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Foreword

The A303 Amesbury to Berwick Down scheme ("the Scheme") forms part of a programme of improvements for upgrading the A303/A358 corridor, improving this vital connection between the South West and London and the South East and including the upgrade of remaining single carriageway sections on the route to dual carriageway. This investment is stated as a priority project in the National Infrastructure Plan and Government's commitment is confirmed in the Road Investment Strategy (2015/16-2020/20 Road Period). Subject to achieving an approved Development Consent Order ("DCO"), preliminary works are planned to start in 2020 with the main construction works following in 2021, and the Scheme is due to open to traffic in 2026.

Objectives for the Scheme have been formulated both to address identified problems and to take advantage of the opportunities that new infrastructure would provide. The objectives are defined by the Department for Transport ("DfT"):

- Transport - To create a high quality reliable route between the South East and the South West that meets the future needs of traffic;
- Economic Growth - to enable growth in jobs and housing by providing a free flowing and reliable connection between the South East and the South West;
- Cultural Heritage - To help conserve and enhance the World Heritage Site and to make it easier to reach and explore; and
- Environment and Community - To improve biodiversity and provide a positive legacy for nearby communities.

The objectives would be achieved by providing a high quality, two-lane dual carriageway on the A303 trunk road between Amesbury and Berwick Down in Wiltshire. The Scheme would resolve traffic problems and, at the same time, protect and enhance the Stonehenge component of the Stonehenge, Avebury and Associated Sites World Heritage Site, hereafter referred to as "the WHS". The Scheme would be approximately 8 miles (13km) long and comprise the following key components:

a) A northern bypass of Winterbourne Stoke with a viaduct over the River Till valley;
b) A new junction between the A303 and A360 to the west of and outside the WHS, replacing the existing Longbarrow roundabout;
c) A twin-bore tunnel approximately 2 miles (3.3km) long, past Stonehenge; and
d) A new junction between the A303 and A345 at the existing Countess roundabout.

Executive Summary

This report summarises the findings of assessment of five large bulk samples and a column of thirteen small bulk samples taken from a solution feature 24105; and of wood charcoal fragments in two samples from a possible pit 24103, cut into the solution feature 24105, and a Beaker pit 23405. The features were recorded during archaeological trial trenching in the Western Portal and Approach evaluation area; the results of the trial trenching are reported separately (see HE551506-AMW-HER-Z2_ML_M00_Z-RP-LH-0001, Volume 1 pp. 27-8, 47-8, 51; Volume 2, Figures 11.23, 11.45, Plate 12.2) [1] [REP1-045 - 046]. The results reported in this report confirm the findings of the ES on those matters.

The samples from the solution feature 24105 were processed and assessed for the presence of molluscs. The wood charcoal fragments were assessed to characterise the assemblages, recording quantities preserved and quality of preservation as well as providing an initial indication of the woody taxa present. The potential of the assemblages to contribute information regarding fuel selection and the nature and composition of the wooded landscape from which fuel was selected was also considered.

No conspicuous differences are seen between snail taxa identified at the bottom of the sequence (24116) and those at the top (24107), although the number of remains in the former is too small for any comparison to be meaningful. The limited evidence shows a predominance of species of open habitats, which suggests a short grassland environment in the immediate area of the feature at the time of its final infilling.

Charcoal fragments from Beaker pit 23405 were well preserved, displaying clear anatomical structures with very little indication of post-depositional sediment infiltration or other processes that can be detrimental to identification. Oak (*Quercus* sp.), Maloideae group taxa and cherry/blackthorn (*Prunus* sp.) were recorded. The growth rings were closely spaced suggesting they may derive from slow grown wood from larger branches or main stems. All of the taxa identified provide good fuel and could have occurred in a range of habitats.

Post-medieval pit 24103 (cut into solution feature 24105) contained unidentifiable root wood and four fragments of hazel (cf. *Corylus avellana*) roundwood, almost certainly derived from woodland managed by local estates and land owners and used for fuel.

In summary, the assemblages of charred plant remains comprised mostly remains of cereals, hazelnuts and tubers. Due to the presence of intrusive material (verified by radiocarbon dating), well-preserved consistent assemblages are rare and the recovered charred plant remains are consequently of little significance for the understanding of the site. There is potential for further radiocarbon dating of material form the samples, however, due to the lack of significance of the recovered environmental assemblages for the understanding of the site, no analysis recommendations are made. Although the evidence could inform about plant exploitation practices from the perspective of the wider area, it does not challenge interpretations in recent reviews of environmental evidence.

1 Introduction

1.1 Project Background

1.1.1 Archaeological evaluation fieldwork undertaken in the Western Portal and Approaches has included geophysical survey, plough zone artefact collection, trial trenching and geoarchaeological investigations.

1.1.2 The evaluation was undertaken in accordance with an Archaeological Evaluation Strategy Report (AESR) [2] setting out the general and specific principles guiding the strategies for field-based investigations and an accompanying Overarching Written Scheme of Investigation (OWSI) [3] detailing the methods and techniques employed during the archaeological evaluation. The AESR and OWSI were approved by the Heritage Monitoring and Advisory Group (HMAG: comprising representatives of Wiltshire Council Archaeology Service, the National Trust, English Heritage and Historic England).

1.1.3 A Site Specific Written Scheme of Investigation (SSWSI) [4] for archaeological evaluation of land within the Stonehenge, Avebury and Associated Sites World Heritage Site (WHS), between the A360 and Normanton Gorse (south of the existing line of the A303), detailed the aims and methodologies to be used. This guiding document was approved by the HMAG prior to fieldwork commencing.

1.1.4 Detailed reports on the results of the evaluation programme were submitted to the Examination on 12th April 2019 [REP-045, 046] [1]. An accompanying submission [REP-040] sets out the relationship between the detailed reports and the baseline, mitigation approach and likely significance of effects reported in the Environmental Statement [APP-044]. The report noted (paragraph 7.3.1) that assessment of charcoal and mollusc samples from a specific feature would be reported separately. The results reported in this report confirm the findings of the ES on those matters.

1.1.5 This report presents the findings of an assessment of paleoenvironmental samples taken during archaeological trial trenching in the Western Portal and Approach evaluation area from solution feature 24105, and of wood charcoal fragments in two samples from a possible Post-medieval pit 24103, cut into the solution feature 24105, and a Beaker pit 23405. The results of assessment of charred plant remains from a total of 39 bulk sediment samples were previously presented in the Western Portal and Approaches Evaluation Report [1](‘the Evaluation Report’) but are discussed here in the context of the palaeoenvironmental and radiocarbon dating evidence (Tables 5-1 to 5-4.

2 Mollusc Samples

2.1 Introduction

2.1.1 Five large bulk samples and a column of thirteen small bulk samples were taken from solution feature 24105. The samples were processed and assessed for the presence of environmental evidence, with particular reference to molluscs.

2.2 Methods

2.2.1 The mollusc small bulk samples were of around 1 litre each, the large bulk samples of 40 litres each. The samples were processed by standard flotation methods on a Syraf-type flotation tank; the flot retained on a 0.25 mm mesh, residues fractionated into 4 mm and 1 mm fractions and dried. The coarse fractions (>4 mm) were sorted, weighed and discarded. The flots were scanned using a stereo incident light microscopy (Leica MS5 microscope) at magnifications of up to x40 for the identification of environmental remains. Different bioturbation indicators were considered, including the percentage of roots, the abundance of modern seeds and the presence of mycorrhizal fungi sclerotia (e.g. *Cenococcum geophilum*) and animal remains, such as earthworm eggs and insects, which would not be preserved unless anoxic conditions prevailed on site. The preservation and nature of the environmental evidence was recorded and reported elsewhere [1]. Mollusc nomenclature follows [5]. Abundance of remains is qualitatively quantified (A* = 30-99, A = >10, B = 9-5, C = <5) as an estimation of the minimum number of individuals and not the number of remains per taxa.

2.3 Results

2.3.1 Shells of terrestrial molluscs were largely present in the flots of the large bulk sediment samples but only on one of the small bulk column samples (Table 4-1). The snail taxa identified include specimens from mostly open country habitats, but intermediate snails were also present: *Cochlicopa* sp., cf. *Trochulus hispidus, Pupilla muscorum*, *Vertigo pygmaea, Vallonia* sp., cf. *Helicella itala*, *Pomatias elegans* and cf. Helicidae.

3 Charcoal Samples

3.1 Introduction

3.1.1 Wood charcoal fragments were retrieved in sufficient quantities for wood charcoal assessment from the flots of two bulk sediment samples: sample 23407 is from a Beaker pit (23405) that has been radiocarbon dated to 2140-1920 cal. BC (UBA-39010: 3655±40 BP) using hazelnut shell; sample 24110 from pit 24103 returned a Post-medieval radiocarbon date on wheat (UBA-39014: 201±27 BP) [1] . The remainder of the flots from the bulk sediment samples provided very small amounts (less than 10 ml) of charcoal fragments and were not considered suitable for charcoal assessment [1].

3.1.2 This assessment aims to characterise the charcoal assemblages, recording quantities preserved, quality of preservation as well as providing an initial indication of the woody taxa present. This work also considers the significance and potential of the assemblages to contribute information regarding fuel selection and the nature and composition of the wooded landscape from which fuel was selected.

3.2 Methods

3.2.1 Charcoal samples were contained within the >2mm flot. The flots were passed through a 4mm sieve and charcoal fragments in the resulting fractions were quantified (Table 4-2). Ten charcoal fragments were randomly extracted from each flot and the fragments were fractured along three planes (transverse, tangential longitudinal and radial longitudinal sections) following standardised procedures [6] [7]. They were viewed under a stereozoom microscope for initial sorting and an incident light microscope (at 50, 100, 200 and 500x) to facilitate identification of the woody taxa present. Taxonomic identifications were assigned by comparing suites of anatomical characteristics visible with those documented in reference atlases [8] [9] [10]. Identifications are given to species where possible, however genera, family or group names are given where anatomical differences between taxa are not significant enough to permit satisfactory identification. Taxa are referred to using their common English and Latin names in the first instance and their English names thereafter. One exception is the Maloideae subfamily, a taxonomic group which includes hawthorn, apple and whitebeam but that cannot be distinguished on the basis of their wood anatomy. Taxonomic identifications of charcoal are recorded in Table 4-2, and nomenclature used follows [11].

3.3 Results

Sample 23407 from Beaker pit 23405

3.3.1 The >2mm flot produced a moderate quantity of wood charcoal fragments measuring >4mm (114 frags) and abundant charcoal 2-4mm (>250 frags) totalling approximately 50% of the flot with the remaining proportion dominated by land snail shells. Charcoal fragments were well preserved, displaying clear anatomical structures with very little indication of post-

depositional sediment infiltration or other processes that can be detrimental to identification. Oak (*Quercus* sp.), Maloideae group taxa and cherry/blackthorn (*Prunus* sp.) were recorded and none of the fragments derive from roundwood or notably quick grown wood. Instead the growth rings were closely spaced suggesting they may derive from slow grown wood from larger branches or main stems. All of the taxa identified provide good fuel and could have occurred in a range of habitats such as deciduous woodland or as smaller stands in more open scrub vegetation.

Sample 24110 from pit 24103

3.3.2 The small flot from this sample contained a moderately high proportion of charcoal, contributing approximately 50% with uncharred rootlets and woody fragments making up the remaining flot. Charcoal fragments consisted almost entirely of charred roots measuring less than 5mm diameter and although some are represented by long segments, they passed easily through the 4mm sieve and somewhat falsely augmented the 2-4mm sieved fraction. Only 23 fragments were retained in the >4mm fraction while the 2-4mm fraction produced between 50-250 fragments. All of the fragments were well preserved, with clear anatomical features and little indication of detrimental post-depositional processes.

3.3.3 Root wood tends to lack uniformity in its structure with variability and discrepancy from main trunk wood noted in several groups of anatomical features such as pore distribution, ring porosity and ray width [10]. As such it is rarely possible (with a few exceptions) to provide taxonomic identifications of root wood with confidence [10].

3.3.4 In addition to unidentifiable root wood, four fragments of hazel (cf. *Corylus avellana*) roundwood were also recorded. At this time (in the Post-medieval period), firewood almost certainly derives from woodland managed by local estates and land owners using a range of techniques such as coppicing [12]. Fuelwood may also have been sought from the small upper branches of trees destined for timber (although not hazel) as well as underwood taxa. Unfortunately, none of the hazel fragments displayed the complete diameter of the roundwood and there is no clear evidence for rapid growth that is often associated with management techniques. It has therefore not been possible to determine the total number of rings or growth pattern represented in the hazel roundwood.

4 Discussion

4.1 Charred plant remains

4.1.1 Assemblages with cereal grains and other charred plant remains (hazelnuts, tubers) were recovered from many of the samples taken during the evaluation [1], although the number of remains per sample was generally low (Table 5-4). On account of the small number of remains, the assemblages are of little significance in isolation, although considered from the perspective of the wider Salisbury Plain area they could provide some supporting information about plant exploitation practices and ritual depositional practices, but without providing any substantial new data to challenge current notions as reviewed recently [13].

4.1.2 Intrusion of charred plant remains and particularly cereal grains is a relatively frequent phenomenon in charred assemblages in the Salisbury Plain area [14]; these can consequently provide misleading information about past plant exploitation activities. Direct radiocarbon dating of charred plant remains is the only safe method to enable assessment of the consistency or otherwise of these assemblages. To increase the efficiency of any radiocarbon dating strategy, a prior taphonomical assessment of the preservation conditions (taking into account the degree of fragmentation and surface erosion) of the charred plant remains is advisable to guide the selection of the samples for radiocarbon dating.

4.1.3 The radiocarbon dating undertaken to verify the consistency or otherwise of the deposits (see 4.4 Radiocarbon dating), has shown the site to provide both inconsistent and consistent assemblages of charred plant remains: some of the cereal grains in pits 23403, 24005, and 24103 proved to be of Post-medieval and modern date; but the cereal grain from Beaker pit 24405 (UBA-39015, 3686 ± 32, 2200-1970 cal. BC) and all dated hazelnut shells (UBA-39010: 3655 ± 40, 2140-1920 cal. BC; UBA-39012: 3686 ± 32, 2200-1970 cal. BC), proved to be consistently of Beaker or later Bronze Age date.

4.1.4 Other charred plant remains present in the samples and not directly radiocarbon dated were seeds of vetch (Vicieae), sedges (Cyperaceae) and ribwort plantain (*Plantago lanceolata*) and tubers from lesser celandine (*Ranunculus ficaria*) and false oat-grass or onion-couch grass (*Arrhenatherum elatius* subsp. *bulbosum*), particularly in some of the samples from solution feature 24105. The presence of these types of remains, and particularly the tubers, is not unusual in these kinds of deposits [13]; their significance is far from straightforward and the object of debate, with a diversity of interpretations being brought forward [15] [16] [17] [18] [19], as they could either be of significance for understanding past plant management practices as well as merely representing the natural vegetation of the site. However, the presence of intrusive material in the samples and the current existence of all these taxa in the present local flora precludes the validity of any interpretation in the absence of extensive radiocarbon dating to check the consistency of each type of plant remain as part of the prehistoric assemblages.

4.2 Mollusc samples

4.2.1 The snail assemblage from the solution feature 24105 is very small, particularly in the lower parts of the sequence. This restricts the potential of the evidence to inform on the landscape and its changes over time. No conspicuous differences are seen between the taxa identified at the bottom of the sequence (24116) and those at the top (24107), although the number of remains in the former is too small for any comparison to be meaningful. The limited evidence merely shows a predominance of species of open habitats, which suggests a short grassland environment in the immediate area of the feature at the time of its final infilling in the Post-medieval period.

4.3 Charcoal samples

4.3.1 The samples of wood charcoal differ markedly in their composition and date and are therefore treated separately with regards their significance and potential.

Sample 23407 from Beaker pit 23403

4.3.2 The charcoal from pit 23403, radiocarbon dated to 2140-1920 cal. BC (UBA-39010: 3655±40 BP) through a hazel nutshell fragment, has some potential to provide further taxonomic identifications and therefore a better understanding of the composition of this assemblage. As an isolated Early Bronze Age assemblage within the context of the immediate site any data obtained is likely to be limited. However, it could provide an indication of the range of woody taxa available and selected for use, probably as fuel, at this time. If considered as a part of the scheme-wide post-excavation analysis programme in conjunction with other contemporary, comparable assemblages, the data could contribute (albeit only a small amount) to broader discussions and research questions regarding the composition of the landscape as identified in SAARF [20] and SWARF [21]. The association of this assemblage with other material, whether artefacts (such as Beaker pottery) or environmental remains (such as charred plant macrofossils and bone) and the wider site context may augment the significance this assemblage has in contributing to topics regarding, for example, fuel selection for specific activities.

Sample 24110 from Post-medieval pit 24103

4.3.3 The predominance of charred root wood within the Post-medieval assemblage is interesting and could indicate that woody taxa were being burnt while clearing land for example, rather than necessarily implying the selection of root wood as fuel. Taxonomically identifiable charcoal, from stem or branch wood, is however very limited probably amounting to fewer than ten fragments in total and as such this assemblage demonstrates very little potential for further identification work and analysis. The roundwood fragments are also incomplete and there is no evidence for distinct growth patterns in those viewed during assessment. This small isolated assemblage is of low significance with no potential for further analysis.

4.4 Radiocarbon dating

4.4.1 A total of eight radiocarbon dating samples were submitted in order to gain a better understanding of the chronology of the activities identified at the site, as well as the assessment of the consistency of the deposits and their potential for contamination by remains from modern agricultural practices [14]. Paired samples of well-preserved hazel nutshell fragments (assumed not to be intrusive) were submitted from the contexts from pits 23403 and 24005 from which cereal grain samples (some of which were potentially intrusive) were also submitted.

4.4.2 The radiocarbon samples were submitted to the 14CHRONO Centre, Queen's University, Belfast and the bone sample to the Scottish Universities Environmental Research Centre (SUERC), University of Glasgow. The macrofossil samples were treated with Acid and the measurements corrected using AMS δ13C values; detailed descriptions of the methods employed by the SUERC Radiocarbon Laboratory can be found in [22]. The calibrated age ranges were calculated with OxCal 4.2.3 [23] using the IntCal13 curve [24]. All radiocarbon dates are quoted as uncalibrated years before present (BP), followed by the lab code and the calibrated date-range (cal. BC) at the 2σ (95.4%) confidence, with the end points rounded out to the nearest 10 years, according to the maximum intercept method [25].

4.4.3 As discussed in the Evaluation Report [1], some of the cereal grains in pits 23403, 24005, and 24103 demonstrated to be of Post-medieval and modern date. However, not all charred plant remains present in the samples are intrusive: the cereal grain from pit 24405 (UBA-39015, 3686 ± 32, 2200-1970 cal. BC), as well as all the hazelnut shells, proved to be consistently of Beaker or later Bronze Age date.

4.4.4 There is potential in the plant macroremains for further dating should the consistency of every deposit or sample need to be ascertained. This is, however, not recommended as any potential palaeoenvironmental interpretation would still be limited by the rarity of remains available to support it.

4.5 Summary of environmental evidence

4.5.1 A diversity of environmental evidence was retrieved from the samples taken across the site, with positive preservation results for wood charcoal, charred plant and molluscan remains. Overall, some of the environmental assemblages from the site could have some potential (albeit limited) to inform about past landscapes and plant resource exploitation practices and their funerary or symbolic use. However, this evidence is severely compromised by contamination with modern intrusive material due to high levels of bioturbation, as confirmed by an initial round of radiocarbon dating. As such, no further analytical work is recommended on the samples themselves, although as part of a larger data set they may have the potential to contribute to the understanding of past human activities in the wider area and will be retained.

5 Tables

Table 5-1 Snails assessment data

(A* = 30-99, A = >10, B = 9-5, C = <5)

Feature	Context	Sample	Flot (ml)	Intermediate	Open country/ grassland	Indeterminate
24105	24107	24111	20	C - *Cochlicopa* sp., cf. *Trochulus hispidus*	A* - *Pupilla muscorum, Vertigo pygmaea, Vallonia* sp., cf. *Helicella itala*	
24105	24108	24112	20	C - cf. *Trochulus hispidus*		
24105	24113	24114	15	C - *Pomatias elegans*		cf. Helicidae
24105	24115	24117	10	C - *Cochlicopa sp*		
24105	24116	24118	3		C - *Vallonia* sp.	

Table 5-2 Charcoal assessment data

(* = 1-10, ** = 11-50, *** = 51-250, **** = >250, rw = roundwood)

Summary			
Period		Beaker	Post-medieval
Sample Number		23407	24110
Context		23404	24104
Context / deposit type		Pit 23403	Pit 24103
>4mm charcoal		***114	**23
2-4mm charcoal		****	***
Charcoal as estimated Proportion of flot		50%	60%
Taxonomic Identifications	**English Name**		
Quercus sp.	oak	7	
cf. Maloideae	hawthorn, whitebeam, rowan, apple	2	
Prunus sp.	Cherry/blackthorn	1	
cf. *Corylus avellana*	hazel		4 rw
Indeterminate root wood			6

Table 5-3 Radiocarbon dating results

Lab. Ref	Sample reference	Material	Date BP	δC13‰ (IRMS)	δN15‰	Calibration (2σ, 95.4%)
UBA-82677	201767_(26009)	Bone (human): Left tibia 0.9g	3923 ±32	-21.8 ‰	10.2 ‰	2490-2300 cal. BC
UBA-39010	201767_(23404) <23407>	Charred plant remain: *Corylus avellana* shell fragment	3655 ±40			2140-1920 cal. BC
UBA-39011	201767_(23404) <23407>	Charred plant remain: *Triticum* sp. grain	Modern			
UBA-39012	201767_(24006) <24009>	Charred plant remain: *Corylus avellana* shell fragment	3686 ±32			2200-1970 cal. BC
UBA-39013	201767_(24006) <24009>	Charred plant remain: *Triticum* sp. grain	Modern			
UBA-39014	201767_(24104) <24110>	Charred plant remain: *Triticum aestivum/turgidum* grain	201± 27			cal. AD 1650-1950
UBA-39015	201767_(24409) <24414>	Charred plant remain: *Triticum* sp. grain	3790 ±35			2340-2060 cal. BC
UBA-39016	201767_(27004) <27009>_	Charred plant remain: *Corylus avellana* shell fragment	3663 ±32			2140-1950 cal. BC

Table 5-4. Summary of charred plant remain assessment results

Feature	Context	Sample	Grain	Chaff	Cereal Notes	Charred Other	Charred Other Notes	Comments (Preservation)
23403	23404	23407	C	-	*Triticum* sp., Triticeae	C	*Corylus avellana*	Grain looked intrusive but large nutshell fragments non-intrusive: confirmed by radiocarbon dating.
24005	24006	24008	-	-	-	C	*Corylus avellana* shell and kernel	Fair
24005	24006	24009	C	-	*Triticum* sp.	C	*Corylus avellana*	Fair: grain proved intrusive and nut shell non-intrusive upon radiocarbon dating.
24003	24004	24010	C		Triticeae	C	*Corylus avellana*	Poor, small fragments
24003	24004	24011	-	-	-	-	-	-

24103	24104	24110	A	-	*Triticum aestivum/turgidum* (inc. sprouted), Triticeae	A*	*Ranunculus ficaria* tubers, Poaceae, Cyperaceae, *Plantago lanceolata*	Heterogenous. Grain proved intrusive upon radiocarbon dating.
24105	24107	24111	-	-	-	-	-	-
24105	24108	24112	C	-	*Hordeum vulgare*	C	Poaceae, Indet. *Ranunculus ficaria* and *Arrhenatherum elatius* subsp. *bulbosum* tubers	Poor
24105	24113	24114	C	-	Triticeae	C	Indet. tuber epidermis, *Corylus avellana*, Poaceae	Poor, small shell fragment
24105	24115	24117	-	-	-	-	-	-
24105	24116	24118	-	-	-	C	*Ranunculus ficaria* tuber	Poor
24105	24116	24121	-	-	-	-	-	-
24105	24116	24122	-	-	-	C	*Corylus avellana*	Poor, small shell fragment
24105	24115	24123	-	-	-	-	-	-
24105	24115	24124	-	-	-	-	-	-
24105	24115	24125	-	-	-	-	-	-
24105	24113	24126	-	-	-	C	*Plantago lanceolata*	Fair
24105	24113	24127	-	-	-	-	-	-
24105	24108	24128	-	-	-	-	-	-
24105	24108	24129	-	-	-	-	-	-
24105	24119	24130						-
24105	24107	24131	-	-	-	-	-	-
24105	24106	24132	-	-	-	-	-	-
24105	24106	24133	-	-	-	-	-	-
24405	24406	24407	-	-	-	-	-	-
24405	24409	24414	C	-	*Triticum* sp.			Poor
24403	24404	24415	-	-	-	-	-	-
24420	24421	24422	C	-	*Triticum* sp.	-	-	Poor, looks intrusive
24420	24423	24424	-	-	-	-	-	-
24405	24409	24426	-	-	-	-	-	-
24405	24423	24427	-	-	-	C	Poaceae	Poor
27003	27004	27009	-	-	-	C	Vicieae, *Corylus avellana*	Fair, large shell fragments

Abbreviations List

AESR	Archaeological Evaluation strategy Report
DCO	Development Consent Order
DfT	Department for Transport
HMAG	Heritage Monitoring and Advisory Group
OWSI	Overarching Written Scheme of Investigation
SAARF	Stonehenge and Avebury Archaeological Research Framework
SWARF	South West Archaeological Research Framework
SSWSI	Site Specific Written Scheme of Investigation
WHS	World Heritage Site

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Appendices

Appendix A Chronology

A.1 Chronological Scheme

A.1.1.1 The chronological scheme followed in this report follows that at http://www.heritage-standards.org.uk/chronology/. For the purposes of this report, periodization is as follows:

- Palaeolithic -1,000 000 to -10,000 (BC)
- Mesolithic -10,000 to -4,000
- Neolithic -4,000 to -2,200
- Early Neolithic -4,000 to -3,300
- Middle Neolithic -3,300 to -2,900
- Late Neolithic -2,900 to -2,200
- Bronze Age -2,600 to -700
- Early Bronze Age -2,600 to -1,600
- Middle Bronze Age -1,600 to -1,200
- Late Bronze Age -1200 to -700
- Iron Age -800 (BC) to 43 (AD)
- Roman 43 to 410 (AD)
- Early Medieval 410 to 1066
- Medieval 1066 to 1540
- Post-medieval 1540 to 1901
- 20th Century 1901 to 2000

A.1.1.2 To accommodate the overlap between Late Neolithic (-2,900 to -2,200) and Early Bronze Age (2-2,600 to -1,600) in the above scheme, in this report these terms are used as broad chronological periods. The term 'Beaker' is used to refer to a material culture group that overlaps with both these chronological periods.

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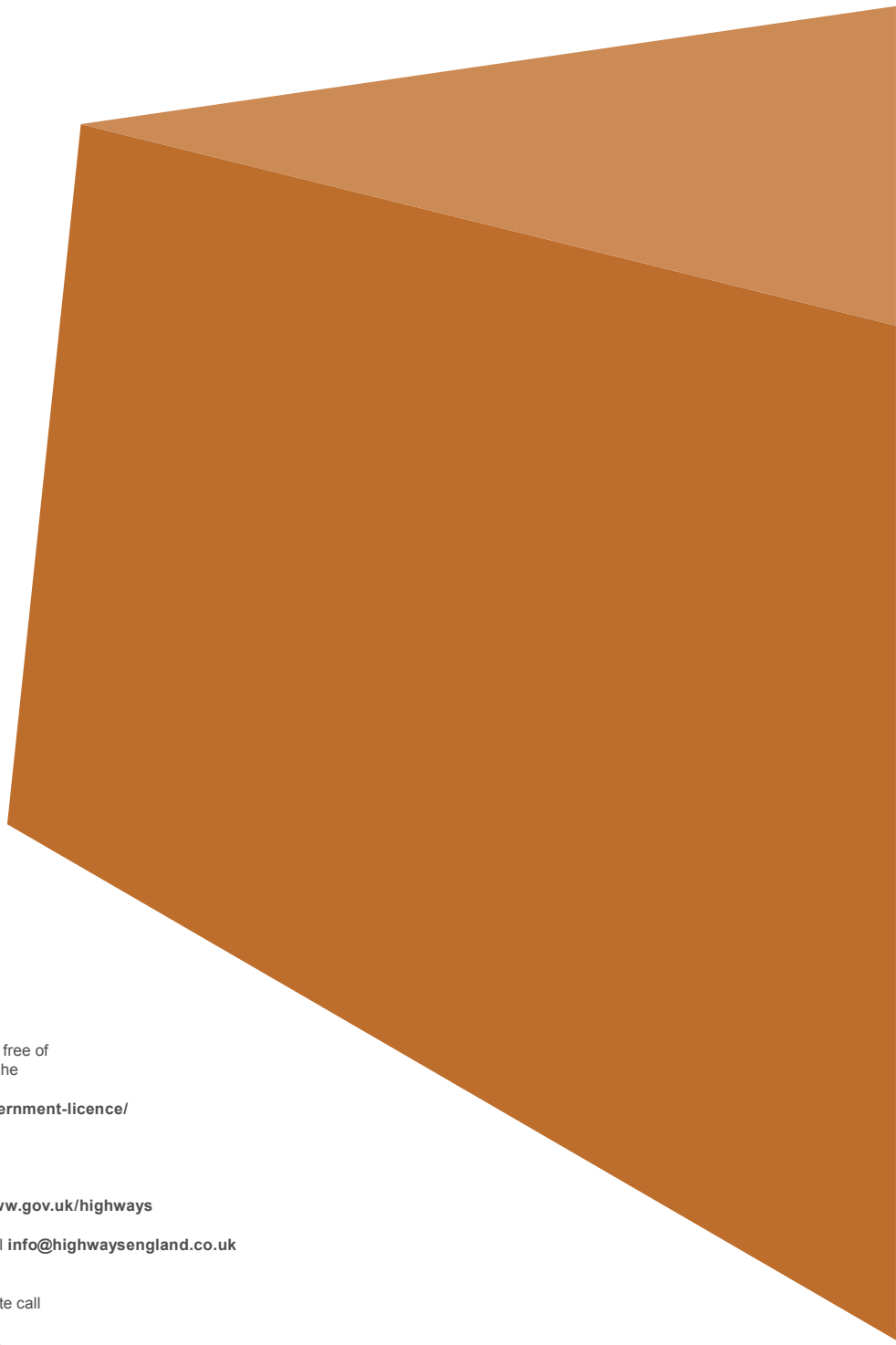

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