

# A303 Amesbury to Berwick Down TR010025

6.3 Environmental Statement Appendices

Appendix 6.11: Outline Archaeological Mitigation Strategy

APFP Regulation 5(2)(a)

Planning Act 2008

Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009

October 2018





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#### 1 Introduction

#### 1.1 Scope of Archaeological Mitigation

- 1.1.1 A staged programme of archaeological mitigation will be implemented in accordance with advice in DMRB Volume 11 Section 3 Part 2 (Highways England, 2007), and Volume 10 Section 6 Part 1 (Highways England, 2001) in advance of scheme construction. The programme will comprise measures to protect archaeological remains *in situ* and/or to record archaeological remains through investigation, prior to the construction of the Scheme.
- 1.1.2 This document provides an Outline Archaeological Mitigation Strategy (OAMS) for the scheme, to support the ES, HIA and the DCO application. The OAMS presents a draft Strategy as the basis for extensive consultation with members of the Heritage Monitoring Advisory Group (HMAG) (within the WHS) and Wiltshire Council Archaeology Service (WCAS) (outside the WHS) to develop a final Strategy.
- 1.1.3 The final strategy will take the form of a Detailed Archaeological Mitigation Strategy (DAMS) and accompanying Overarching Written Scheme of Investigation (OWSI). These will set out the scope, guiding principles and methods for the planning and implementation of essential archaeological mitigation. For each site or area of archaeological interest a Site Specific Written Scheme(s) of Investigation (SSWSI) will be prepared that outlines specific measures that would apply to particular pieces of archaeological fieldwork, to be carried out as part of the programme of archaeological mitigation works.
- 1.1.4 The archaeological mitigation programme will be conducted with full consideration of the Research Framework for the Stonehenge & Avebury and Associated Sites WHS (Leivers and Powell, 2016); and where appropriate the South West Archaeological Research Framework (Grove and Croft, 2012). Each SSWSI shall ensure that research strategies become a visible theme running through the archaeological mitigation and the subsequent reporting stage to demonstrate that they have been the basis for decision making, sample selection and justification for all stages of archaeological mitigation and reporting.

### 1.2 Design and Management of Archaeological Mitigation

- 1.2.1 The DAMS, OWSI and SSWSIs will be prepared and will be agreed in consultation with HMAG (inside the WHS) and WCAS (outside the WHS) prior to preliminary works commencing on site. The advice of the Scientific Committee will also be sought and incorporated into the design of the reports, where it is appropriate and relevant.
- 1.2.2 The archaeological fieldwork will be closely monitored to ensure that it is being carried out to the required standard and that it will achieve the desired aims and objectives. HMAG will be invited to attend site meetings to review the progress and results of the fieldwork within the WHS, and WCAS outside the WHS. These meetings will also be used to sign-off sites to construction. In addition,

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- site visits will also be arranged in order for the Scientific Committee to view the archaeological investigations in progress, where appropriate and feasible.
- 1.2.3 It is anticipated that the majority of the archaeological fieldwork will be undertaken during the preliminary works stage of the construction programme as Advanced Archaeological Works. However, where site conditions prevent archaeological fieldwork at the preliminary works stage, archaeological fieldwork may be required during the construction stage. It is anticipated that such circumstances will generally be limited to minor works, e.g. within the existing highway boundary.
- 1.2.4 In order to minimise the risk of unexpected finds being made during the course of the Main Contractor's works, Further Archaeological Design (FAD) documents will be prepared, if required, as an addendum to a SSWSI, in consultation with HMAG and WCAS.
- 1.2.5 The archaeological mitigation works and reporting will be undertaken by a suitably qualified, experienced and capable Archaeological Contractor.
- 1.2.6 During both the preliminary works stage and the construction stage, procedures will be adopted in the Outline Environmental Management Plan (OEMP) (Application Document 6.3, Appendix 2.2) and Heritage Management Plan (HMP) to ensure that sites and areas of archaeological interest are protected. Toolbox talks would be undertaken when necessary to inform construction supervision staff and site operatives of sensitive areas.
- 1.2.7 In areas where archaeology or heritage assets are to be preserved *in situ* (protected by temporary perimeter fencing, or beneath fill materials), method statements will be put in place at the start of the construction programme that describes specific protection measures to be applied to the site or area of interest, and following procedures outlined in the OEMP and the HMP. The method statements will be subject to approval by HMAG (for sites within the WHS) and WCAS (for sites outside the WHS). The method statement will ensure that sites / areas would be marked out, fenced and protected prior to construction. Measures will be put in place to avoid rutting or the compaction of soft ground unless adequate protection is provided (vehicles would be restricted or prohibited from traversing sensitive areas prior to fencing, the laying of a protective membrane and fill deposits / vehicle running surface, as appropriate).
- 1.2.8 The method statement(s) will set out a suitable methodology for filling areas without disturbing or impacting sensitive archaeological remains. Toolbox talks would be undertaken to inform construction supervision staff and site operatives of procedures within these areas.
- 1.2.9 An allowance for a minimum period of time to deal properly with any unexpected finds during the construction process will be agreed and recorded in the Construction Environmental Management Plan (CEMP) prepared by the Main Contractor for the construction stage.



# 2 Archaeological Mitigation Measures

#### 2.1 Proposed Recording Methods and Descriptions

2.1.1 The following archaeological mitigation actions are proposed; the application of these will be determined in consultation with HMAG (within the WHS) and WCAS (outside the WHS). Relevant descriptions of proposed mitigation actions are presented in Table 2.1 below.

**Table 2.1: Archaeological Mitigation Measures** 

Recording Method	Description
Detailed Excavation (preliminary works stage)	A programme of controlled, intrusive fieldwork with defined objectives which maps, examines, records and interprets archaeological remains at a site or within a specified area. The records made and the objects and samples gathered during the fieldwork are combined and studied (assessed and if appropriate analysed) and the results published in detail appropriate to the project design. Detailed Excavation, which may incorporate extensive sample excavation ('strip and record' or 'strip, map and sample'), trench mitigation or test pit mitigation (with soil sieving and artefact recovery), would be undertaken where significant archaeological remains are either known from assessment or evaluation works. Detailed excavation may be targeted at specific sites, areas of interest or a sample range of locations. The extent of the investigation and the excavation strategy for each detailed excavation area would be agreed in consultation with HMAG or WCAS, as appropriate.
Fieldwalking (Preliminary works stage)	A non-intrusive archaeological survey technique used to record the position and distribution of artefacts recovered from a rapid survey of the ploughed surface of a field(s). To be undertaken in areas where ther will be ground disturbance or areas of landscape fill, where conditions did not allow for this to take place prior to public examination.
Trial Trench Evaluation (Preliminary works stage)	In the few small areas where access has been denied prior to public examination - a targeted or sample-based mechanical or hand excavated trench based investigation to record the extent of archaeological remains identified through non-intrusive survey and to inform decision making on further mitigation recording that may be appropriate.
Archaeological Monitoring and Recording (construction stage)	A programme of observation, investigation and recording of archaeological remains undertaken in specific areas where the presence of or moderate potential for archaeological remains has been demonstrated or can be predicted, but where detailed investigation prior to the main construction programme is unfeasible due to safety or logistical considerations, or undesirable due to environmental or engineering constraints. The contractors preferred method of working would be controlled as necessary to allow archaeological recording to take place to the required standard.
Geo-archaeological investigation (preliminary and construction stages)	A programme of sample recovery and assessment / analysis undertaken to investigate palaeo-environmental conditions and soil sediment development that may be relevant to the research of archaeological sites or remains found within the vicinity. Achieved through trial pit excavations or other soil



Recording Method	Description
	sample retrieval methods (such as auger or boreholes).
Archaeological Topographic Survey (preliminary and construction stages)	An archaeological site survey undertaken to record the shape and topography of the ground surface and any relevant components. It would include both a drawn and written record, and depending upon the level of detail that is required it could also include a photographic record. Typically it would be applied to both archaeological remains and features that contribute to the historic landscape character.
Archaeological Photographic Recording (preliminary works stage)	A photographic record combined with a written description of a heritage asset that records its current condition, character and type. Depending upon the level of detail required the photographs may also record views to and from the asset so that there is a record of its setting.
Preservation in situ	An area of development that has been excluded to conserve archaeological remains, thereby preserving it for later generations. Measures for preservation <i>in situ</i> would include protective fencing, burying / sealing remains beneath fill material to ensure that they are not disturbed (including use of a protective barrier membrane between the existing ground surface and the fill, and control measures for plant movements at construction).

- 2.1.2 Following completion of archaeological recording work on site, a programme of post-excavation assessment, analysis and reporting would be undertaken, including publication of the results and deposition of the archive in an approved local museum.
- 2.1.3 The scope and relevant methods applicable to the above mitigation measures are outlined in more detail in section 3 below.

#### 2.2 Proposed Archaeological Mitigation Areas

2.2.1 The location and extent of all areas proposed for archaeological mitigation will be determined in consultation with HMAG (within the WHS) and WCAS (outside the WHS). Areas proposed for archaeological mitigation, based on the baseline assessment and archaeological evaluation results, are identified in Table 2.2 (proposed archaeological preservation *in situ* areas), Table 2.3 (proposed archaeological investigation areas) below, and the proposed areas are illustrated on Figure 1. A definitive final list of sites for archaeological mitigation will be agreed with HMAG (within the WHS) and WCAS (outside the WHS) and the area and methods refined, following completion of the archaeological evaluation programme.



Table 2.2: Proposed archaeological preservation *in situ* sites / action areas

Site / Action Area no.	Section	Site / asset name	UID / NHLE or WSHER ref Designation	Mitigation
1	1	Milestone on track, south of A303, close to Yarnbury Camp.	UID 6001 / NHLE 1005621 Scheduled Monument	Archaeological Photographic Recording; and protective fencing that incorporates a 10m buffer around the scheduled area.
2	1, 2	Fields systems east of Yarnbury Camp which are located either side of the A303; and an undated oval enclosure.	UID 1004.01 - MWI6094, MWI6232, MWI6930, MWI6943, MWI6994, MWI6996, MWI6997, MWI7001, MWI7095, MWI7112, MWI7130, MWI7235, MWI7267 UID 1006 - MWI7223, MWI7261	No dig solution for the construction of restricted byway and a PMA between Scotland Lodge and Yarnbury Camp, where feasible.
6	2	Area of field systems and dispersed features adjacent to Bronze Age barrows (see 7 below) (land required for landscape and biodiversity mitigation)	UID 1004.01 - MWI6094, MWI6232, MWI6930, MWI6943, MWI6994, MWI6996, MWI6997, MWI7001, MWI7095, MWI7112, MWI7130, MWI7235, MWI7267	No-dig solution for PMA, bat mitigation bund and other landscaping, where feasible
7	2	Non-designated barrows east of Scotland Lodge Iron Age site	UID 2035.01 / MWI6396 UID 2035.02 / MWI7206	Protective fencing that incorporates a 10m buffer around the barrows.
8	2	Three non-designated barrows dispersed across a hill slope in an area required for soil storage (Parsonage Down excavated material deposition area).	2030.01 / MWI7134 2030.02 / MWI7200 2030.03 / MWI7160	Protective fencing that incorporates a 10m buffer around the barrows.
9	2	Possible settlement associated with an Iron Age / Romano-British enclosure that contains internal features (Parsonage Down excavated material deposition area).	UID 1004.01 / MWI7130 UID 2039 / MWI7098	Protective fencing that incorporates a 10m buffer around the enclosure.
10	2	Dispersed unenclosed settlement of possible Bronze Age date located on slightly higher ground overlooking dry valley to the southwest in an area required for soil storage (Parsonage Down excavated material).	UID 2036 / MWI74874 UID 2038 / MWI74875).	Preservation <i>in situ</i> in excavated material deposition area, where feasible.



Site / Action Area no.	Section	Site / asset name	UID / NHLE or WSHER ref Designation	Mitigation
11	2	Linear boundary, extensive field systems, enclosures and possible trackways of possible Iron Age / Romano-British date in an area required for soil storage (Parsonage Down excavated material)	UID 1005 / MWI7159, MWI7245, MWI7262; UID 1004.01 - MWI6094, MWI6232, MWI6930, MWI6943, MWI6994, MWI6996, MWI6997, MWI7001, MWI7095, MWI7112, MWI7130, MWI7235, MWI7267	Preservation <i>in situ</i> in excavated material deposition area, where feasible.
14	2	Non-designated barrows on the top of Winterbourne Stoke Hill.	UID 2054.01 / MWI7208 UID 2054.02 / MWI7209 UID 2054.03 / MWI7207	Protective fencing that incorporates a 10m buffer around the barrows. If subject to landscaping, appropriate protection using protective barrier membrane, suitable fill and vehicle control measures.
17	2	Non-designated barrows in two areas north of the A303 and west of the A360: barrow within Winterbourne Stoke Compound Areas and barrow just to the east of the A360 north link road and south east of the A360.	UID 2077 / MWI6402 UID 2148 / MWI75991 UID 2151 / MWI6403	Protective fencing that incorporates a 10m buffer around the barrows.
18	2	Barrow and enclosure west of current Longbarrow roundabout; barrow southwest of current Longbarrow roundabout.	UID 2001 / NHLE 1011048 UID 2002 / NHLE 1011045 Scheduled Monuments	Protective fencing that incorporates a 10m buffer around the scheduled area.
20	2	Bronze Age land boundary (Wessex Linear) crossing Winterbourne Stoke Compound Area.	UID 2014.02 / MWI6406 (land boundary) UID 2076 & 2078 / MWI7201 (settlement evidence)	Appropriate protection using protective barrier membrane, suitable fill and vehicle control measures.
21	2	Bronze Age land boundary (Wessex Linear) – western approaches.	UID 2014.01 NHLE 1010837 Scheduled Monument	Archaeological Photographic Recording; and protective fencing, that incorporates a 10m buffer, where feasible, around the scheduled area
22	2	Milestone along A360.	UID 6027 NHLE 1130972 Scheduled Monument	Archaeological Photographic Recording; and protective fencing that incorporates a 10m buffer around the listed milestone.



Site / Action Area no.	Section	Site / asset name	UID / NHLE or WSHER ref Designation	Mitigation
23	2, 3	Barrow (Wilsford G1) and other scheduled monuments under or close to the line of the tunnel including the Avenue.	UID 2018 / NHLE 1010832 UID 3001 / NHLE 1008953 UID 3014 / NHLE 1008947 UID 3018 / NHLE 1012420 UID 3010.01 / NHLE 1010140 UID 3010.02 / NHLE 1010140 UID 3010.03 / NHLE 1010140 UID 3012 / NHLE 1012372 UID 3017 / NHLE 1012381 UID 3020 / NHLE 1012129 Scheduled Monuments	Protective fencing that incorporates a 10m buffer around the scheduled areas, where appropriate.



Site / Action Area no.	Section	Site / asset name	UID / NHLE or WSHER ref Designation	Mitigation
27	2, 3, 4	Barrows that are scheduled and milestones that are listed, along sections of the A303, A360 and Stonehenge Road which will be converted into green lanes. Non-designated 1918 military stone marker (military 1918 stone RFC/RAF Stonehenge Airfield Marker "A.M. No.1")	UID 2003 / NHLE 1011047 UID 2004 / NHLE 1011842 UID 2006 / NHLE 1011841 UID 3002 / NHLE 1012369 UID 3010.01 / NHLE 1010140 UID 3014 / NHLE 1008947 UID 3018 / NHLE 1012420 UID 3020 / NHLE 1012129 UID 3022 / NHLE 1012131 UID 4009 / NHLE 1009142 UID 4010 / NHLE 1012128 Scheduled Monuments UID 6027 / NHLE 1130972 UID 6031 / NHLE 1130999 UID 6040 / NHLE 1131085 UID 6042 / NHLE 1131071 Listed milestones Non-designated small hengiform enclosure just south of the A303 and east of the A360 at NGR SU104414)	Archaeological Photographic Recording; and protective fencing that incorporates a 10m buffer around the scheduled area, where appropriate.
31	4	Countess East compound area multi-period occupation (Neolithic, Iron Age, Roman, Saxon).	UID 4040 / MWI11909 UID 4041 / MWI11896 UID 4039.01 / MWI12036 UID 4039.02 / MWI12036 UID 4039.03 / MWI12036 UID 4039.04 / MWI12036 UID 4039.05 / MWI12037 UID 4042.01 / MWI12030	Protective fencing that incorporates a 10m buffer around the archaeological remains within the compound area. Appropriate protection using protective barrier membrane, suitable fill and vehicle control measures.



Site / Action Area no.	Section	Site / asset name	UID / NHLE or WSHER ref Designation	Mitigation
32	4	Barrows east of Solstice Park.	UID 4059 / NHLE 1009566 UID 4060 / NHLE 1009872 UID 4063 / NHLE 1009871 Scheduled monuments	Archaeological Photographic Recording; and protective fencing that incorporates a 10m buffer around the scheduled area.
34	5	Listed milestone at Rollestone Corner	UID 6122 / NHLE 1284782 Listed building	Archaeological Photographic Recording; and protective fencing that incorporates a 10m buffer around the listed milestone, where feasible.
36	2	Area of archaeological interest north from A360 North Link Road to Stonehenge visitor centre within the WHS for NMU route.	No UID	Protective fencing. Appropriate protection using protective barrier membrane, suitable fill and vehicle control measures.
37	2	Area of archaeological interest south from A360 South Link Road to Druids Lodge within the WHS for NMU route.	No UID	Protective fencing. Appropriate protection using protective barrier membrane, suitable fill and vehicle control measures.
		Listed Mileston, A360, Devizes Road	NHLE 1318705	Archaeological Photographic Recording; and protective fencing that incorporates a 10m buffer around the listed milestone, where feasible.



 Table 2.3: Proposed archaeological fieldwork areas

Site / Action Area no.	Section	Site / asset name and Description	UID (NHLE / WSHER ref) Designation	Mitigation
2	1, 2	Fields systems east of Yarnbury Camp which are located either side of the A303; and an undated oval enclosure.	UID 1004.01 / MWI6094, MWI6232, MWI6930, MWI6943, MWI6994, MWI6996, MWI6997, MWI7001, MWI7095, MWI7112, MWI7130, MWI7235, MWI7267, MWI7223, MWI7261 (field systems)	Detailed excavation where no dig solution is not feasible.
3	2	Possible ring ditch on mainline, west of Scotland Lodge (found by geophysics, subsequent trial trench did not locate it.	UID 2025 / MWI74873	Detailed excavation.
4	2	Enclosures, field systems and isolated burials (Iron Age) north-west and north of Scotland Lodge. Iron Age settlement on the Scheme mainline.	UID 1004.01 / MWI6094, MWI6232, MWI6930, MWI6943, MWI6994, MWI6996, MWI6997, MWI7001, MWI7095, MWI7112, MWI7130 MWI7235, MWI7267 (field systems) UID 2027 / MWI6935 (burial) UID 2029 / MWI6948, MWI7133 (field systems – enclosures)	Detailed excavation.
5	2	Northern edge of Iron Age settlement at Scotland Lodge impacted by Scheme mainline.	UID 1004.01 / MWI6943 UID 2033 / MWI6959	Detailed excavation.
6	2	Area of field systems and dispersed features adjacent to Bronze Age barrows (land required for landscape and biodiversity mitigation).	UID 1004.01 / MWI6094, MWI6232, MWI6930, MWI6943, MWI6994, MWI6996, MWI6997, MWI7001, MWI7095, MWI7112, MWI7130, MWI7235, MWI7267 (field systems)	Detailed excavation where no dig solution is not feasible.
10	2	Dispersed unenclosed settlement of possible Bronze Age date located on slightly higher ground overlooking dry valley to the southwest in an area required for soil storage (Parsonage Down excavated material).	UID 2036 / MWI74874 (oval enclosure) UID 2038 / MWI74875 (pits)	Detailed excavation where preservation in situ not feasible beneath deeper areas of excavated material deposition (greater than 2m in thickness).



Site / Action Area no.	Section	Site / asset name and Description	UID (NHLE / WSHER ref) Designation	Mitigation
11	2	Linear boundary, extensive field systems, enclosures and possible trackways of possible Iron Age / Romano-British date in an area required for soil storage (Parsonage Down excavated material).	UID 1005 / MWI7159, MWI7245, MWI7262 (linear boundary) UID 1004.01 / MWI6094, MWI6232, MWI6930, MWI6943, MWI6994, MWI6996, MWI6997, MWI7001, MWI7095, MWI7112, MWI7130, MWI7235, MWI7267 (field systems)	Detailed excavation where preservation in situ not feasible beneath deeper areas of excavated material deposition (greater than 2m in thickness).
12	2	Possible area of undated lynchets and field systems at Parsonage Down.	UID 1004.01 / MWI6094, MWI6232, MWI6930, MWI6943, MWI6994, MWI6996, MWI6997, MWI7001, MWI7095, MWI7112, MWI7130, MWI7235, MWI7267 (field systems)	Detailed excavation (under mainline and highway embankments), but avoiding oil pipeline.
13	2	Iron Age / Romano-British pits, ditches and undated ring ditches (not located by recent geophysical survey or previous trial trenching) on the west bank of the River Till. Water meadows of possible medieval or postmedieval date on the west and east banks of the River Till Valley. Geoarchaeological / Palaeo-environmental deposits.	UID 2050 / MWI6987	Combination of detailed excavation, geoarchaeological assessment, and archaeological topographic survey.
15	2	Field systems and enclosures, including possible Iron Age lynchets, and a buried soil horizon and colluvium within a dry valley.	UID 2053 / MWI7009, MWI7111 (field system) UID 2056 / MWI73338 (field system) UID 2048 / MWI7009, MWI73341, MWI73343 (land boundary) UID 2068 / MWI6407, MWI12690 (land boundary) UID 2052 / MWI74877 (ridge and furrow)	Combination of detailed excavation and geoarchaeological assessment of buried soil and colluvial deposits along dry valley.



Site / Action Area no.	Section	Site / asset name and Description	UID (NHLE / WSHER ref) Designation	Mitigation
16	2	Longbarrow Junction (south), mainline to the A360 and the realigned A360 south - C-shaped enclosure at Longbarrow Junction (southern dumbbell), scattered pits, Wessex linear and two sides of a possible enclosure.	UID 2072 / MWI720 (enclosure) UID 2068 / MWI6407, MWI12690 (land boundaries) UID 2073 & UID 2078 / MWI7125 (land boundary) UID 2074 / MWI6945 (field systems) UID 2089 / MWI7003, MWI7094, MWI12625, MWI13128, MWI13155 (field systems) UID 2081 / MWI6991 (field systems) UID 2075 / MWI6946 (pits)	Detailed excavation of C-shaped enclosure and associated remains; detailed excavation of the mainline to the east of the C-shaped enclosure and the realigned A360 south, where scattered pits, a Wessex linear and two sides of a possible enclosure have been located by trial trenching.
19	2	Realigned A360 north - isolated burials, flint scatter, scattered pits, ditches and post holes, Wessex linears and a geological sinkhole.	UID 2014.02 / MWI6406 (land boundary) UID 2073 & UID 2078 / MWI7125 (settlement evidence) UID 2076 & UID 2078 / MWI7201 (settlement evidence) UID 2078 / MWI6405 (settlement evidence)	Combination of detailed excavation and geoarchaeological assessment.



Site / Action Area no.	Section	Site / asset name and Description	UID (NHLE / WSHER ref) Designation	Mitigation
24	2	Main line A360 to Western Portal – flint scatters, occasional scattered pits and post holes, dry valley and a geological sinkhole.	UID 2001 / MWI6924, MWI7128, MWI7198 (Bronze Age settlement) UID 2088 / MWI12541 (pits) UID 2089 / MWI7003, MWI7094, MWI12625, MWI13128, MWI13155 (field system) UID 2098 / MWI13149 (linear features) UID 2018 / MWI12542, MWI13002 (flat graves associated with Wilsford G1 barrow) UID 2089 / MWI7003, MWI7094, MWI12625, MWI13128, MWI13155 (military railway)	Combination of detailed excavation and geoarchaeological assessment.
26	2, 3	Movement monitoring points for the tunnel section.	No UID	Detailed excavation of small areas for each monitoring position including ploughsoil artefact sampling with micro-siting of the equipment to avoid archaeological remains. (Carried out prior to the installation of the equipment).
28	4	Buried soil horizon and double ditch, undated ditch, flint scatters, in situ flint knapping in stony hollow.	No UID	Combination of detailed excavation and geoarchaeological assessment.
29	4	Mesolithic site at Countess Farm West – Mesolithic material located within a buried soil horizon and colluvial deposits.	UID 4036 / MWI11874	Combination of detailed excavation and geoarchaeological assessment.
30	4	Channel cleaning of existing highway drainage ditches.	No UID	Combination of detailed excavation and geoarchaeological assessment.
33	4	Area of archaeological interest east of Solstice Park (west of a group of scheduled barrows).	No UID	Detailed excavation.



Site / Action Area no.	Section	Site / asset name and Description	UID (NHLE / WSHER ref) Designation	Mitigation
35	5	Rollestone Corner - occasional tree throws that contained material that could broadly be of Neolithic date.	No UID	Detailed excavation.



#### 3 Outline Method Statements

#### 3.1 Detailed Archaeological Excavation

- 3.1.1 Sites or areas designated for detailed excavation (including extensive sample excavation) will be stripped with mechanical plant as set out in the approved DAMS and OWSI and the SSWSI, unless certain specific areas require further targeted test-pit mitigation to recover artefacts from the topsoil. If the latter is the case the methods to be used will be specified in the appropriate SSWSI. For areas where machine stripping is required, this means the stripping of topsoil, subsoil or other overburden to the correct archaeological level under the supervision of a qualified archaeologist, using back-acting mechanical plant fitted with a toothless bucket, in such a manner as to cleanly expose the archaeological horizon. Dump trucks and other plant will not be permitted to track over stripped areas until archaeological investigations are complete and the archaeological site or area signed-off.
- 3.1.2 Sites or areas opened for detailed excavation and/ or Archaeological Monitoring and Recording will be subject to archaeological survey, resulting in a digital pre-excavation plan. In accordance with the research objectives as identified in the approved SSWSI, the archaeological site or area would then be subject to the sample excavation of key features designed to recover artefactual dating evidence, and selected feature complexes would be subject to further excavation designed to resolve stratigraphic relationships.
- 3.1.3 The works would also include sampling of archaeological features for charred plant remains, molluscs, pollen and other palaeo-environmental and palaeo-economic indicators, where suitable preservation conditions exist in combination with archaeological deposits. Artefact and environmental assessments would be carried out during the course of the works, and selected key features may be subject to more detailed excavation and sample recovery, to address the research objectives of the archaeological programme.
- 3.1.4 The proportion of features excavated would be determined by the importance of the features and the requirements of the research objectives. The iterative process outlined allows the approach to excavation sampling to be closely targeted to address specific questions, rather than being tied to a predetermined excavation strategy.
- 3.1.5 The research objectives and excavation strategy will be kept under review. It is critical for the success of this approach that the majority of data, artefact and environmental sample processing would be undertaken whilst the investigation proceeds (including artefact spot-dating and preliminary assessment of environmental samples). Decisions on further investigation in a given area would be made as soon as sufficient information becomes available.
- 3.1.6 A Scheme-wide programme of radiocarbon dating will be undertaken on samples from suitably secure contexts, in order to place the main historical processes that have affected landscape development within an absolute chronological framework.



- 3.1.7 Palaeo-environmental samples will be recovered where suitable deposits are present, in particular from waterlogged sequences or deposits sealed in a primary context, to assist with regional palaeo-environmental reconstruction.
- 3.1.8 Geoarchaeological investigations will focus on areas of particular interest as identified through previous and current archaeological evaluations and be specifically designed to address particular research questions.

#### 3.2 Fieldwalking

- 3.2.1 Surface artefact collection by fieldwalking may be employed, where land has not been previously sampled as conditions were not suitable, i.e. ploughed, rolled and weathered, with minimal crop growth such that more than 50% of the field surface is visible. A scalable strategy based on gridded collection is proposed, based on advice from the Scientific Committee. This will be centred around total collection of all artefactual material visible on the surface within 5m x 5m square units (25m²), initially spaced at 20m intervals, giving a 6.25% sample of the total area. Where judgements are later made in the field to reduce the collection interval (following consultation and agreement with HMAG/WCAS), informed by particular concentrations or distinctive assesmblages of material, additional squares can reduce the interval to every 10m (giving a 25% sample), or further still to every 5m or a lower distance interval.
- 3.2.2 It is recognised that surface artefact collection remains contingent on timing and results can be affected by variables of ground, weather and light conditions. The potential for preparation of agricultural land for effective collection is necessarily limited by landowner agreement prior to taking possession of or acquisition of the land.

#### 3.3 Topographic survey

3.3.1 Topographic survey will be used to record earthwork features that are visible within the Scheme footprint and that would be destroyed as a result of construction activity. Various survey techniques will be deployed on a site-by-site basis to record these earthworks which would be described in each SSWSI and may be combined with other mitigation measures such as photographic recording.

#### 3.4 Archaeological Photographic Recording

3.4.1 Archaeological photographic recording will be used to record the current condition of heritage assets that have been selected for preservation *in situ*, prior to the installation of any protective fencing. The level of photographic recording would be described in each SSWSI.

#### 3.5 Trial Trench Evaluation

3.5.1 Archaeological trial trench evaluation will be undertaken as per the methods set out in the Archaeological Evaluation Strategy Report (AESR) (AMW 2018a), its accompanying Outline Written Scheme of Investigation (OWSI) (AMW 2018b) and the appropriate Stite Specific Written Scheme of Investigation (SSWSI) for



the scheme, in the few small areas within the red line boundary where land access has been denied prior to public examination.

#### 3.6 Preservation *in situ*

3.6.1 Heritage assets and archaeological sites will be protected by a combination of protection measures that will be put in place at the start of the construction programme to ensure their long-term survival. Relevant protection measures would include temporary protective fencing which will be maintained throughout the preliminary works and construction stages (incorporating an additional 10m buffer area for specific identified designated and non-designated assets), and at some locations the use of a combination of appropriate protective barrier membrane, suitable fill material to bury archaeological remains and vehicle / plant control measures. For each site or heritage asset, protection measures will be described in a site specific method statement.

## 4 Phasing of Archaeological Mitigation Programme

#### 4.1 Preliminary Works

- 4.1.1 The archaeological mitigation programme (recording works for archaeology) would commence as part of the preliminary works and in advance of the start of the main construction works.
- 4.1.2 The exact timing of the mitigation programme is dependent upon land access requirements under the DCO, prevailing ground conditions and related utility diversions. Mitigation works would be generally programmed as follows:
- 4.1.3 Phase 1: topographic surveys, small-scale investigation of historic landscape features and minor archaeological sites and geoarchaeology investigations. Archaeological mitigation would be carried out during advanced works contracts such as installation of highway boundary, utility diversions, ecology works and woodland clearance at certain locations. Archaeological mitigation at selected sites to facilitate the installation of protective fencing would be carried out.
- 4.1.4 Phase 2: Detailed Excavation would be undertaken during the preliminary works stage (and prior to construction), at archaeological sites and areas requiring preservation by record. Detailed design works for additional sites that require preservation *in situ* would be developed and implemented during the preliminary works stage, if appropriate, and maintained throughout the preliminary and construction works.

#### 4.2 Construction Works

4.2.1 Phase 3: Monitoring works would be undertaken to ensure the preservation *in situ* of archaeological assets in accordance with the method statements (including sites to be fenced and protected, areas to be preserved under excavated material and landscape fill areas, areas to be protected by no-dig solutions for haul roads, temporary roads required for traffic management, NMU and PMA routes and compound areas).



- 4.2.2 Archaeological evaluation and mitigation fieldwork will be designed and implemented in compound areas where a no-dig solution is not possible or appropriate (for example areas required for concrete batching plants or excavated material processing plants), with appropriate micro-siting to avoid archaeological remains, where feasible.
- 4.2.3 Archaeological mitigation fieldwork would be undertaken in advance of the installation of tunnel movement monitoring stations above the section of the scheme that is in tunnel, where this has not been possible during the preliminary works stage.

# 4.3 Post-Excavation Assessment, Analysis, Reporting and Dissemination

- 4.3.1 A post-excavation assessment, in accordance with DMRB and Historic England guidelines, followed by an appropriate scheme of detailed analysis and reporting would be undertaken. It will commence as soon as the archaeological mitigation fieldwork has been completed.
- 4.3.2 The post-excavation works are likely to result in both a popular publication(s) and an academic monograph or academic papers presented in an appropriate geographic or topic specific academic journal (which will either be available in hard copy or online).
- 4.3.3 The results of the archaeological fieldwork will be disseminated, by various means, to as wide an audience as possible (local, regional, national, international), given the importance of the WHS.
- 4.3.4 The Project archive would be deposited at a local museum for long-term storage and the archive would be made publicly accessible with the museum's agreement. Digital data and digital finds information would also be conserved on a local and/or national web-based server.
- 4.3.5 Opportunities for public archaeology would be arranged to view work in progress and to highlight the heritage-led aspects of the scheme, providing a 'behind-the-scenes' insight and showcasing archaeological discoveries arising from the investigations made, where safe to do so.
- 4.3.6 Media relations would be maintained throughout the scheme and relevant details provided to media outlets, to inform local communities, the wider general public and the academic community.
- 4.3.7 Opportunities to enhance public appreciation of the findings and an understanding of the scheme would be developed during the course of the investigations and could involve, for example, providing interpretation panels and displays of finds at selected venues.



#### **Abbreviations List**

AMS Archaeological Mitigation Strategy

OWSI Overarching Written Scheme of Investigation

SSWSI Site Specific Written Scheme(s) of Investigation

WHS World Heritage Site

HMAG Historic Monitoring Advisory Group

WCAS Wiltshire Council Archaeology Service

FAD Further Archaeological Design

CEMP Construction Environmental Management Plan

TWB Targeted watching brief
GWB General watching brief

#### References

AmW 2018a, Archaeological Evaluation Strategy Report (AESR) (HE551506-AMW-EHR-SW\_GN\_000\_Z-MS-0001)

AmW 2018b, An Overarching Written Scheme of Investigation (OWSI) (HE551506-AMW-EHR-SW\_GN\_000\_Z-SP-LH-001)

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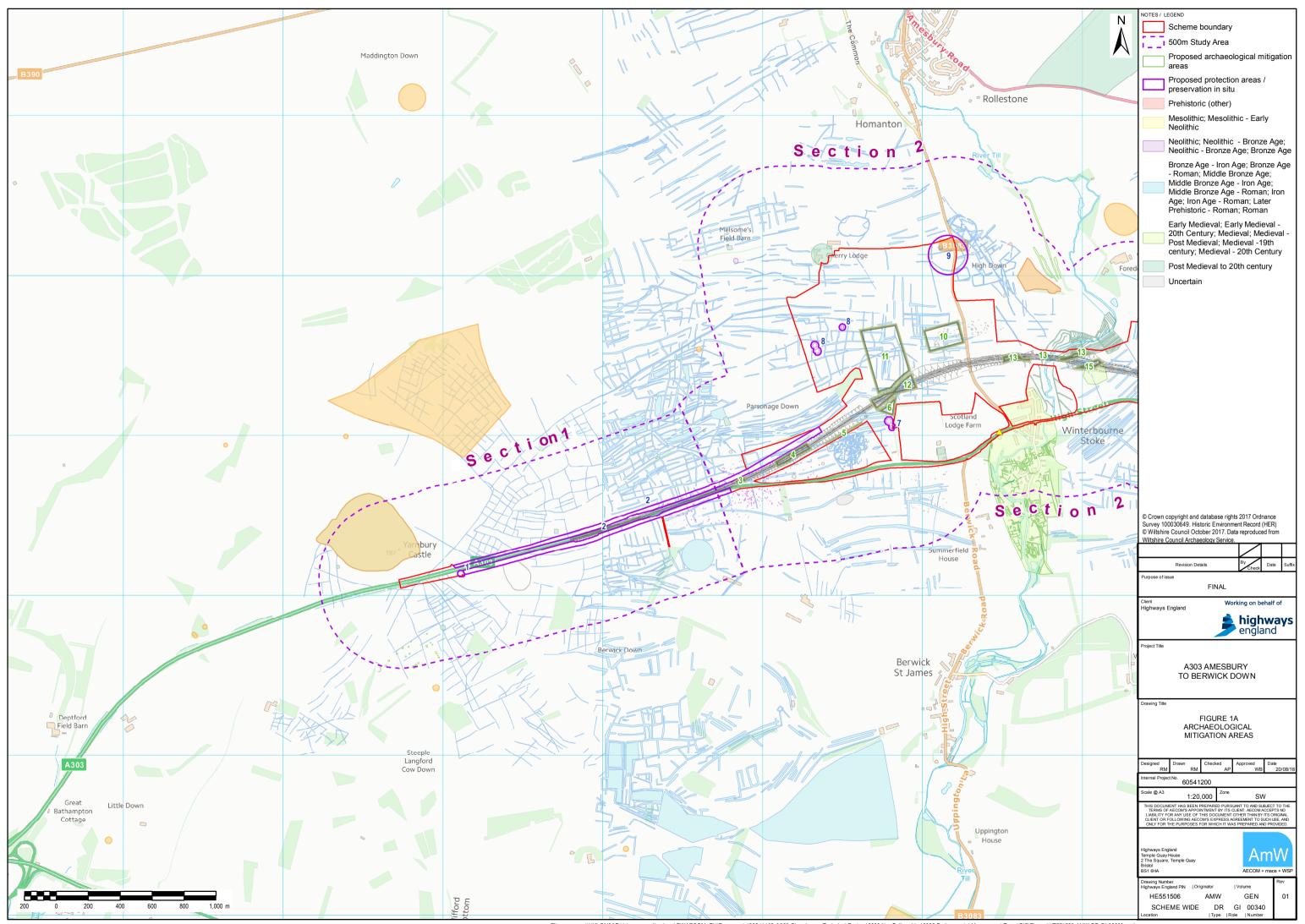
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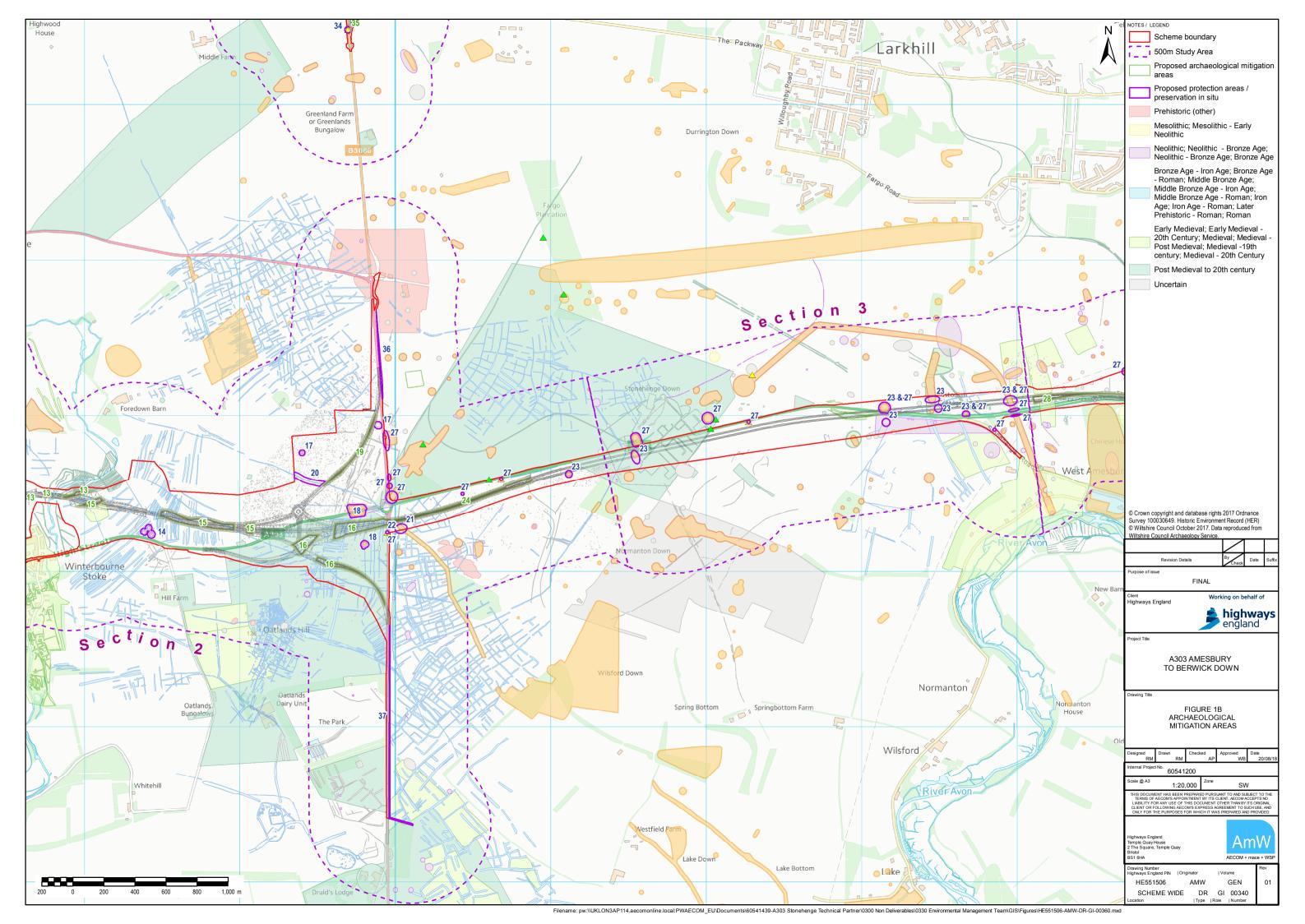
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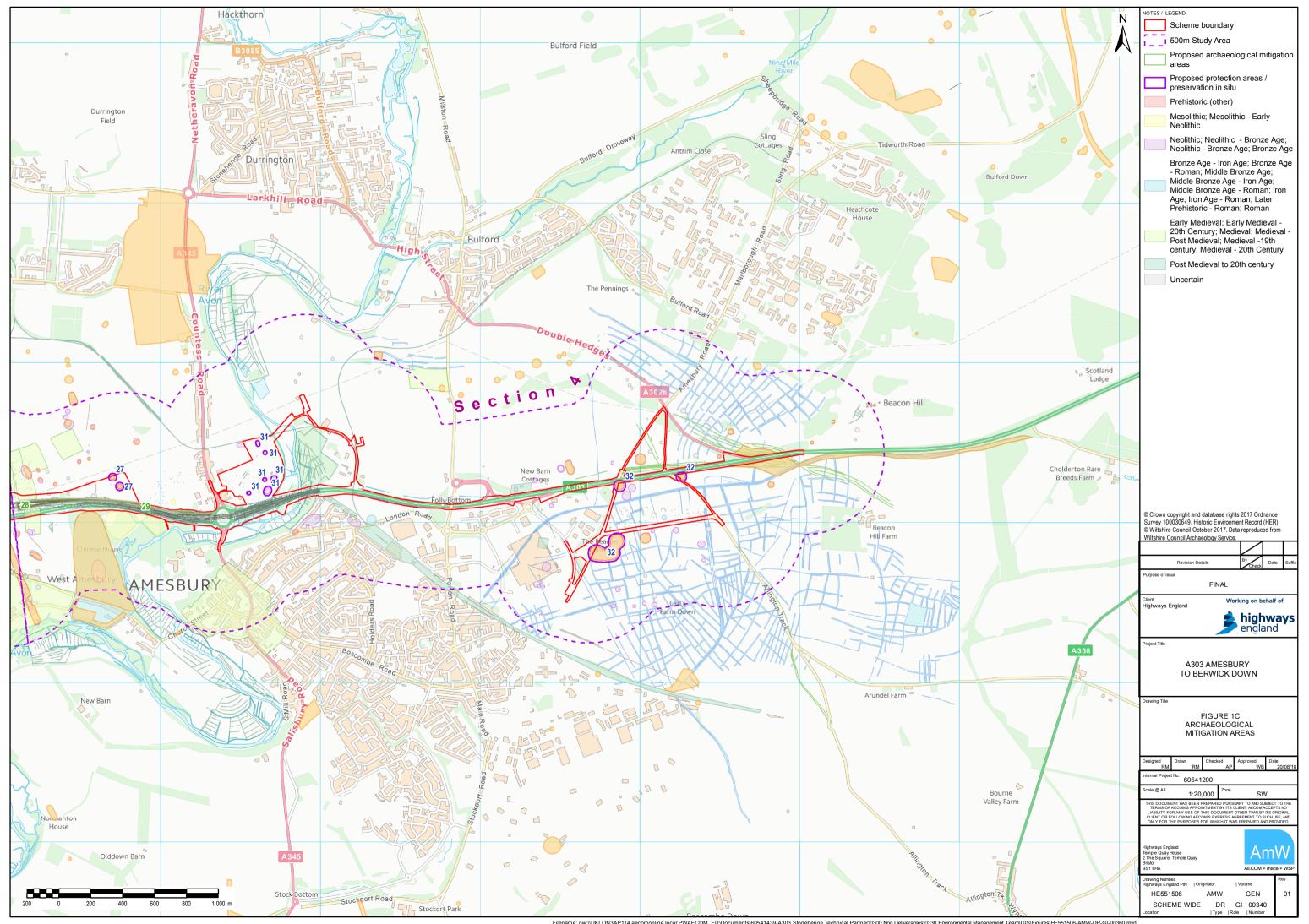
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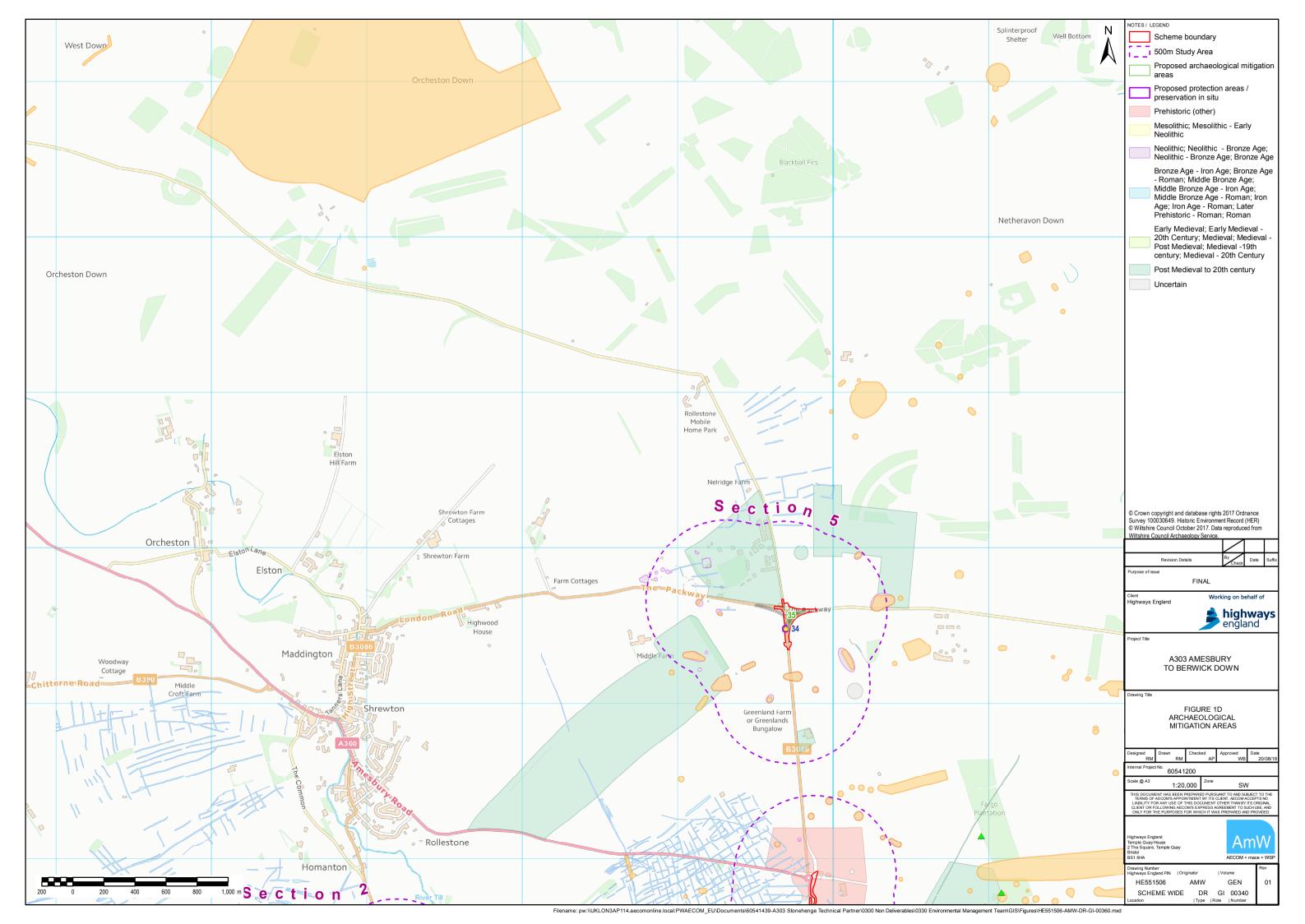


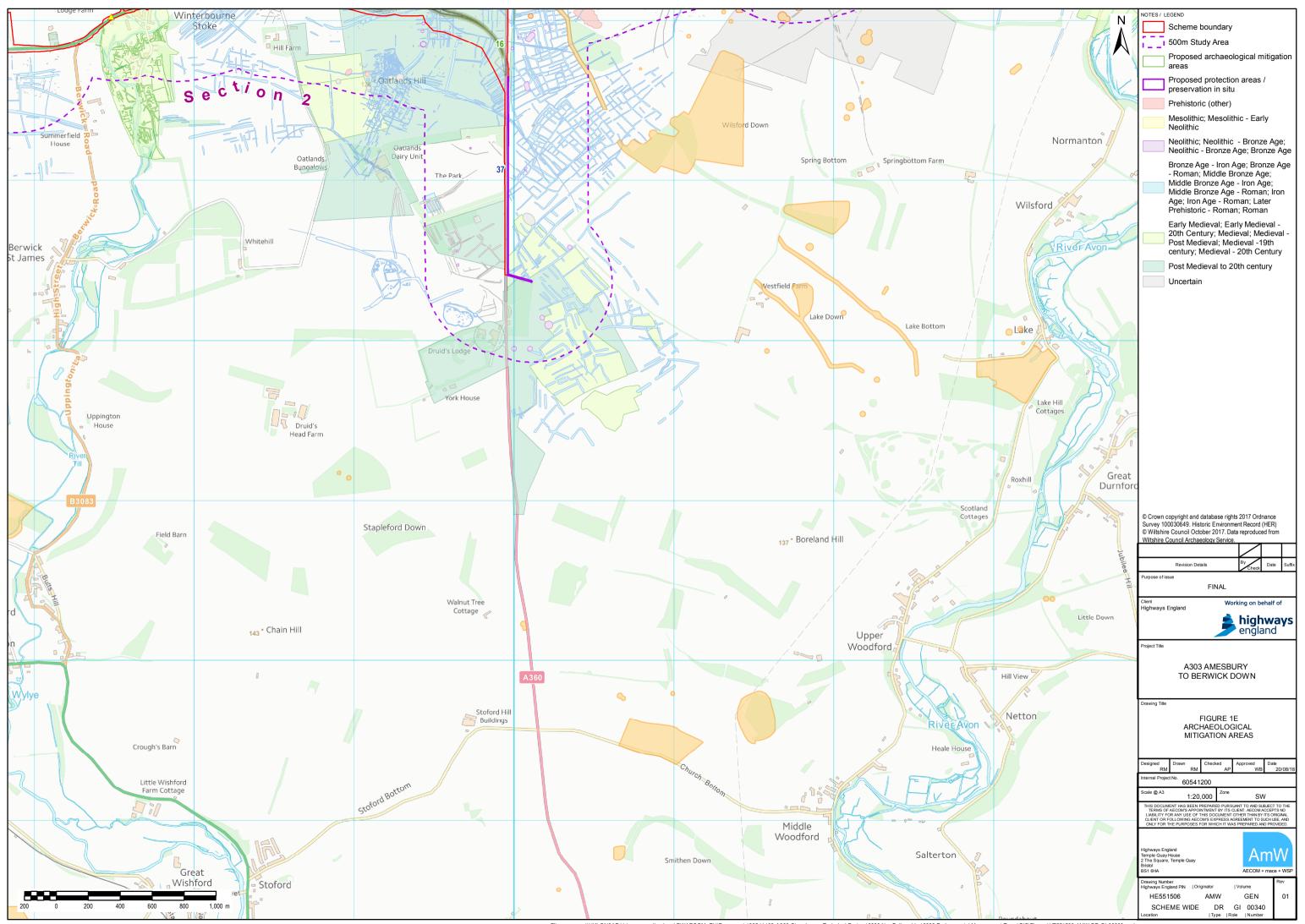
# **Figures**











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