits will also be dated.*

8 REVISED RESEARCH AIMS AND METHOD STATEMENTS

8.1 Introduction

- 8.1.1 This section details the aims and method statements for analysis and references the required tasks (see **Task list** below). The known archaeological background in the immediate vicinity of the Site will be reviewed. This will include reviewing published reports and available archaeological 'grey literature', and investigation of all available aerial photographs. This will contribute towards discussion of land utilisation beyond the boundaries of the Site.

8.2 Stratigraphic

- 8.2.1 Stratigraphic analysis will begin by checking the grouping of features carried out at assessment, confirming the provisional phasing, and will be checked and corrected in the project database. Provisional phasing will likewise be confirmed and entered into the

database. Initial specialist analyses will only begin once this stage of work is complete, preceded by a verbal or written briefing from the stratigraphic specialist.

- 8.2.2 It is anticipated that many of the context groups of ambiguous date (marked and noted as possible) will be reconsidered. Hopefully, through spatial analysis, radiocarbon dating and re-examination of the pottery some of the stratigraphic relationships can be resolved. A review of the pottery spot-dating will be undertaken. It will also generate an updated an expanded context database.
- 8.2.3 The Site databases will require checking and amending to reflect any changes made to the phasing. To facilitate sharing of data and understanding of spatial patterning during the analysis stage, an (ArcMap) GIS (Geographic Information System) project will be established and updated. This will allow graphical display of the results of database analyses by each member of the project team. As an outcome of this phase of work, a project meeting will be held at which specialist information will be presented.

8.3 Artefacts

Pottery

- 8.3.1 The prehistoric assemblage will be subjected to full fabric and form analysis, following the standard Wessex Archaeology recording system for pottery (Morris 1994), which accords with nationally recommended guidelines. It is recommended that the macroscopic fabric analysis is supplemented by petrological (thin section) analysis of a sample of the rock-tempered sherds from pit [333], to try to establish a likely source or source area.
- 8.3.2 Any possible refinements of the initial spot-dating will be fed back into the structural framework. The assemblage will be briefly discussed (with supporting tabulated data) in terms of the range of types present and their likely chronological range. A small selection of sherds will be illustrated (maximum 6 sherds).

Anglo-Saxon grave goods

- 8.3.3 Most of the grave goods (metalwork, shale armlet) will be submitted to an external specialist for further comment, with particular reference to chronology, cultural affiliations, and the use of grave goods in Conversion-period England. The beads will be reported on internally. All grave goods will be illustrated (although without duplication of bead types), in a mixture of actual objects views and outlines from X-radiographs.

Human Bone

- 8.3.4 Analysis of the cremated bone will follow the writer's standard procedure (McKinley 1994, 5-6; 2004b). The unsorted <4mm residues will be subject to a rapid scan at this stage to extract any identifiable material, osseous or artefactual.
- 8.3.5 Taphonomic factors potentially affecting differential bone preservation will be assessed. The age of individuals will be further assessed using standard methodologies (Brothwell 1972; Beek 1983; Buikstra and Ubelaker 1994; Scheuer and Black 2000). The sex of the individual will be confirmed from the sexually dimorphic traits of the skeleton (Bass 1987; Buikstra and Ubelaker 1994; Gejvall 1981). A standard series of measurement will be taken on the unburnt bone (Brothwell and Zakrzewski 2004) and skeletal indices calculated (Bass 1987; Trotter and Gleser 1952; 1958). Non-metric traits will be recorded (Berry and Berry 1967; Finnegan 1978).



- 8.3.6 Pathological lesions are recorded in text and via digital photography. X-radiography will be required in several cases to aid diagnosis. Several lesions are likely to warrant photographing for publication purposes.
- 8.3.7 The form and nature of the deposits currently of uncertain type will be further considered in light of the osteological and context data. Aspects of pyre technology and the cremation mortuary rite will be discussed.
- 8.3.8 It is recommended that bone samples from both the prehistoric burials are submitted for radiocarbon dating. It would also be advisable to submit a sample from the possible placed deposit of adult skull vault (**ON 25**) from the terminal of ring-ditch **420**. The resultant data will help ascertain the temporal relationship of the monuments and the longevity of their mortuary use. It will also facilitate the study of the deposits within the correct temporal context and enable them to be viewed within their wider regional setting.

Other Finds

- 8.3.9 None of the other finds categories warrants further analysis. In addition a fragment of red deer antler from the base of pit **[355]** may be suitable for radio carbon determination.

8.4 Environmental

Charred plant remains

- 8.4.1 It is proposed to analyse the charred plant remains from three samples from Middle Neolithic pit **[563]**.
- 8.4.2 All identifiable charred plant macrofossils will be extracted from the 2 and 1mm residues together with the flot. Identification will be undertaken using stereo incident light microscopy at magnifications of up to x40 using a Leica MS5 microscope, following the nomenclature of Stace (1997) for wild plants, and traditional nomenclature, as provided by Zohary and Hopf (2000, Tables 3, page 28 and 5, page 65), for cereals and with reference to modern reference collections where appropriate. They will be quantified and the results tabulated.
- 8.4.3 The samples proposed for analysis are indicated with a "P" in the analysis column in **Appendix 2.1**.

Land and aquatic molluscs

- 8.4.4 It is proposed to analyse the molluscs from the sequence of five mollusc samples from section **[411]** of ring ditch **[375]** and a single bulk sample through Middle Neolithic pit **[563]**.
- 8.4.5 Analysis of selected samples involves the extraction of apical and diagnostic fragments from both flot and residue. The recovered shells are identified and quantified using stereo incident light microscopy at magnifications of up to x40 using a Leica MS5 microscope, following the nomenclature of Anderson (2005) and with reference to modern reference collections where appropriate. The results are tabulated and species diversity indices calculated (Shannon index, Broullion index, Delta 2 index and Delta 4 index). Mollusc histograms are produced where applicable using Tilia v 2.0.2 (Grimm 1991).

8.5 Scientific dating

- 8.5.1 It is recommended that bone samples from both the prehistoric burials (inhumation burial **[461]** and cremation burial in pit **[555]**) are submitted for radiocarbon dating. It is also

considered advisable to submit a sample from the possible placed deposit of adult skull vault (**ON 25**) from the terminal of ring-ditch **420**.

- 8.5.2 The resultant data will help ascertain the temporal relationship of the monuments and the longevity of their mortuary use. It will also facilitate the study of the deposits within the correct temporal context and enable them to be viewed within their wider regional setting.
- 8.5.3 Samples should also be submitted from material collected from pit **[563]**, one of the pits flanking the causeway of ring ditch **420**.
- 8.5.4 Radiocarbon determinations calculated from antler at the base of pit **[355]** are also considered to offer the most optimistic opportunity to obtain a date for the pit cluster at the north end of the site and, in so doing, a link with activity around the ring ditch monuments.
- 8.5.5 Environmental material from pit **[447]** may provide further potential for radiocarbon dating. At present, no dating material has been identified from this context. However, the pit may provide a key date when considering the dating and phasing of ring ditches **420** and **543**. It will also be important to ascertain whether the feature is of similar date to pit **[563]**.

9 RESOURCES AND PUBLICATION

9.1 Proposed analysis and publication

- 9.1.1 The significance of the results of the fieldwork, in relation to the understanding of the long term development of the local landscape, warrants detailed analysis and dissemination.
- 9.1.2 It is proposed that detailed specialist analysis (as outlined above) be undertaken, the reports on which – rather than amalgamated or summarised in a journal article, are made available in full via the internet, accompanied by full stratigraphic reports and figures and a synthetic narrative describing the development of activity on the Site. The significance of the findings will be discussed within their local and regional contexts. It is proposed that the results are made available as follows:

- *Full analysis and research, including specialist reports to be made available through HER and the Wessex Archaeology website;*
- *A short summary report (anticipated to be five pages) to be published in Wiltshire Archaeological and Natural History Magazine, a peer reviewed journal with a regional and national readership. This will serve as a 'signpost' article to the full results;*
- *An illustrated publication in a format to be finalised but probably 12-16 pages at A5 size which presents the results of the excavation in narrative form and set within the context of the local area. This aimed at a non-academic audience. This would be made available both via a limited print run and through the Wessex Archaeology website where further links to downloadable detailed specialist information would be available.*

9.2 Management structure

- 9.2.1 WA operates a project management system. The team will be headed by a Post-Excavation Manager who will assume ultimate responsibility for the implementation and execution of the project specification as outlined in the Updated Project Design, and the achievement of performance targets, be they academic, budgetary, or scheduled.



- 9.2.2 The Post-Excavation Manager may delegate specific aspects of the project to other key staff, who will both supervise others and have a direct input into the compilation of the report. They may also undertake direct liaison with external consultants and specialists who are contributing to the publication report, and the museum named as the recipient of the project archive. The Post-Excavation Manager will have a major input into how the publication report is written. They will define and control the scope and form of the post-excavation programme.
- 9.2.3 The Post-Excavation Manager will be assisted by the Reports Manager, who will help to ensure that the report meets internal quality standards as defined in WA's guidelines.

9.3 Task list

- 9.3.1 The following Wessex Archaeology core staff are scheduled to undertake the work as outlined in the task list for post-excavation analysis and publication:

Table 5: Task list

Main task	Task description	Days	Staff
	<i>Management/ Support</i>		
1	Project management	2	L Mepham
		2	M Leivers
	<i>Pre-analysis</i>		
2	Complete digitising	2	Illustrator
3	Project meetings	0.25	All
4	Check phasing and stratigraphic analysis, update site database	2	P Harding
5	Background research	2	P Harding
6	Documentary research	1	P Harding
	<i>Finds</i>		
7	X-raying of human bone	2 hours	Conservator
8	Conservation of metalwork, glass bead and pottery	12 hours 6 hours	Conservator WCC
9	Conservation of shale armlet	6 hours	WCC
10	Prehistoric pottery: analysis and reporting	1	L Mepham
11	Worked flint: analysis and reporting	2	P Harding
12	Petrological analysis	£100	Ext
13	Anglo-Saxon metalwork	4	Ext
14	Anglo-Saxon beads	0.5	S Nelson
15	Human bone	9	J McKinley
16	Finds illustration (grave goods, prehist pot x 6)	3	Illustrator
	<i>Environmental</i>		
17	Extraction of Charred Plants and Wood Charcoal (3 samples)	1	N Mulhall
18	Extraction of Molluscs (6 samples)	2	S Wyles
19	Analysis and Reporting of Charred Plant Remains (3 samples)	1.25	S Wyles
20	Analysis and Reporting of Molluscs (6 samples)	4.5	S Wyles
21	Overview and Palaeo-environmental Summary	1	S Wyles



Main task	Task description	Days	Staff
22	C14 Dating	£465 per sample	Ext
	Reporting		
23	Introduction	0.5	P Harding
24	Neolithic evidence	0.5	P Harding
25	Bronze Age evidence	5	P Harding
26	Anglo-Saxon cemetery	5	P Harding
27	Finds reporting	3	L Mepham
28	Environmental reporting	3	S Wyles
29	Discussion	2	P Harding
30	Site illustrations (including skeleton plans and photos)	8	D Office
31	Check and compile bibliography	0.5	P Harding
32	Compile and integrate report	2	P Harding
33	Edit report	3	M Leivers
34	Review report	0.5	P Bradley
35	Check proofs	0.5	All
36	WAM signpost article (including insertion fees)	5	Various
37	Popular publication production and limited print run	TBC	Various
	Archiving		
38	Final archive ordering	0.5 3	P Harding TBC
39	Finds archive check	0.5	S Nelson
40	Environmental archive check	0.5	S Wyles
41	Digital data preparation	0.5 2	P Harding D Office
42	Security copying of paper records	0.5	TBC
43	Archive deposition		TBC

10 STORAGE AND CURATION

10.1 Museum

10.1.1 It is recommended that the project archive resulting from the excavation be deposited with Salisbury and South Wiltshire Museum. This Museum is not currently accepting archives therefore alternative arrangements will be sought.

10.1.2 Eventual deposition of any finds with the Museum will only be carried out with the full agreement of the landowner.

10.2 Preparation of Archive

10.2.1 The complete site archive, which will include paper records, photographic records, graphics, artefacts, ecofacts and digital data, will be prepared following the standard conditions for the acceptance of excavated archaeological material by Salisbury and South Wiltshire Museum, and in general following nationally recommended guidelines (SMA 1995; IfA 2009; Brown 2011; ADS 2013).



10.2.2 All archive elements will be marked with the project code (**79291**), and a full index will be prepared. The physical archive comprises the following:

- *22 cardboard boxes or airtight plastic boxes of artefacts & ecofacts, ordered by material type (this total includes 4 boxes of unsorted sample residues, which will be discarded during analysis)*
- *1 lever arch file/document case of paper records & 1 A3 ring bound file containing A3 and A4 graphics*



10.3 Conservation

- 10.3.1 No immediate conservation requirements were noted in the field, although one very fragile piece of Peterborough ware pottery from pit [307] was block-lifted for possible subsequent consolidation. Other finds which have been identified as of unstable condition and therefore potentially in need of further conservation treatment comprise are almost entirely metal objects and shale from the Anglo-Saxon graves (**Appendix 1.3**).
- 10.3.2 Metal objects have been X-radiographed as part of the assessment phase, as a basic record and also to aid identification. On the basis of the X-rays, the range of objects present and their provenance on the Site, four objects have been selected for further conservation treatment, involving some re-X-raying, investigative cleaning and stabilisation. One glass bead will be cleaned to remove adhering soil.
- 10.3.3 The fragile pottery from pit [307] will be cleaned, the visible surface consolidated, and then the soil backing removed.
- 10.3.4 The shale armet will be stabilised for long-term curation by freeze-drying.

10.4 Discard Policy

- 10.4.1 Wessex Archaeology follows the guidelines set out in *Selection, Retention and Dispersal* (Society of Museum Archaeologists 1993), which allows for the discard of selected artefact and ecofact categories which are not considered to warrant any future analysis. In this instance, the burnt, unworked flint has been discarded, and this process is documented in the project archive. No further discard is anticipated.
- 10.4.2 The discard of environmental remains and samples follows nationally recommended guidelines (SMA 1993; 1995; English Heritage 2002).

10.5 Copyright

- 10.5.1 The full copyright of the written/illustrative archive relating to the Site will be retained by Wessex Archaeology Ltd under the Copyright, Designs and Patents Act 1988 with all rights reserved. The recipient museum, however, will be granted an exclusive licence for the use of the archive for educational purposes, including academic research, providing that such use shall be non-profitmaking, and conforms with the Copyright and Related Rights regulations 2003.

10.6 Security Copy

- 10.6.1 In line with current best practice (e.g. Brown 2011), on completion of the project a security copy of the written records will be prepared, in the form of a digital PDF/A file. PDF/A is an ISO-standardised version of the Portable Document Format (PDF) designed for the digital preservation of electronic documents through omission of features ill-suited to long-term archiving.

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12 APPENDIX 1 – ARTEFACT TABLES

Appendix 1.1: Anglo-Saxon grave goods

Grave	Personal items	Knives	Other	Residual finds
309		1		
312	necklace group: 2 amethyst beads; 6 glass beads; 1 ?gypsum bead; 2 <i>bullae</i> ; copper alloy wire fragments; iron chain, probably chatelaine			1 CBM; 4 flint
315	5 small iron rod fragments, possibly chatelaine component			1 flint
324	glass bead; silver wire necklace fittings; shale armlet; silver disc pendant; 3 iron strip fragments, possibly chatelaine component	1	Roman coin	2 flint
361	iron buckle	?1	iron rod fragment; cu alloy strip fitting	1 stone; 7 pottery; 15 flint

No grave goods were recovered from Grave 104. CBM = ceramic building material

Appendix 1.2: Summary of results from human bone scan

Context	Cut	Deposit type	Quantification	Age/sex	Pathology	Comment
<i>Prehistoric</i>						
442 ON 25	438	Re. (ditch terminal)	frag. left frontal	adult c. 18-35 yr. male	'ivoried' surface defect	2
449	447	Re. (pit)	frag. radius	juvenile-adult >8 yr.		4-5
451 ON 19	450	?Re. (ditch)	c. 10 % s.u.	?= 461	endosteal hypervascularity & new bone (thickened diploe); hypervascularity – humerus shafts	1-2; fragmented. Need to reconstruct skull with 461.
461	450	Extended (R) burial, R leg flexed	c. 52%	juvenile c. 7-8 yr. + Re. adult		4; adult carpal & tooth in samples.
550	544	?Re. (ditch fill)	c. 2% a.	adult >18 yr.		3; heavily fragmented.
565	563	Re. (pit)	2 frags. ?u.			4-5; nearest to R prox. humerus but not quite right – LH does not recognise either
556	555	capping	8.0g	adult		mostly white, some black; mostly long bone
557/568	555*	un. cremation burial + rpd	897.1g	adult c. 20-45 yr. ?male	enth – femur shaft	Excavated in two halves & three spits two additional bags of un-located bone negates excavation procedure since they are outwith formation process information (c. half wt.); having quizzed the excavator this was hand collected bone from one half of fill but is still outwith the three spits



						which may as well be amalgamated now as rendered meaningless (he thinks mostly from lower portion but ...). W half 129.6g , E half 437.8g, (distributed through depth, slightly more lower 0.10m), 330.7g un-located. Mostly white, some variation. Trabecular & compact.
Anglo-Saxon						
105	104	?in situ?Re.	c. 12%	adult >25 yr. ??male		3-4 (root erosion); heavily fragmented - all fresh breaks. Skull reconstruct but no indices. No record of bone on sheets & no sample; v. shallow small scoop machined-out.
310	309	lightly flexed (R) burial	c. 58%	adult >40yr. male	caries; amtl; ?dental abscess; oa – costo-vertebral; op – L bsm; enth – femur shaft; cortical defect – clavicle; pitting – T ap	4-5 (root erosion); heavily fragmented (many fresh), few articular surfaces; little reconstruction warranted, few indices; strong supinator crests
313	312	supine, extended burial	c. 28 % s.u.l.	juvenile c. 5-7 yr.	hypoplasia; ? <i>cribra orbitalia</i>	5-5+; heavily degraded/fragmented; Cu-alloy stn. mandible & clavicle; no indices/reconstruction.
316	315	supine, extended burial, R leg flexed	c. 50%	adult >40 yr. female	amtl; calculus; mv - occipital central suture	5-5+ heavily degraded & fragmented; skull may reconstruct (needs doing), few, if any indices; disturbance, displaced skull elements; very strong deltoid tuberosities;
325	324 0.23m	supine, extended burial	c. 70%	adult c. 20-25 yr. female	calculus; op – right prox. femur	4-5; fragmented (mostly fresh); limited reconstruction warranted (no complete elements); few indices; marked deltoids & supinator crests. Toe bone with R hand. Staining to mandible & scapula blade.
363	361 0.63m	?robbed & Re., feet in situ	<i>in situ</i> : c. 5% l. ON 18: 4 frags. (l. temporal) A: c. 25% B: c. 12% a.u.l. C: c. 20% a.u.l. D: c. 20% l. total c. 95%	adult c. 25-40 yr. male	caries; abscesses; calculus; secondary sinusitis; <i>cribra orbitalia</i> ; oa – C; Schmorl's node – T; op – C1 anterior facet, T & L bsm, glenoid fossa; enth – distal femur, iliac crest, olecranon, patella; mv – wormian bones	In situ foot bones & redeposited bone excavated as 4 gps., but mis-labelled in p.exc. processing so groupings lost. Most re-united with correct grouping by osteo. but 5 small bags, inc. small elements/fragments from all skeletal areas, could not be re-assigned to gp. of origin. <i>in situ</i> 2-3; ON 23 5+++; ON 18 2-3; A-D 2-3; old & fresh breaks, broken ends <i>in situ</i> remains appear dry bone. Should be able to reconstruct a fair amount & get most main indices. Large, robust bones, strong markings. ON 23 = antler

KEY: Re.. - redeposited; * - undisturbed; un. - unurned; rpd - redeposited pyre debris; R/L - right/left; s.a.u.l. (skull, axial skeleton, upper limb, lower limb; skeletal areas represented where not all were recovered); amtl - *ante mortem* tooth loss; oa - osteoarthritis; enth - enthesophytes; op - osteophytes; mv - morphological variation; C/T/L - cervical/thoracic /lumbar vertebrae; ap - articular processes; bsm - body surface margins



Appendix 1.3: Conservation assessment

Obj. No.	Context	Material	Object	Comments	Treatment proposal	Time
1	310	iron	knife	- remains of mineralised horn on the tang - lumps of very degraded mineralised organics on the blade - not actively corroding - can see profile from object and x-ray	none	
4	313	iron	chain links	- x-ray confirms twisted links - many links extensively covered with mineralised textile - not actively corroding - airbrading will probably not help reveal the object - conservation time will be dependant on how much needs cleaning for illustration - cleaning will be limited by extent of mineralised material on the surface	- re-x-ray selected pieces with right angle and end-on profiles to assist illustration - remove soil from selected pieces to assist illustration - clean selected areas of mineralised textile for identification	2hr 3hr 1hr
5	313	copper alloy	fitting	- not actively corroding	none	
9	313	copper alloy	fittings	- could be base silver? - not actively corroding	none	
12	325	shale	bracelet	- wet - slightly warped	- external: freeze dry	4hr
13	325	iron	knife	- in 2 pieces that join together - not actively corroding - can see shape and cross section on object	none	
14	325	iron	strip	- x-ray confirms loop at end with remains of link still present - not actively corroding	- external: airbrade to assist illustration	2hr
15	325	iron	strip x 2	- not actively corroding	if required: - external: airbrade top sections of both to assist identification	1.5hr
17	325	silver	disc	- not actively corroding	none	
20	363	copper alloy	fittings	- not actively corroding	none	
21	363	iron	fragment (possibly knife blade)	- not actively corroding	none	



Obj. No.	Context	Material	Object	Comments	Treatment proposal	Time
22	363	iron	buckle and buckle plate (part)	- x-ray confirms identification - mineralised textile on back of buckle plate - possible mineralised leather inside buckle plate - not actively corroding	- external: airbrade to assist illustration	2hr
27	325	silver	wire	- not actively corroding	none	
28	325	glass	bead		- remove soil to improve colour	1hr
29	313	copper alloy	fitting	- could be base silver? - not actively corroding	none	
31	313	silver	wire	- not actively corroding	none	
	308	ceramic	sherd	- friable, Neolithic - profile visible - attached to mud block - substantial cracks	after initial illustration: - clean visible surface - consolidate - remove from block to reveal back of sherd	1.5hr 3hr
	316	iron	rod fragments	- not actively corroding	none	
	363	iron	rod	- mineralised wood present - not actively corroding	none	



13 APPENDIX 2 – ENVIRONMENTAL TABLES

Appendix 2.1: Assessment of the charred plant remains and charcoal

Feature	Context	Sample	Vol (L)	Flot size	Roots %	Grain	Chaff	Cereal Notes	Charred Other	Notes for Table	Charcoal > 4/2mm	Other	Analysis
Middle Neolithic													
Pit													
563	564	52	40	325	2	B	-	?F-t wheat grain fgs	A**	<i>Vicia/Lathyrus, Corylus avellana</i> shell fgs	15/25 ml	Moll-t (A**)	P
	564	52*	60	250	2	B	-	?F-t + hulled wheat grain fgs	A**	<i>Galium, Corylus avellana</i> shell fgs	10/25 ml	Moll-t (A**)	P
	565	54	10	50	2	C	-	Hulled wheat grain fg	A	<i>Vicia/Lathyrus, Corylus avellana</i> shell fgs	<1/1 ml	Moll-t (A**)	P
	566	55	10	40	2	C	-	Indet. grain fgs	A	<i>Corylus avellana</i> shell fgs	0/1 ml	Moll-t (A**)	M
Bronze Age													
Pits													
329	331	15	20	60	10	B	-	?Wheat grain fgs	-	-	0/1 ml	Moll-t (A**)	-
447	448	60	30	80	1	C	-	Indet. grain fgs	-	-	1/2 ml	Moll-t (A**), Sab (C)	-
	448	38	10	70	2	C	-	Wheat grain fgs	C	<i>Vicia/Lathyrus</i>	0/2 ml	Moll-t (A**)	-
	449	39	10	80	2	C	-	Indet. grain fgs	C	<i>Corylus avellana</i> shell fgs	1/2 ml	Moll-t (A**)	-
Cremation Related Deposits 555 Series 49													
555	556	41	4	4	20	C	-	Indet. grain fgs	-	-	0/<1 ml	Moll-t (A)	-
W 0-5	557	42	5	10	25	C	-	Indet. grain fgs	-	stem/root fgs	0/<1 ml	Moll-t (A), Sab (C)	-
W 5-10	557	43	10	15	15	C	-	Indet. grain fgs	-	stem/root fgs	0/<1 ml	Moll-t (A), burnt bone	-
W 10-15	557	48	10	10	15	C	-	Indet. grain fgs	C	<i>Vicia/Lathyrus</i>	0/<1 ml	Moll-t (A*), burnt bone	-
E 0-5	557	50	5	10	5	C	-	F-t wheat grain fgs	C	<i>Arrhenatherum elatius</i>	0/<1 ml	Moll-t (A*), burnt bone	-



Feature	Context	Sample	Vol (L)	Flot size	Roots %	Grain	Chaff	Cereal Notes	Charred Other	Notes for Table	Charcoal > 4/2mm	Other	Analysis
E 5-10	557	51	7	15	5	-	-	-	-	-	0/<1 ml	Moll-t (A*), burnt bone	-
E 10-15	557	53	5	15	5	C	-	F-t wheat grain fgs	C	Vicia/Lathyrus, stem/root fgs	0/<1 ml	Moll-t (A*), burnt bone	-
555	565	65	0.8	3	10	C	-	Indet. grain fgs	-	-	-	burnt bone Moll-t (C)	-
?Prehistoric													
Pits													
323	321	16	10	50	35	C	-	Indet. grain fgs	A	Corylus avellana shell fgs	1/2 ml	Moll-t (A**)	-
333	332	25	20	40	25	B	-	?Hulled wheat grain fgs	B	Corylus avellana shell fgs, Vicia/Lathyrus	2/4 ml	Moll-t (A*), Moll-f (C)	-
344	345	26	15	30	30	C	-	Indet. grain fgs	-	-	0/1 ml	Moll-t (A*)	-
Undated													
Tree throw													
517	521	40	10	20	10	-	-	-	-	-	<1/1 ml	Moll-t (A*)	-

Key: A*** = exceptional, A** = 100+, A* = 30-99, A = >10, B = 9-5, C = <5; Moll-t = terrestrial molluscs, Moll-f = aquatic molluscs; Analysis: C = charcoal, P = plant, M = mollusc



Appendix 2.2: Land Snail assessment from Ring Ditch Groups 420, 543 and 375

Phase	Late Neolithic/Bronze Age						Bronze Age				
Group Number	420				543		375				
Feature Type	Ring Ditch				Ring Ditch		Ring Ditch				
Feature	544				476		411				
Context	546	546	548	548	478	571	412	413	414	414	415
Series					61		32				
Sample	44	45	46	47	62	63	31	30	29	28	27
Depth (m)	Spot	Spot	Spot	Spot	Spot	Spot	Spot	Spot	Spot	Spot	Spot
Weight (g)	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000
Open country species											
<i>Pupilla muscorum</i>	+	-	B	A	B	A	B	A	B	A	A
<i>Vertigo</i> spp.	-	-	-	B	C	C	C	-	C	-	A
<i>Helicella itala</i>	C	C	C	B	C	C	-	B	B	A	A
<i>Vallonia costata</i>	C	-	C	A	B	A	C	A	B	A	A
<i>Vallonia excentrica</i>	C	C	C	A	B	A	C	A	B	A	A
<i>Truncatellina cylindrica</i>	-	-	-	C	-	-	-	-	C	-	C
Intro. Helicellids	-	-	-	-	-	-	-	C	-	C	B
Intermediate species											
<i>Trochulus hispidus</i>	-	-	+	B	C	C	-	C	-	A	B
<i>Pomatias elegans</i>	+	+	+	C	+	+	-	+	-	-	+
<i>Cochlicopa</i> spp.	C	+	C	C	C	B	-	C	C	A	A
<i>Punctum pygmaeum</i>	-	-	C	-	-	C	-	-	-	-	-
Shade-loving species											
<i>Carychium</i>	-	-	-	-	-	-	-	-	C	C	-
<i>Discus rotundatus</i>	-	C	+	C	-	+	-	-	-	-	-
<i>Clausilia bidentata</i>	-	+	+	+	-	-	-	-	-	-	-
<i>Helicigona lapicida</i>	-	-	+	+	-	-	-	-	-	-	-
Burrowing species											
<i>Cecilioides acicula</i>	C	C	-	-	-	B	C	A	B	A	A
Approx totals	5	5	15	100+	25	60	10	65	30	100+	100+

Key: A = >10, B = 9-5, C = <5; + = present



14 APPENDIX 3 – OASIS FORM

OASIS ID: wessexar1-172116

Project details

Project name	The Old Dairy, London Road, Amesbury
Short description of the project	Archaeological excavations were undertaken by Wessex Archaeology at Old Dairy, London Road, Amesbury, on behalf of Mansell Partnership Housing, centred on National Grid Reference (NGR) 416200 142000. The work was undertaken as a condition of planning consent to redevelop the site for residential use. The results produced unexpected evidence for multi-phase activity, much of it linked with funerary use, extending from at least the Middle Neolithic to the Anglo-Saxon period. The fieldwork was undertaken 22nd April and 5th June, and 18th to 19th December 2013. The earliest activity included two Middle Neolithic pits, one of which contained Peterborough Ware pottery. Three large ring ditches of Bronze Age date were recorded, and appear to represent a previously unrecorded funerary complex, located in an area that already boasts some of the densest concentrations of such monuments in the country. The largest ring ditch measured 28m in diameter. The site also revealed a small Anglo-Saxon inhumation cemetery spanning the late 7th-early 8th centuries. Five inhumations, most with grave goods, were arranged around a central inhumation burial. This burial, which was surrounded by a shallow ring ditch, had heavily disturbed and the bones rearranged, possibly within the Anglo-Saxon period.
Project dates	Start: 22-04-2013 End: 19-12-2013
Previous/future work	No / No
Type of project	Recording project
Site status	None
Current Land use	Vacant Land 1 - Vacant land previously developed
Monument type	RING DITCH Bronze Age
Monument type	CEMETERY Early Medieval
Monument type	RING DITCH Bronze Age
Monument type	RING DITCH Bronze Age



Investigation type "Full excavation"

Prompt Planning condition

Project location

Country England

Site location WILTSHIRE SALISBURY AMESBURY The Old Dairy, London Road, Amesbury

Postcode SP4 7XL

Study area 0.36 Hectares

Site coordinates SU 416214 141999 50.9252009592 -1.40773839787 50 55 30 N 001 24 27 W
Polygon

Lat/Long Datum Unknown

Height OD /
Depth Min: 90.00m Max: 91.00m

Project creators

Name of
Organisation Wessex Archaeology

Project brief
originator Mansell Partnership Housing

Project design
originator Wessex Archaeology

Project
director/manager Caroline Budd

Project supervisor PA Harding

Type of
sponsor/funding
body Developer

Name of Mansell Partnership Housing



sponsor/funding
body

Project archives

Physical Archive recipient Wessex Archaeology

Physical Archive ID 79291

Physical Contents "Human Bones","Metal","Animal Bones","Ceramics","Environmental"

Digital Archive recipient Wessex Archaeology

Digital Archive ID 79291

Digital Contents "Stratigraphic","Survey"

Digital Media available "Database","Spreadsheets","Survey","Text"

Paper Archive recipient Wessex Archaeology

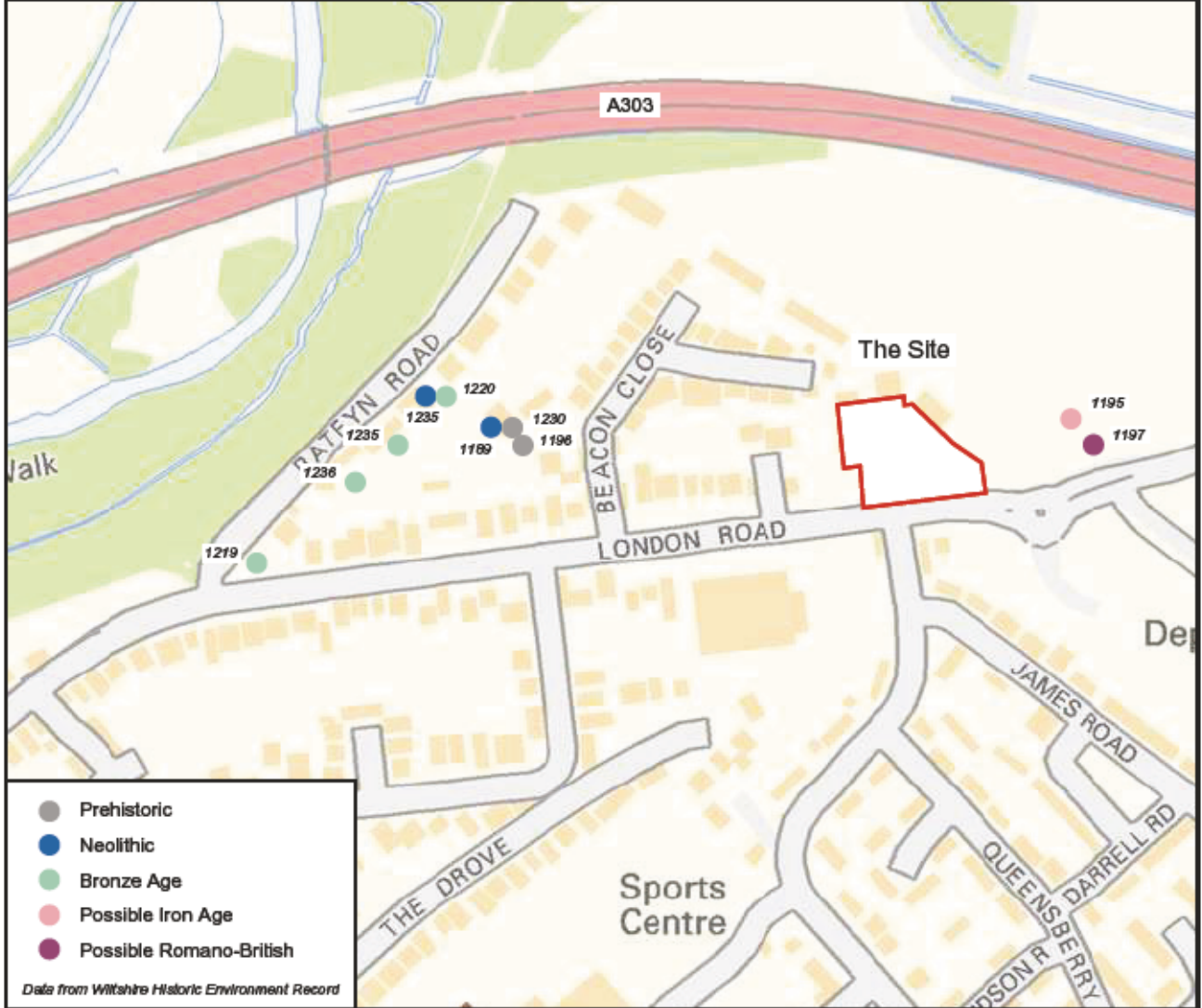
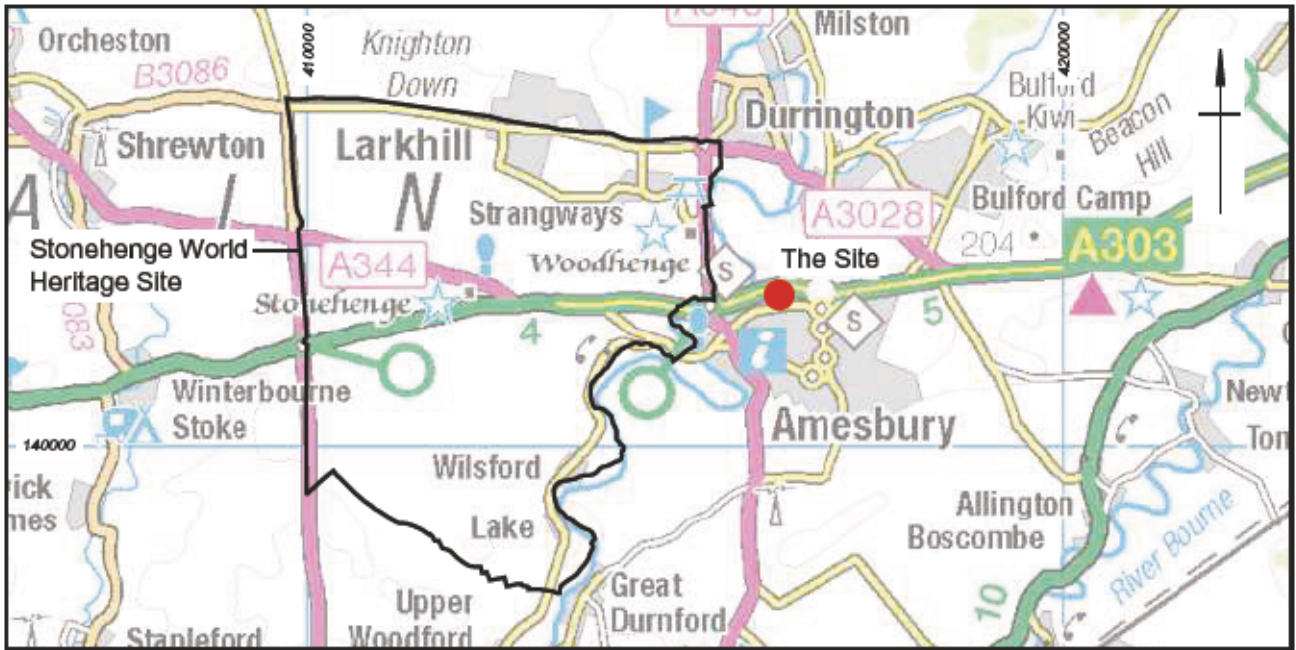
Paper Archive ID 79291

Paper Contents "Stratigraphic","Survey"

Paper Media available "Context sheet","Diary","Drawing","Map","Notebook - Excavation',' Research',' General Notes","Photograph","Plan","Report","Section","Survey "

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Site location plan

Figure 1



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Plan of archaeological features

Figure 2

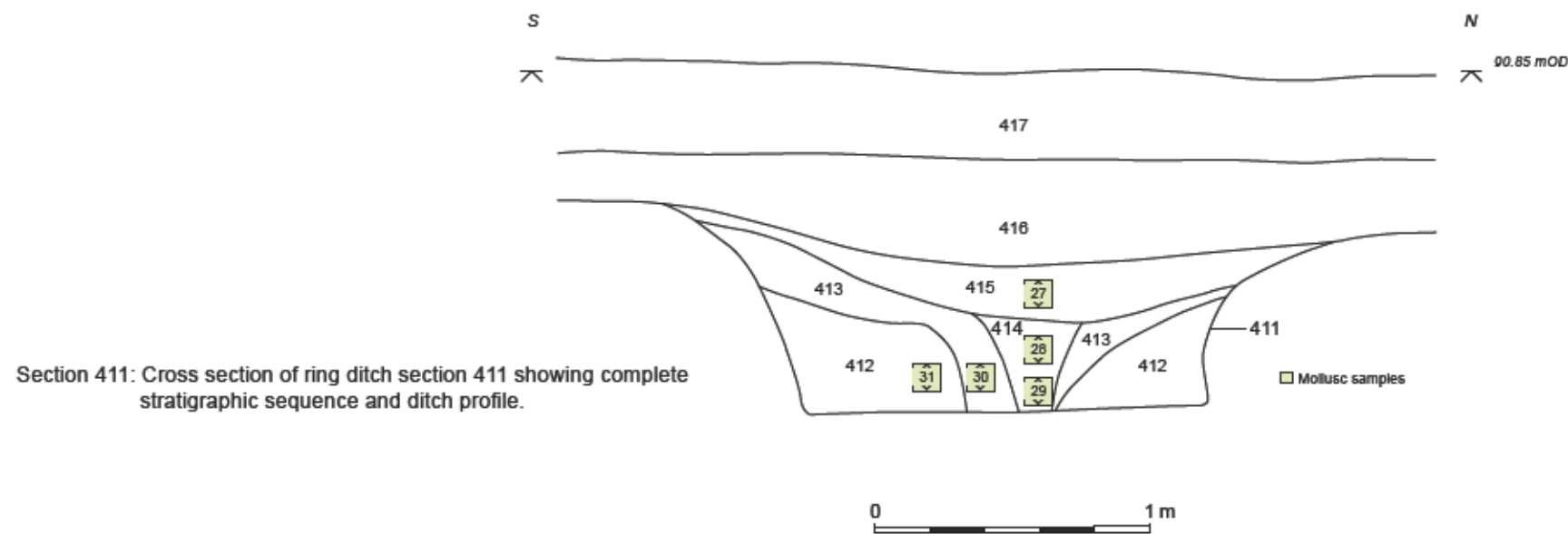


Plate 1: Ditch section 380, view from the south, showing truncation of upper ditch profile by dairy construction.

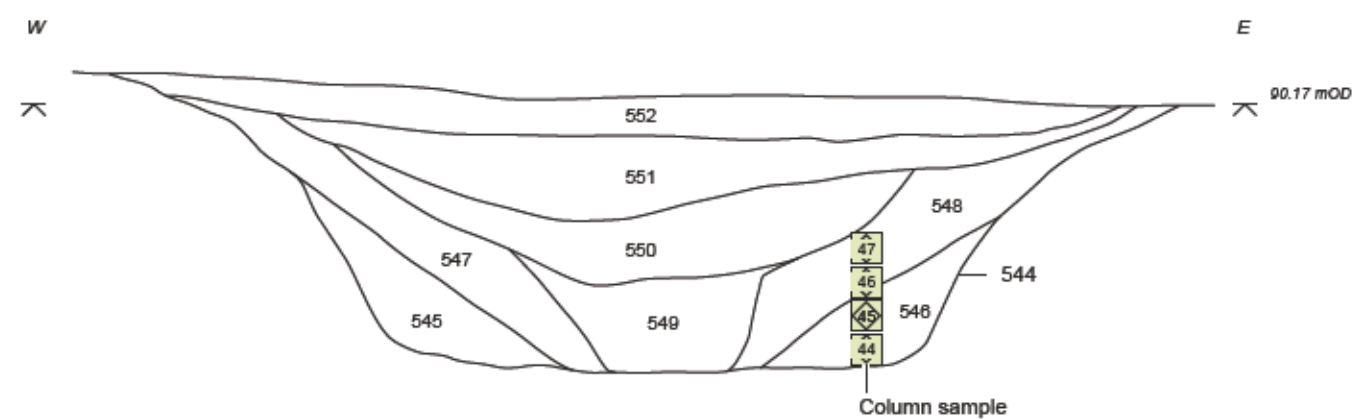


Plate 2: Ditch section 348, view from the east, showing ditch profile and dairy storm-water contamination at the base



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Section 544: Cross section of ring ditch section [544] showing complete stratigraphic sequence and ditch profile.



Plate 3: Ditch section 572, view from the south-east

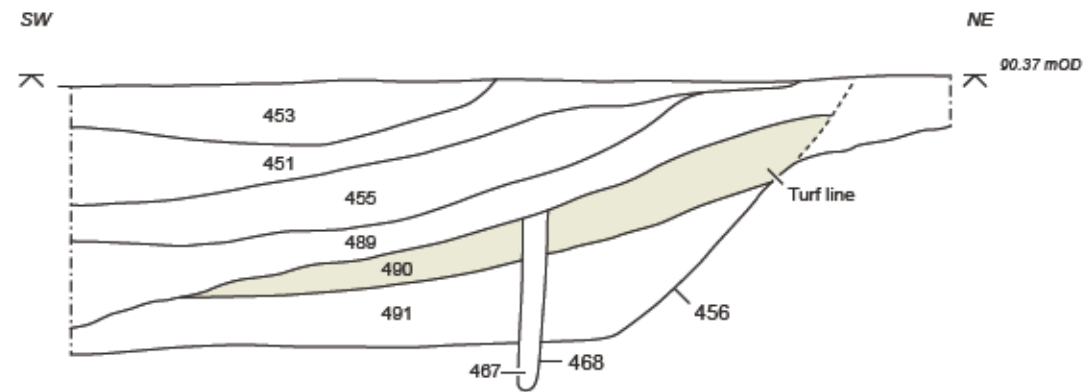


Plate 4: Ditch section 502, view from the north-west.



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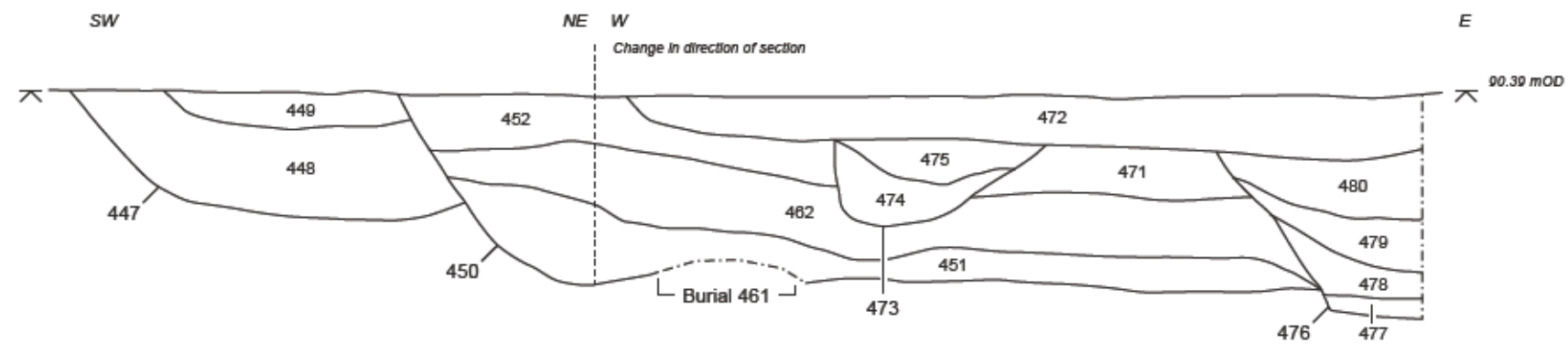
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Section 456: Longitudinal section through ditch terminus 456 showing buried turf line cut by stake hole overlain by chalk rubble from ring ditch 543 construction



Plate 5: Inhumation burial 461 on base of ditch 450 with Neolithic pit 447 beyond, view from the north.



Section 450 Longitudinal section showing Neolithic pit 447, ditch 450, with location of inhumation burial 461, and ditch section 476 of ring ditch 543

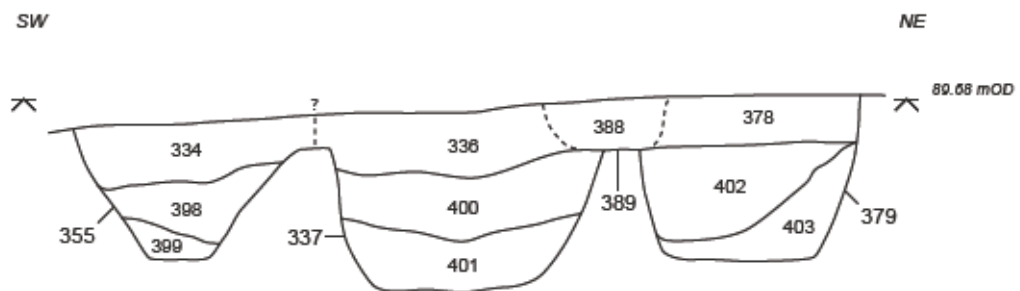


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Section 563: Cross section of Middle Neolithic pit 563



Section 335: Cross sections through pits 335, 337 and 339 with ditch section 389 of Anglo-Saxon ring ditch 492



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Plate 6: Central disturbed Anglo-Saxon inhumation burial 363 (grave 361) with prehistoric pit 359 beyond



Plate 7: Anglo-Saxon inhumation burial 325 (grave 324) from south

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