

Rampion 2 Wind Farm

Category 7: Other Documents

Outline Onshore Written Scheme of Investigation (tracked)

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Executive Summary

This Outline Onshore Written Scheme of Investigation (Document reference 7.9) has been prepared to manage impacts to archaeological remains during construction of the onshore elements of the Proposed Development. This is part of a suite of plans supporting onshore construction works for Rampion 2.

The Outline Onshore Written Scheme of Investigation (Document reference 7.9) has been developed following collation of relevant baseline data, geophysical survey and targeted archaeological evaluation reported in the **Chapter 25: Historic environment, Volume 2** of the ES (Document Reference 6.2.25). This process has identified the embedded environmental measures secured within these documents.

This Outline WSI includes information on the standards and guidance for archaeological work and proposed fieldwork methodology. It also sets out procedures for the discovery of statutorily designated remains and reporting and monitoring requirements.

Site Specific WSIs will be produced with the appointed Contractor(s) following the grant of the Development Consent Order (DCO) and prior to the relevant stage of construction. This will be produced in accordance with this Outline WSI for approval of the local authority, prior to the commencement of that stage of works. [Where specific commitments are listed in this document, the relevant stage specific plan shall include detail on how that commitment is delivered where it is applicable to that stage of works.](#)

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1. Introduction

- 1.1.1 Rampion Extension Development Limited (hereafter referred to as 'RED') propose to develop Rampion 2 Project Offshore Wind Farm ('Rampion 2' or the 'Proposed Development') located adjacent to the existing Rampion Offshore Wind Farm located in the English Channel in the south of England.

1.2 Purpose

- 1.2.1 This **Outline Onshore Written Scheme of Investigation** (WSI) (Document Reference: 7.9) sets out the overarching measures that will be taken in response to the disturbance of archaeological remains resulting from work carried out within the onshore part of the proposed DCO Order Limits (illustrated in **Figure 1: Proposed DCO Order Limits and Landscape Zones**). For the offshore part of the proposed DCO Order Limits seaward of Mean High Water Springs (MHWS), please refer to **Outline Marine Written Scheme of Investigation** (Document Reference 7.13).
- 1.2.2 The Outline Onshore WSI applies to the onshore construction works for the Proposed Development where any intrusive groundworks are required, including topsoil stripping and sub-soil disturbance. Intrusive groundworks are anticipated as part of the following:
- onshore cable corridor construction including open cut, trenchless construction and the installation of the permanent at or above ground infrastructure including drainage mitigation features, joint bays (including the transition joint bay), link boxes and fibre-optic joint bays;
 - onshore substation construction at Oakendene, including the permanent access, drainage and landscaping;
 - existing National Grid Bolney substation extension works;
 - temporary compounds; and
 - construction accesses.
- 1.2.3 This document sets out the overarching archaeological mitigation strategy that will be followed before and during construction of the onshore elements of the Rampion 2 Project Offshore Wind Farm. It describes how RED will secure implementation of the following environmental measures:
- C-79 [Archaeological-Where archaeological](#) and paleoenvironmental mitigation [involves preservation by record, this](#) will entail an agreed programme of archaeological recording and dissemination to mitigate any significant adverse effects during construction. Provision will be made for appropriate curation/deposit ion of the site archive.
 - C-80 Any loss of built heritage assets or historic landscape elements will be mitigated through an [appropriate-proportionate](#) level of survey and recording and dissemination, where avoidance or sensitive adaptation is not feasible.

- C-225 Where previously unknown archaeological remains which are demonstrably of national heritage significance are identified within the onshore Order limits, engineering and design solutions (e.g. narrowing of the construction corridor, divert cable route within DCO Order Limits, re-siting stockpiles, trenchless crossings) will be employed, subject to agreement by the relevant planning authority in consultation with WSCC. In the event that archaeological remains of national significance are deemed not suitable for preservation in situ on archaeological grounds, or necessary consent is not granted, an appropriate programme of mitigation will be undertaken to ensure preservation by record.

In the event of the discovery of archaeological remains of high heritage significance which are not suitable for preservation in situ on archaeological grounds, or cannot be avoided due to technical constraints, an appropriate programme of mitigation will be undertaken to ensure preservation by record in accordance with onshore outline WSI-

All measures for mitigation and preservation in situ will be reviewed in consultation with relevant stakeholders (WSCC Archaeologist, local planning authority and Historic England). An onshore outline WSI provides detail of appropriate methodologies to be implemented during the evaluation and mitigation stages of the archaeological works. Where previously unknown archaeological remains of high heritage significance are identified through surveys along the cable route, and where these locations have not been possible to avoid during earlier design stage, consideration will be made for engineering and design solutions (e.g. narrowing of the construction corridor, divert cable route within DCO Order Limits, re-siting stockpiles,) to avoid impacts in the first instance.

Where previously unknown archaeological remains which are demonstrably of equivalent significance to Scheduled Monuments of high heritage significance are identified through surveys along the cable route, and where these locations have not been possible to avoid during earlier design stage, engineering and design solutions (e.g. narrowing of the construction corridor, divert cable route within DCO Order Limits, re-siting stockpiles, trenchless crossings) will be employed to avoid impacts unless such required avoidance measures are not consented by the local authority.

In the event of the discovery of archaeological remains of high heritage significance which are not suitable for preservation in situ on archaeological grounds, or cannot be avoided due to technical or consenting constraints, an appropriate programme of mitigation will be undertaken to ensure preservation by record. Such measures will be reviewed in consultation with relevant stakeholders (WSCC Archaeologist, local planning authority and Historic England). An onshore outline WSI provides detail of appropriate methodologies to be implemented during the evaluation and mitigation stages of the archaeological works. Where impacts are not avoidable, these will be minimised where possible through design solutions and an appropriate programme of mitigation will be undertaken to ensure preservation by record. Such measures will be reviewed in consultation with relevant stakeholders (local planning authority and Historic England). An Onshore Outline WSI provides detail of

~~appropriate methodologies to be implemented during the evaluation and mitigation stages of the archaeological works.~~

- 1.2.4 This document provides a summary of the archaeological background, and regional research agenda, as well as setting out the overarching procedures and standards for archaeological works required as part of the evaluation and mitigation strategy.
- 1.2.5 Site-specific written schemes of archaeological investigation (SSWSIs) applicable to the pre-construction and construction phase works will be produced to describe in detail [how the commitments above will be delivered \(as relevant to that stage of works\)](#) and the measures for individual phases of investigation within each area of the onshore part of the proposed DCO Order Limits in accordance with this Outline Onshore WSI.
- 1.2.6 Detailed measures will be defined on the basis of evaluation survey information including any geophysical survey and evaluation trial trenching completed. Where required, for example where it has not been practicable to complete surveys in advance of the DCO Application, additional SSWSIs will be provided setting out proposals for evaluation survey. SSWSIs will also be produced for mitigation which may be required following completion of evaluation surveys. Development of appropriate mitigation strategies will be undertaken, as appropriate, with input from experienced specialists (e.g., geoarchaeologist and environmental archaeologist).
- 1.2.7 The SSWSIs will be based on the detailed design to be progressed post-consent.
- 1.2.8 The onshore part of the proposed DCO Order Limits falls within the jurisdiction of the following local planning authorities (LPAs): Arun District Council (ADC), Horsham District Council (HDC), and Mid-Sussex District Council. At county level the relevant authority is West Sussex County Council (WSSCC) and South Downs National Park Authority (SDNPA). This document has been informed by ongoing consultation with Archaeological Curators (see Section 1.3 for definition of this role).

1.3 Project roles

- 1.3.1 Project roles relevant to the implementation of the Outline Onshore WSI are set out below. The SSWSIs will set out the project roles and responsibilities in detail for those individual works.

Rampion Extension Development Limited

- 1.3.2 RED (with their appointed contractors to the roles described in this WSI) will be responsible for implementing the Outline Onshore WSI (and subsequent SSWSIs). RED will ensure that all relevant project personal understand the archaeological requirements.
- 1.3.3 RED is responsible for maintaining a record of contacts related to the delivery of evaluation and mitigation. This will include archaeological consultants, contractors, and curators, in addition to nominated contacts within survey, sampling and construction contractors.

- 1.3.4 Communication with the Archaeological Curators and any other stakeholders is the responsibility of RED. RED will advise the onshore Archaeological Clerk of Works (ACoW) of all requirements or responsibilities related to communication with stakeholders and contractors, and in relation to the project's timescales, plans and requirements, ensuring that the information is shared as soon as it becomes available.

Onshore Archaeological Clerk of Works

- 1.3.5 The ACoW will be appointed by and act on behalf of RED.
- 1.3.6 The ACoW will be suitably qualified and experienced, commensurate with the responsibilities of this role as outline. All onshore archaeological works will be monitored by the ACoW. The ACoW will ensure, on behalf of RED, that this Outline Onshore WSI (and subsequent SSWSIs) are implemented, will review any archaeological method statements, sampling/finds policies and reporting, and will lead consultation with Archaeological Curators, as advised by RED. The ACoW will ensure that consultation with Archaeological Curators will be maintained throughout the different stages of archaeological works.
- 1.3.7 The ACoW will report to RED and will provide advice to RED to inform communication with stakeholders and contractors in relation to the implementation of the Outline Onshore WSI and SSWSIs.

Archaeological Curators

- 1.3.8 The curatorial responsibility for the onshore historic environment of Rampion 2 post-consent resides with the relevant local planning authority for each stage of scheme, in this case the district councils and SDNPA as listed in paragraph 1.2.8, [with advice from the WSCC Archaeologist](#). The agreement of this Outline Onshore WSI, [as well as archaeological archives and public outreach activities](#), is with the WSCC Archaeologist, with advice sought from Historic England ([Historic England Regional Inspector of Ancient Monuments](#)~~South East Regional Advisor~~ and Science Advisor) and SDNPA.
- 1.3.9 Archaeological Curators will be provided with copies of all relevant project documentation and will be consulted in all aspects of the onshore historic environment.
- 1.3.10 As required, SSWSIs, reports and deliverables will be submitted to the Archaeological Curators by RED. SSWSI or other documents related to scheme-specific programming will be highlighted to the curators as requiring their agreement/acceptance within a particular timescale (typically 12 weeks). If no response is received from the curator within a reasonable period to be agreed with the curator(s), then it will be assumed that the curator(s) agree with the proposals/documentation.
- 1.3.11 Archaeological Curators may attend site visits and/or meetings where requested/required during monitoring of archaeological works.
- 1.3.12 Archaeological fieldwork will require signing off by the relevant Archaeological Curator for each stage of the scheme.

Main Works Contractor

- 1.3.13 The Main Works Contractor will be appointed by RED. Where the appointed Main Works Contractor has responsibility for the construction phase of work, any archaeological works undertaken during this phase will be managed by them.
- 1.3.14 The Mains Work Contractor will ensure that all relevant project personal understand the archaeological requirements and will ensure no groundworks are undertaken in any area of the onshore part of the DCO Order Limits prior to the fulfilment of archaeological requirements and written sign-off from the Archaeological Curator for each stage of the scheme, where relevant. Written confirmation of fulfilment of archaeological requirements should be provided to the Main Works Contractor.
- 1.3.15 The Main Works Contractor will inform the ACoW and Archaeological Contractor of any environmental constraint or matter relating to health, safety and welfare of which they are aware that is relevant to the archaeological works.

Archaeological Contractor

- 1.3.16 Archaeological works (carrying out the fieldwork, post-excavation reporting, deposition of the archive and dissemination) will be undertaken by an Archaeological Contractor, appointed by RED or the Mains Work Contractor. Completion of archaeological works will be under the supervision of the ACoW. The Archaeological Contractor will have appropriate experience and be able to maintain appropriate staffing for the proposed work. The Archaeological Contractor shall be a Registered Organisation of the Chartered Institute for Archaeologists (CIfA) or have equivalent experience and expertise. The Archaeological Contractor shall be responsible for supplying any specialist technical or analytical services required for specific archaeological procedures.
- 1.3.17 Attendance at site visits and meetings during will be required by the Archaeological Contractor during the archaeological works, as appropriate, with RED, the ACoW, Archaeological Curators and/or Main Works Contractor in attendance.

2. Historic environment baseline summary

2.1 Introduction

- 2.1.1 The historical and archaeological background of the onshore part of the proposed DCO Order Limits have been documented in the [Appendix 25.2: Onshore historic environment desk study, Volume 4](#) of the ES (Document Reference 6.4.25.2). In addition, onshore geoarchaeological and paleoenvironmental baseline information and assessment has been undertaken in [Appendix 25.3: Onshore desk-based geoarchaeological and paleoenvironmental assessment report, Volume 4](#) of the ES (Document Reference 6.4.25.3).
- 2.1.2 To support the historic environment baseline, the onshore part of the proposed DCO Order Limits was subject to geophysical survey ([Appendix 25.4: Onshore geophysical survey report, Volume 4](#) of the ES (Document Reference 6.4.25.4)) and some advance targeted archaeological evaluation ([Appendix 25.6: Archaeological trial trenching at Brook Barn Farm, Volume 4](#) of the ES (Document Reference 6.4.25.6)). These surveys have been undertaken subject to where land access and ground conditions has permitted. A summary of these investigations (including geophysical survey data collected up to end of April 2023) with relevant points are set out within **Section 2.1: Introduction** and a summary of archaeological potential is provided in **Appendix A: Summary of archaeological assessment**. Geophysical survey of the onshore part of the proposed DCO Order Limits is ongoing and further targeted archaeological evaluation is planned, subject to land access negotiations. Further survey and evaluation reports post-consent will be referenced in the subsequent SSWSIs.
- 2.1.3 It is important to note, in terms of providing a chronological summary, that there has been very little systematic archaeological investigation in the area before the Rampion 2 project. This means that the West Sussex Historic Environment Record (HER) data almost certainly underrepresents the true nature and extent of the archaeology present. This is supported by the geophysical survey and targeted archaeological evaluation listed below, which have identified remains beyond what might have been initially indicated by pre-existing HER data.
- 2.1.4 Magnetometry survey of the proposed DCO Order Limits was undertaken between September 2021 and November 2023. As a result of evolving design of the Proposed Development, magnetometry survey was undertaken in areas that are no longer in the proposed DCO Order Limits. A total of 424ha of land within the proposed onshore part of the DCO Order Limits was surveyed ([Appendix 25.4: Onshore geophysical survey report, Volume 4](#) of the ES (Document Reference 6.4.25.4)) [**PEPD-031 and PEPD-113 to PEPD-119**]. Where areas were not surveyed, this is due to land access restrictions and ground conditions. Approximately 58ha of land suitable for survey remains within the DCO Order Limits.

- 2.1.5 The geophysical survey has identified anomalies interpreted as archaeological or potential archaeological features at various locations across the proposed DCO Order Limits.
- 2.1.6 Advanced targeted archaeological evaluation was undertaken within the proposed DCO Order Limits on land to the west of Brook Barn Farm (**Appendix 25.6: Archaeological trial trenching at Brook Barn Farm, Volume 4** of the ES (Document Reference 6.4.25.6)). Trial trenches were excavated to target geophysical anomalies of potentially high heritage significance. Excavation of the trenches revealed a series of cut features relating to late Iron Age and Roman activity, characteristic of rural settlement.

2.2 Summary of archaeological potential

- 2.2.1 The route has been split into three zones for the purpose of understanding the archaeological background and overview of archaeological potential (**Figure 1: Proposed DCO Order Limits and Landscape Zones**).
- Zone 1: South Coast Plain.
 - Zone 2: South Downs.
 - Zone 3: Low Weald.
- 2.2.2 Indicative archaeological potential and significance of areas within the proposed DCO Order Limits is shown in **Figure 2: Indicative areas of onshore archaeological potential and significance**.

Zone 1: South Coast Plain

- 2.2.3 Overall, there is potential for archaeological remains to occur relating to all periods within the onshore part of the proposed DCO Order Limits in Zone 1: South Coast Plains (**Appendix 25.2: Onshore historic environment desk study, Volume 4** of the ES (Document Reference 6.4.25.2), **Appendix 25.3: Onshore desk-based geoarchaeological and palaeoenvironmental assessment report, Volume 4** of the ES (Document Reference 6.4.25.3), **Appendix 25.4: Onshore geophysical survey report, Volume 4** of the ES (Document Reference 6.4.25.4) and **Appendix 25.6: Archaeological trial trenching at Brook Barn Farm, Volume 4** of the ES (Document Reference 6.4.25.6)), which are anticipated to form elements of the following assets groups or themes:
- early prehistoric artefactual material;
 - buried prehistoric landscapes;
 - later prehistoric settlement and agriculture practices;
 - later prehistoric funerary activity;
 - late Iron Age to Romano-British settlement and land-use;
 - medieval settlement and agriculture;
 - post medieval settlement agriculture; and

- military coastal defences.

2.2.4 In addition, there is potential for palaeoenvironmental deposits within Zone 1, particularly within the deep alluvium present within the floodplain, which have potential for environmental reconstruction of the Holocene, as do marine deposits ([Appendix 25.3: Onshore desk-based geoarchaeological and palaeoenvironmental assessment report, Volume 4](#) of the ES (Document Reference 6.4.25.3)).

Zone 2: South Downs

2.2.5 Overall, there is potential for archaeological remains to occur relating to all periods within the onshore part of the proposed DCO Order Limits in Zone 2: South Coast Plain, which are anticipated to form elements of the following assets groups or themes:

- early prehistoric artefactual material;
- prehistoric settlement and agriculture practices;
- prehistoric flint mining activity;
- prehistoric monumental funerary activity;
- early medieval mortuary activity;
- medieval settlement and agriculture;
- post medieval settlement agriculture; and
- military activity.

2.2.6 In addition, there is potential for palaeoenvironmental deposits within Zone 2, particularly within head deposits in the downland dry valleys, which have potential to reconstruct palaeoenvironmental conditions and prehistoric land use during the Holocene ([Appendix 25.3: Onshore desk-based geoarchaeological and palaeoenvironmental assessment report, Volume 4](#) of the ES (Document Reference 6.4.25.3)).

Zone 3: Low Weald

2.2.7 Overall, there is potential for archaeological remains to occur relating to all periods within the onshore part of the proposed DCO Order Limits in Zone 3: Low Weald, which are anticipated to form elements of the following assets groups or themes:

- early prehistoric artefactual material;
- later prehistoric settlement and agriculture practices;
- later prehistoric industrial activity;
- Roman industry and communications;
- medieval settlement and agriculture;
- post medieval settlement, agriculture and emparkment;

- post medieval industry and communications; and
- military activity.

2.2.8 In addition, there is potential for palaeoenvironmental deposits within Zone 2, particularly within the deep alluvium within the Adur floodplain and within or beneath the head deposits especially where they overlie the broad and gently sloping valley floors, which have potential for environmental reconstruction of the Holocene (**Appendix 25.3: Onshore desk-based geoarchaeological and palaeoenvironmental assessment report, Volume 4** of the ES (Document Reference 6.4.25.3)).

3. Research context

- 3.1.1 As mitigation by investigation and recording primarily mitigates loss of archaeological interest, it is important to set the results of any archaeological fieldwork into a wider framework archaeological research and investigation. The overarching research agenda for the South-East of England (SERF)¹ sets out key themes that archaeological investigation can inform. **Table 3-1** maps the archaeological remains anticipated to be present within the proposed DCO Order Limits against these identified research agendas. The SERF does not currently include chapters covering all chronological periods. For these periods, anticipated archaeological remains are mapped against research themes and objectives identified in the relevant Resource assessment seminar notes and papers².
- 3.1.2 In addition, consideration should also be given to Historic England guidance documents applicable to different periods and themes identified in **Table 3-1**, such as, Curating the Palaeolithic (Historic England 2023a) and Managing Lithic Sites and Sites (2023b).
- 3.1.3 SSWSIs will provide further detail and set out how the research potential of individual sites will be realised against the research agendas.

¹ South East Research Framework Resource Assessment and Research Agenda available as individual chapters compiled by different authors (2013 with additions in 2019), available online at <https://www.kent.gov.uk/leisure-and-community/history-and-heritage/south-east-research-framework> (Accessed 16 May 2023)

² Resource assessment seminar notes and papers compiled by different authors (2007), available online at <https://www.kent.gov.uk/leisure-and-community/history-and-heritage/south-east-research-framework> (Accessed 16 May 2023)

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Table 3-1 Archaeological Research Agenda

Anticipated remains in the proposed DCO Order Limits	Mapping to SERF	Mapping to South East Resource assessment seminar notes and papers³
Palaeoenvironmental deposits and buried/submerged landscapes.	<p>Developing understanding and dating of regional Pleistocene environmental, climatic and litho-stratigraphic frameworks.</p> <p>How did Pleistocene climate and sedimentary processes contribute to development of present-day landscapes?</p> <p>Conversely, what stories of Pleistocene climate and depositional process are reflected in today's landscapes?</p> <p>What faunal communities, including extinct tropical and cold adapted species, previously were present? And what are the climatic and palaeo-environmental implications of recovered fossil communities?</p> <p>What effect did Pleistocene climate change have on British environments and faunal communities?</p> <p>Modelling of fluvial deposit zones/types more likely to contain undisturbed or minimally disturbed remains and biological remains.</p>	-

³ The SERF does not currently include chapters covering all chronological periods. For these periods, anticipated archaeological remains are mapped against research themes and objectives identified in the relevant Resource assessment seminar notes and papers compiled by different authors (2007), available online at <https://www.kent.gov.uk/leisure-and-community/history-and-heritage/south-east-research-framework> (Accessed 16 May 2023).

Anticipated remains in the proposed DCO Order Limits

Mapping to SERF

Mapping to South East Resource assessment seminar notes and papers³

Modelling of raised beach deposit zones/types more likely to contain undisturbed or minimally disturbed remains and biological remains.

Relationship of Sussex raised beach sequence with fluvial terrace systems, particularly local systems of the Arun, Lavant and Rother?

On-shore Pleistocene stratigraphy should be correlated with the channel and near-shore sediments at the current coastline, and off-shore continuations of terrestrial sediments characterised and assessed for their Palaeolithic potential.

Can phases of small-scale woodland clearance (and/or woodland management practices) be confidently identified in the region's palaeoenvironmental records, and can they be related to known Mesolithic activity?

What are the vegetation histories of the Greensand and Chalk downland in the south-east region, and does the genesis of these landscapes relate to human activity during the Mesolithic period?

How are Mesolithic people responding to climatic and landscape change at the 8.2 ka event?

**Anticipated remains
in the proposed DCO
Order Limits**
Mapping to SERF
**Mapping to South East Resource
assessment seminar notes and
papers³**

What evidence exists to support theories of Early Holocene vegetation diversity in south-east England?
What is the relationship between palaeoenvironmental sites and known early Mesolithic activity?

How do the region's palaeoenvironmental records relate to the landscape archaeological record?

What evidence is there for hunting strategy/technology?

How can Upper Palaeolithic and Mesolithic evidence be targeted?

To what degree are plateau and slope sites under-represented due to Late Glacial and Early Holocene erosion?

To what extent are land surfaces from this period buried beneath Head and Colluvium?

To what extent does the timing of Holocene sea-level rise affect the visibility of sites?

**Artefactual material
associated with the
Mesolithic and
Palaeolithic.**

Investigations into the relationship between raw material nature/quality/availability, mobility and the organisation of activity in the landscape.

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**Anticipated remains
in the proposed DCO
Order Limits**

Mapping to SERF

**Mapping to South East Resource
assessment seminar notes and
papers³**

Can individual artefacts from Clay-with-flints deposits be dated on the basis of condition and/or patination: (a) to the Palaeolithic; (b) to any particular stage of the Palaeolithic?

Patterns of technological/typological change through the Early Palaeolithic, and contrast/similarities with adjacent regions such as the Solent Basin, the Thames Valley/London Basin and East Anglia.

How disturbed/transported are Palaeolithic remains in fluvial contexts?

Is there evidence of later prehistoric re-use of Mesolithic flint working sites, particularly in the Bronze Age (perhaps through Bronze Age discovery of these sites during forest clearance)?

How can lithic analysis reveal choices of local or distant sources, chronological patterning, potential travel distances, exchange mechanisms or preferential selection for specific tool types?

Investigations on how the date and taphonomic history of artefacts is reflected in aspects of their condition, such as: staining, patination, edge abrasion and surface scratches.

Anticipated remains in the proposed DCO Order Limits	Mapping to SERF	Mapping to South East Resource assessment seminar notes and papers ³
Features associated with later prehistoric activity (flint mining, settlement, agriculture practices and funerary activity)	<p>Diversity of evidence for settlement activity, especially in the recognition of small-scale and low-density activity, and to document the full range of settlement forms in the various periods.</p> <p>To understand how sites of all types related to their wider landscape setting.</p> <p>Chronology of the construction, use and abandonment of field systems in the middle and late Bronze Age.</p> <p>Landscape organisation and division in the late Iron Age.</p> <p>Recovery and analysis of large assemblages of faunal remains, especially in those areas where soil conditions are likely to favour bone survival.</p> <p>Recovery and analysis of charred plant remains to document the history of crop husbandry, including tillage methods and intensive versus extensive regimes.</p> <p>Production sites of all crafts and industries.</p> <p>Understanding the major episodes of social change evident in the archaeological record.</p>	<p>River valleys may well conceal important sites buried beneath later deposits.</p> <p>Lack of environmental information in conjunction with archaeological data.</p> <p>Evidence for extra-utilitarian aspects of Neolithic flint mining (conceptual, symbolic, cosmological) on the South Downs. Understanding the role of flint mines in Neolithic society beyond simple resource acquisition.</p>

Evidence for post-Neolithic mining or scavenging and reworking of old spoil heaps.

To build a regional chronology based on high quality radiocarbon dates that can be compared with ones from adjacent regions (e.g. Wessex, the middle and upper Thames Valley and East Anglia).

Understating the role of pottery vessels within the sphere of human habitation.

To understand how the pottery recovered from certain types of context (the 'death' assemblage) relates to the actual complete repertoire of vessels that was used in life (the 'life' assemblage).

Understanding how concentrations of early and late Neolithic flints on tertiary deposits overlying the chalk relate to the ways in which Neolithic people were using the landscape.

The movement of objects such as polished axes over various distances needs further study within the region.

Ritual aspects of funerary practices, in particular the dismemberment and movement of body parts after death.

Changes in material culture (either associated with the living or the dead) were not a simple reflection of movements of people, and that ideas rather than people were the key aspect to consider.

The nature and significance of social change, especially in the mid-3rd millennium BC in relation to the adoption of metallurgy and Beaker-associated burial practices.

Nature and organization of Neolithic occupation sites, economic regimes and social structures.

Supposed zonation of Neolithic landscapes into 'sacred' and 'secular' domains, and the development of ceremonial centres, possibly with political as well as religious implications.

What was the extent and nature of woodland in the Neolithic and Early Bronze Age, and were there natural clearings?

Assessments of sampling strategies in rural landscapes have demonstrated that in order to identify prehistoric sites it is necessary to use especially narrow

Anticipated remains in the proposed DCO Order Limits

Mapping to SERF

Mapping to South East Resource assessment seminar notes and papers³

sample intervals for surface collection and test pit surveys, and a minimum 6-10% sampling level for evaluation purposes (e.g. by trenching) (see Hey and Lacey 2001).

‘Strip, map and sample’ excavation methodologies have proved extremely effective for identifying and making sense of prehistoric site evidence, which is often dispersed and very difficult to recognise in vertical sections and small trenches.

Roman settlement, land-use, industry and communications

Influence of Gallic or Roman contacts on all aspects of society and material culture.

The structure of society, nature of trade and examples of continuity or change, pre- and post-conquest.

Evidence of Roman military contact: definable changes in late Iron Age sites, objects and fortifications.

Road network, including construction techniques, maintenance and dating of these, plus final use.

Rural settlement patterns and types.

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Anticipated remains in the proposed DCO Order Limits	Mapping to SERF	Mapping to South East Resource assessment seminar notes and papers³
	<p>Field systems, and their relationship to preceding and succeeding systems, need to be better understood.</p> <p>Environmental evidence of crop assemblages, production practices and also in butchery and processing (salting for instance).</p> <p>Evidence of Wealden iron industry and salt production. Environmental evidence of landscape character.</p> <p>Landscape changes in the late Roman period.</p>	
Early medieval mortuary activity	<p>Understanding of the landscape context of Anglo-Saxon cemeteries, particularly their spatial relationship to sites of prehistoric and Romano-British ritual activity.</p> <p>Understanding of the role of mortuary practices in the expression of tribal identity.</p>	
Medieval settlement and agriculture	<p>More understanding of the landscape of primarily dispersed rural settlement in terms of development and maintenance over space and time.</p> <p>Further investigation of agricultural practices (including animal husbandry) and land use through more systematic sampling and analyses than hitherto</p>	

Anticipated remains in the proposed DCO Order Limits	Mapping to SERF	Mapping to South East Resource assessment seminar notes and papers ³
<p>Post medieval settlement, agriculture and emparkment; and</p> <p>Post medieval industry and communications</p>	<p>Gardens need to be understood as part of the wider manipulation of the landscape by landowners, including parks and the creation of tenant landscapes (Betley 1993). There is also a need to understand the relation to their function as places of upper class display and contrived use of space.</p> <p>The effect canal and rail routes had on the landscape from construction, to use, and to decline.</p> <p>The emergence and evolution of animal-based industries, such as leather, wool, horn-working, veal and dairy products, from the later medieval to late post-medieval period through excavation and the study of environmental data.</p> <p>Further archaeological survey on agricultural buildings and other ancillary structures is still needed.</p> <p>Recording small-scale chalk extraction pits dug to provide material for soil dressing.</p> <p>Systematic recording of other quarries through historical and archaeological research. The majority of these need to be classified by form, establish the material extracted, their date and distribution.</p> <p>Study in trade and communication networks in the 18th/19th centuries from both finds and historical sources.</p>	-

Anticipated remains in the proposed DCO Order Limits

Mapping to SERF

Mapping to South East Resource assessment seminar notes and papers³

Military coastal defences and wider military activity

The use of landscape for defence and the effects on landscapes and urban development of defensive systems, training areas and camps.

-

Embrace Second World War defence within an extension of the approach and methodology utilised in the Defence of Kent Project for the location, identification and recording of all categories of 20th century home defences to the region and, by doing so, establish the wider pattern of the militarised landscape.

4. Development impacts and archaeological response

4.1.1 Desk-based studies and surveys have established that the land within the proposed onshore part of the proposed DCO Order Limits has archaeological potential, indicated by a wide range of data sources (as listed in Section 24 of [Appendix 25.2: Onshore historic environment desk study, Volume 4](#) of the ES (Document Reference 6.4.25.2)) including the WSCC HER, cartographic and aerial remote sensing data, geophysical survey and targeted evaluation trenching.

4.1.2 Any works that physically disturb the ground, such as groundworks associated with construction of the Proposed Development, ground investigation works, and topsoil stripping have potential to damage or remove (through excavation, compaction and dewatering) archaeological features, structures and deposits that may be present.

4.2 Aims

4.2.1 Archaeology is a non-renewable resource. Where impacts cannot be avoided through exclusion from the project area or during detailed design, a programme of archaeological works (appropriate to the significance of the archaeological remains) is required to mitigate impact through thorough investigation and recording of the archaeology that will be damaged or lost during construction of the Proposed Development.

4.3 Objectives

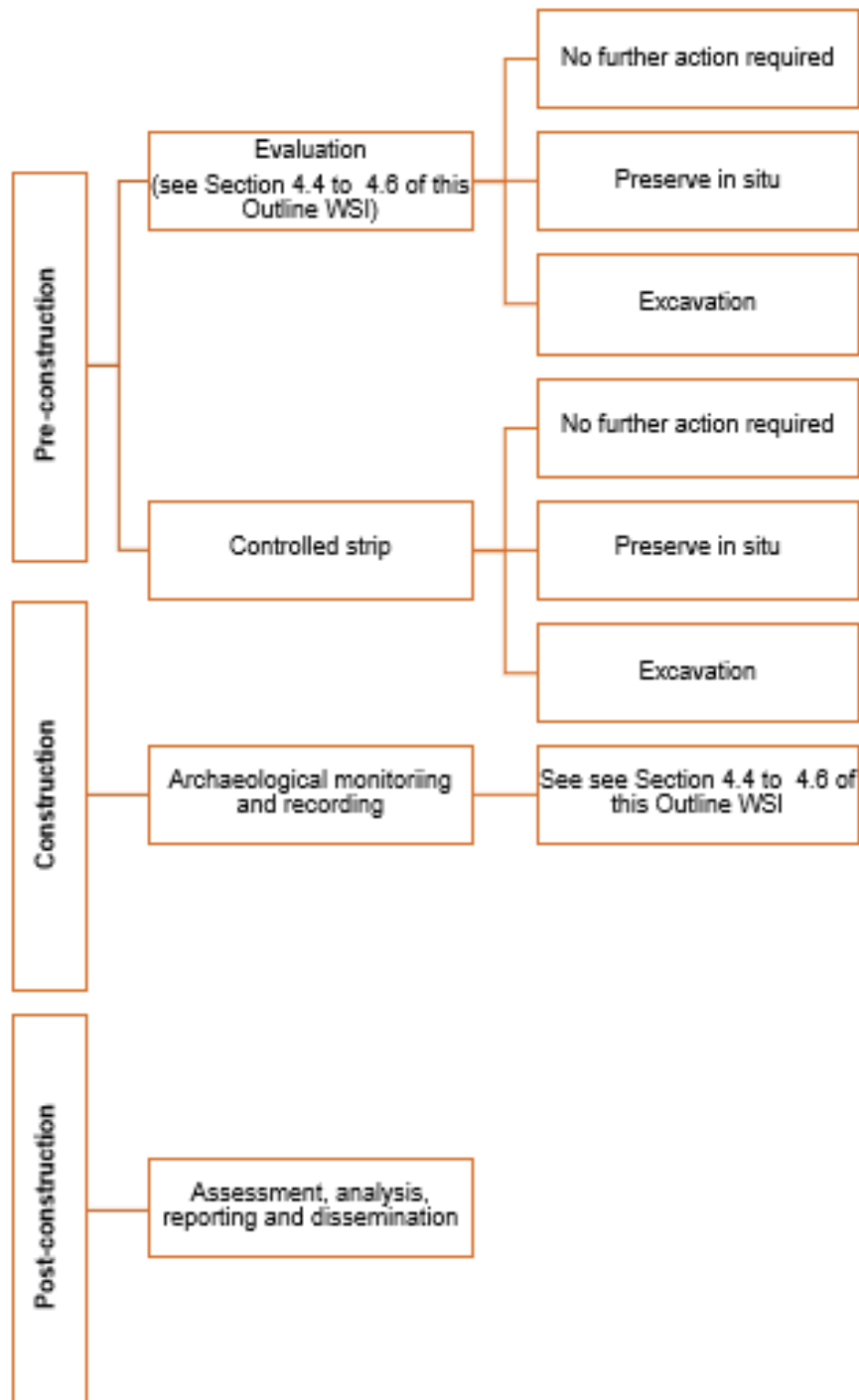
4.3.1 The objectives of the archaeological evaluation and mitigation strategy are to:

- identify archaeological remains (extent, condition, character, and significance) which may be disturbed by the Proposed Development;
- where reasonably practicable, ensure that such remains are appropriately protected from disturbance during works (preservation through avoidance);
- ensure that any remains which are disturbed are appropriately investigated and recorded (preservation by record);
- carry out appropriate post-excavation analysis to allow site records and analysis of archaeological material to be synthesised into an appropriate interpretative report; and
- disseminate the findings of the archaeological investigations at a level commensurate with their significance.

4.3.2 The SSWSIs will detail specific objectives of each phase of the evaluation and mitigation works within each individual area of the DCO Order Limits.

4.3.3 **Graphic 4-1** provides an overview of the phased approach to evaluation and mitigation during the pre-construction, construction and post-construction phases of the project.

Graphic 4-1 Phased approach to evaluation and mitigation strategy



4.4 Overview of evaluation and mitigation strategy

4.4.1 This section provides an overview of the proposed evaluation and mitigation strategy to be used in developing the SSWSIs established in response to meeting

the aims and objectives in **Section 4.2: Aims** and **Section 4.3: Objectives**. The proposed application of each method is described in **Section 4.5**, whilst the professional standards by which all archaeological work will be undertaken are listed for each method or activity within **Section 4.6: Standards for archaeological work**. The work outlined by this Outline Onshore WSI relate to works within the DCO Order Limits, and to works that take place prior to, during and after construction (see **Graphic 4-1**). A protocol for the discovery of archaeological remains is presented in Appendix C.

Evaluation phase

- 4.4.2 For each area of land affected by the Proposed Development, evaluation of the archaeological potential will be undertaken (where not already completed) prior to construction, to establish the presence/absence, character and significance of archaeological remains.
- 4.4.3 The principal investigation methods to undertake this evaluation phase are:
- geophysical survey;
 - evaluation trenching;
 - rapid identification survey;
 - geoarchaeological investigations; and
 - geoarchaeological monitoring of ground investigation works.
- 4.4.4 In addition, non-standard evaluation methods may be applied where appropriate, including:
- fieldwalking; and
 - test pitting.
- 4.4.5 Where relevant, the evaluation phase will inform the development of archaeological mitigation (avoidance by design or preservation by record).

Mitigation phase

- 4.4.6 All archaeological mitigation will be proportionate to the significance and extent of the potential effects on archaeological remains and will be designed to address the specific research agenda set out at **Section 3: Research context**.
- 4.4.7 The results of the archaeological investigations in the evaluation phase will inform a programme of archaeological mitigation. Where necessary, consideration will be given to mitigation through design (i.e. avoidance) prior to, or in combination with, investigation and recording.
- 4.4.8 Dependent upon the results of the evaluation phase, including the non-standard evaluation methods, additional non-intrusive surveys outside of the immediate footprint of construction impacts may be required. The aim of the additional surveys will be to enhance understanding and knowledge of the nationally significant in order to inform an understanding of features subject to preservation

by record where these form part of the South Downs prehistoric mining landscape. Surveys should only be considered within the Order Limits.

Additional surveys might comprise geophysical magnetometry survey of the chosen monument/s, followed by additional detailed/targeted Ground Penetrating Radar (GPR) survey, focussing on smaller, defined areas of interest, as appropriate.

4.4.74.4.9 The need for, feasibility, location, extent and methodology of any additional non-intrusive surveys will be agreed with the Archaeological Curators, and will be set out within the SSWSIs.

Avoidance

4.4.84.4.10 In line with the protocol set out at **Appendix B**, where archaeological remains are identified, the design of the onshore cable corridor will be reviewed to identify changes to remove or reduce effects on these remains. The degree of design change considered will be proportionate to the significance of the identified remains, and will be evaluated holistically alongside other environmental impacts and technical requirements.

4.4.94.4.11 The condition and heritage significance of archaeological remains discovered will be reviewed against potential construction impacts, which will be supported by relevant survey report/s prepared by the appointed Archaeological Contractor and approved by the Archaeological Curator/s, in accordance with the Outline WSI and relevant SSWSI. The need and scope of mitigation measures will be determined in consultation with the Archaeological Curator/s, with technical input from Historic England where appropriate.

4.4.104.4.12 Engineering solutions (e.g. narrowing of the construction corridor, diverting the cable route within DCO Order Limits, re-siting stockpiles, installing the cable above deeper remains) will be explored to conserve in situ those remains which contribute to significance. Plans detailing engineering proposals for mitigation by avoidance will be provided by the Principal Contractor.

4.4.114.4.13 Where archaeological remains are identified for probable retention in their current location, preservation assessments may be required to understand their current state of preservation and that of the deposits they are buried in in more detail and the potential for the archaeological remains to sustain a further period of burial following construction of the scheme. Where preservation assessments are undertaken, these should apply to those materials and deposits which contribute to the site's significance and should be undertaken by appropriately qualified specialists. In accordance with the NPPF, the level of detail of these preservation assessments should be no more than is necessary to reach an informed decision and be proportionate to the significance of the site affected and the potential impact on that significance. The purpose and approach to preservation assessments are set out in Historic England's (2016a) guidance note *Preserving Archaeological Remains*. Consideration will be given to incorporate preservation assessment techniques at the evaluation phase (e.g. during evaluation trenching) for areas where existing evidence indicates the potential presence of archaeological remain of high heritage significance and avoidance measures may be implemented. Details will be set out in the relevant SSWSI.

[4.4.124.4.14](#) The suitability and scope of avoidance measures will be determined in consultation with the Archaeological Curator/s, with technical input from Historic England where appropriate.

Preservation by record

[4.4.134.4.15](#) Where archaeological remains will be lost or damaged as a result of the Proposed Development, these will be preserved by record. The principal investigation methods to undertake this mitigation phase are:

- further geoarchaeological monitoring and investigation;
- set piece excavation;
- strip, map and sample excavation; and
- archaeological monitoring and recording.

[4.4.144.4.16](#) The mitigation method used for each area of archaeological interest will reflect the archaeological potential identified at evaluation and the level of impact. The type of investigation initiated may change if significant archaeological remains, not indicated at evaluation, are identified during the mitigation works, e.g., Archaeological Monitoring may be upgraded to Set Piece Excavation, if important archaeological sites or features are identified.

[4.4.154.4.17](#) The detail of evaluation and mitigation proposals, including the most appropriate methodology, and the exact extent of any intervention will be agreed with the Archaeological Curators, and will be set out within the SSWSIs.

4.5 Proposed fieldwork methodology and application

4.5.1 This section outlines the proposed application of each evaluation technique. The professional standards by which all archaeological work will be undertaken are listed within **Section 4.6**.

Evaluation

Geophysical survey

4.5.2 A separate WSI was prepared and approved by the WSCC Archaeologist for the magnetometry survey across the Preliminary Environmental Information Report (PEIR) Assessment Boundary (RED, 2021). The spatial scope of this was extended to include additional areas outside of the PEIR Assessment Boundary, as detailed in the PEIR Supplementary Information Report and PEIR Further Supplementary Information Report with subsequent consultations.

4.5.3 Geophysical survey comprised the archaeological magnetometry survey of identified areas in order to identify geomagnetic anomalies of potential archaeological origin. This survey aimed to cover the developable extent of these areas, but excluded any confirmed safeguarded areas, areas of demonstrable past disturbance (e.g., hardstanding and modern building footprints), and any areas where safe access cannot be confirmed.

4.5.4 Where not already completed, magnetometry survey will be carried out in advance of construction where reasonably practicable in areas of the proposed DCO Order Limits where no prior archaeological survey or investigation has been undertaken, unless agreed with the relevant Archaeological Curator for each stage of the scheme. Geophysical survey would only not be undertaken where the land is unsuitable for survey or where it was agreed with the relevant archaeological contractor that the evaluation strategy could better be met through an alternative approach, such as going straight to trial trenching. All such geophysical survey shall be completed in accordance with the existing agreed WSI.

4.5.5 Geophysical work and reporting will be carried out in line with the standards set out at **Sections 4.6 to 4.9**, as per the following professional guidance:

- EAC Guidelines for the Use of Geophysics in Archaeology (Schmidt et al 2016); and
- Chartered Institute for Archaeologists Standard and Guidance for archaeological geophysical survey (ClfA 2020a).

4.5.6 [Where appropriate and proportionate, other geophysical survey techniques may be employed during the evaluation phase to aid in understanding the presence/absence, character and significance of archaeological remains. Survey design and application of such techniques should follow relevant professional and technical guidance. A SSWSI will identify the exact scope, if undertaken, in consultation with the Archaeological Curator, with advice from Historic England where appropriate.](#)

Evaluation trenching

~~4.5.64~~ 4.5.7 This will be carried out in areas where evaluation trenching has not been practicable to date, and provision will be made in the SSWSIs for further trenching as appropriate.

~~4.5.74~~ 4.5.8 The areas within the proposed DCO Order Limits which will potentially be subject to evaluation trenching are shown in **Figure 3: Potential areas of proposed archaeological trial trenching**. Within these areas, the detailed location and extent of evaluation trenching will be proportionate to the potential and significance of the archaeological interests and will be determined on the basis of desk study and survey information and in consultation with the Archaeological Curator(s). It is anticipated that areas identified for evaluation trenching will be subject to a ~~2% to~~ 5% trench sample size. This will be confirmed in the SSWSIs. [Trench sample size may reduce to a minimum of 2% in areas where low archaeological potential and/or known prior ground disturbance can be clearly demonstrated. Trench sample size may increase to a maximum of 10% in areas where high archaeological potential or significance is predicted.](#) ~~which~~ The SSWSIs will also include ~~any~~ provision for a contingency to increase trenching where necessary to sufficiently characterise archaeological remains. Areas shown in **Figure 3: Potential areas of proposed archaeological trial trenching** as excluded from consideration for evaluation trenching is due to a combination of:

- the location assessed having no archaeological survival based on previous developmental impacts, such as former landfill;

- existing ground conditions do not allow for trenching (e.g., road, woodland); and/or
- no construction impacts from Rampion 2 to deposits with archaeological interest, such as sections of proposed trenchless crossings. Commitment C-278 secures that the depth of the landfall HDD location shall be maintained at least 5m depth (as secured in the Outline CoCP) to avoid impacts to archaeological remains identified by the geophysical survey with the final depth to be confirmed in the stage specific Construction Method as per **draft DCO [REP2-002]** (updated at Deadline 3) Requirement 23.

[4.5.84.5.9](#) Where areas are excluded on the basis of no anticipated impact due to the sufficient depth of trenchless crossing, this should be confirmed following detailed design of each HDD location. Where trenchless crossing is shallow enough to potentially impact deposits with archaeological interest, these locations shall be subject to evaluation trenching.

[4.5.94.5.10](#) Evaluation trenching will comprise the excavation of a sample of the area to be affected by construction of the Proposed Development, to be agreed on a site-by-site basis, typically using 30m or 50m by 2m trenches unless otherwise agreed with the relevant Archaeological Curator for each stage of the scheme. Any sampling strategy will have regard to the results of geophysical survey or walkover and to the extent of prior disturbance.

[4.5.104.5.11](#) The purpose of the evaluation is to identify and characterise the nature, extent and significance of specific archaeological foci, within an extensive area. This information will be used to allow more detailed proposals for mitigation to be developed.

[4.5.114.5.12](#) Archaeological evaluation trenching and recording will be carried out to the standards set out at **Sections 4.6 to 4.9**, in accordance with the Sussex Archaeological Standards (2019) at **Appendix C: Sussex Archaeological Standards (2019)**. The detail of the exact scope (e.g., trench locations) and methodology (e.g., sampling strategies) for the trial trenching will be provided in the SSWSIs, and should follow a consistent approach across the whole scheme.

Fieldwalking survey

[4.5.124.5.13](#) Fieldwalking survey may be undertaken in addition to geophysical survey in a proportionate and targeted manner to allow surface artefact collection in areas of cultivated or disturbed ground. This technique will be used where previous desk study and consultation has identified potential for the presence of archaeological remains which may not be readily identified by other evaluation techniques, such as geophysical survey. Specifically, it will be used where there is potential for evidence of dispersed archaeological remains which may primarily be detected through the identification of artefacts within plough soil.

[4.5.134.5.14](#) The need for fieldwalking within the proposed DCO Order Limits has been established through consultation with stakeholders, within the area which crosses the South Downs between Blackpatch Hill and Harrow Hill, where there is a potential for the presence of archaeological remains relating to prehistoric activity, and the presence of flint artefacts and scatters in the plough soil (**Figure 4: Potential areas of fieldwalking and test pitting**). A SSWSI will identify the exact

scope of the fieldwalking, in consultation with the Archaeological Curator, with advice from Historic England.

[4.5.144.5.15](#) Development of appropriate strategies for surface artefact collection will be undertaken by relevant finds specialists (e.g., in lithic technology) and other specialists (e.g., geoarchaeologist and environmental archaeologist), where appropriate.

[4.5.154.5.16](#) The results of any surface artefact collection exercise will inform the need for and scope of further evaluation techniques, which may include test pitting and/or trial trenching and which will be identified in a SSWSI.

[4.5.164.5.17](#) Surface artefact collection will be carried out to the standards set out at **Sections 4.6 to 4.9** and in accordance with the Sussex Archaeological Standards (2019) at **Appendix C: Sussex Archaeological Standards (2019)**.

Test-pitting

[4.5.174.5.18](#) Test-pitting may be used in addition to geophysical survey in a proportionate and targeted manner to test for the presence of sub-surface archaeology and/or where archaeological survival is predicted to be limited to the artefacts within the plough soil. The technique may be used in areas within the proposed DCO Order Limits where there is an identified potential for the presence of archaeological remains which may not be readily identified by geophysical survey, as described in paragraph 4.5.11, but where surface artefact collection survey may not be possible, e.g., fields under permanent pasture. This technique will comprise regularly spaced test pits to allow the plough soil to be sampled for the presence/absence of artefacts, while also allowing for the identification of buried deposits. The potential need for test-pitting within the proposed DCO Order Limits has been established through consultation with stakeholders, within the area which crosses the South Downs between Blackpatch Hill and Harrow Hill, where there is a potential for the presence of archaeological remains relating to prehistoric activity, and the presence of flint artefacts and scatters in the plough soil (**Figure 4: Potential areas of fieldwalking and test pitting**).

[4.5.184.5.19](#) Development of appropriate strategies for test-pitting will be undertaken by relevant finds specialists (e.g., in lithic technology) and other specialists (e.g., geoarchaeologist and environmental archaeologist), where appropriate. A SSWSI will identify the exact scope of test-pitting, which will be agreed with Archaeological Curator, with advice from Historic England.

[4.5.194.5.20](#) The results of any test-pitting should inform the need and scope of further evaluation techniques, which may include trial trenching and which will be identified in a SSWSI.

[4.5.204.5.21](#) Test-pitting will be carried out by a suitably qualified and experienced contractor with relevant technical competences and resources to the standards set out at **Sections 4.6 to 4.9** and in accordance with the Sussex Archaeological Standards (2019) at **Appendix C: Sussex Archaeological Standards (2019)**.

Rapid identification survey

4.5.244.5.22 Rapid Identification Survey will be undertaken where reasonably practicable in areas which could not be evaluated by other methods as outlined in this section due to the presence of tree cover after felling of trees, and clearance of undergrowth but in advance of any grubbing or grinding out of stumps. This method of evaluation comprises visually monitoring of areas to enable the observation and recording of potential surviving earthworks and/or remains in areas, which might not have been identified due inability to undertaken other evaluation techniques.

Geoarchaeological monitoring and investigation

4.5.224.5.23 Where non-archaeological geotechnical works are proposed, the scope of these works will be reviewed by a geoarchaeological specialist to understand where geoarchaeological monitoring of such works may be of value. All borehole or test pit logs produced by geotechnical works will be reviewed by a geoarchaeological specialist and information will be used where relevant to inform/update a site deposit model. For use in geoarchaeological investigations, geotechnical cores should be whole/intact.

4.5.234.5.24 Geoarchaeological boreholes or test pits may be undertaken either as standalone or as a component of other archaeological investigations, to confirm the extent, nature and significance of any surviving deposits with geoarchaeological potential (Palaeolithic, post-Palaeolithic or palaeoenvironmental) in areas where there may be developmental impact within the proposed DCO Order Limits. The assessment of significance of any surviving remains will be undertaken in the context of the wider archaeological regional research priorities, as set out in the overarching research agenda for the South-East of England (SERF)⁴. Objectives and research questions for these works are expected as a minimum to broadly consider the following:

- the nature and level of natural topography;
- the earliest and latest deposits;
- the presence and nature of paleoenvironmental deposits;
- evidence for period-specific remains; and
- the extent of modern/post-depositional disturbance.

4.5.244.5.25 The scope of these works would be secured within a SSWSI, with advice from Historic England's Science Advisor. A SSWSI will provide for geoarchaeological investigation of the dry valley deposits on the South Downs which the DCO Order Limits intersect.

⁴ South East Research Framework Resource Assessment and Research Agenda available as individual chapters compiled by different authors (2013 with additions in 2019), available online at <https://www.kent.gov.uk/leisure-and-community/history-and-heritage/south-east-research-framework> (Accessed 16 May 2023)

[4.5.264.5.26](#) Geoarchaeological investigation and monitoring work will be undertaken by a suitably qualified and experienced contractor with relevant technical competences and resources.

Mitigation

Archaeological Monitoring (watching brief)

[4.5.264.5.27](#) Archaeological monitoring (watching brief) will be used to provide opportunities for archaeological investigation and recording during construction, in circumstances where:

- investigation would otherwise be impracticable; and
- where archaeological remains of limited value or extent are suspected within a working area.

[4.5.274.5.28](#) Archaeological monitoring (watching brief) will comprise an archaeologist (as provided by the Archaeological Contractor) being present, either continuously or on an agreed schedule of inspection-based visits, during intrusive groundworks so that the presence, or absence, of archaeological remains could be confirmed, and any such remains be appropriately recorded.

[4.5.284.5.29](#) The risk that archaeological remains might be present will be well-established on the basis of previous phases of evaluation, and/or mitigation works, and the areas identified within the SSWSIs. Any site-specific requirements will be set out within the SSWSIs.

[4.5.294.5.30](#) The need to monitor construction works will be predictable, and appropriate arrangements for Archaeological Curator inspection visits will be acceptable in most instances.

[4.5.304.5.31](#) Where archaeological deposits are encountered, sufficient excavation will take place to allow appropriate records to be compiled, as might be reasonably achieved. Provision will be allowed for access in keeping with health and safety considerations.

[4.5.314.5.32](#) Should extensive and/or important/well preserved remains be found, which cannot be addressed within the scope of a watching brief, the requirements for any further excavation will be agreed with RED and the Archaeological Curator for the relevant stage of the scheme. The scope of these works would be secured within a SSWSI.

[4.5.324.5.33](#) Archaeological monitoring and recording will be carried out to the standards set out at **Sections 4.6 to 4.9** and in accordance with the Sussex Archaeological Standards (2019) at **Appendix C: Sussex Archaeological Standards (2019)**.

Strip, map and sample

[4.5.334.5.34](#) Strip, map and sample mitigation will be undertaken to identify specific archaeological foci within an extensive area of potential, or to expose the spatial characteristics of extensive archaeological landscape elements, such as field

systems, prior to selecting locations for targeted sample excavation. This work is to be undertaken within a framework of evidence-based research objectives.

[4.5.344.5.35](#) Following initial machine overburden strip (which will be directed and monitored by the Archaeological Contractor), the area should be examined, and a plan of identified and potential archaeological features and deposits prepared at an appropriate scale. This will inform proposals for sample excavation, to be agreed with the Archaeological Curator.

[4.5.354.5.36](#) Where necessary to allow construction works to continue, the release of a part of an area may be agreed with the Archaeological Curator once an appropriate agreed level of investigation has been completed. In this situation, areas which have not been released will be clearly demarcated.

[4.5.364.5.37](#) Key stages in strip-map-and-sample are:

- careful overburden strip of topsoil and subsoil, using a back-acting excavator, to the archaeological horizon;
- immediate planning (mapping) of the area while the uncovered surface is fresh. The area should be subsequently checked to see if weathering reveals further features and the plan updated as appropriate; and
- sampling, concentrating on established a relative chronology through feature intersections investigations, and by attempting to establish a more precise chronology.

[4.5.374.5.38](#) Areas for strip, map, and sample will be identified following geophysical survey, and/or evaluation trenching, and will be agreed with the Archaeological Curator. Individual areas and the justification for their selection will be set out within the SSWSIs.

[4.5.384.5.39](#) Following the planning (mapping) stage, an appropriate sample of identified features will be investigated. Key areas and nodes will be investigated in sufficient detail to understand them both in respect of themselves and also in relation to their surroundings. This work will be focused on adding to the spatial, chronological, functional and environmental context of the investigated area drawing on the standards set out in **Sections 4.6 to 4.9**, and in accordance with the Sussex Archaeological Standards (2019) at **Appendix C: Sussex Archaeological Standards (2019)**. Any site-specific variations will be set out within the SSWSIs, and/or agreed with the relevant Archaeological Curator.

[4.5.394.5.40](#) This requirement to sample and record identified features will be continually monitored during the course of fieldwork and amended according to its effectiveness in meeting research objectives. In particular, consideration of strip, map, and sample operations will be discussed with the relevant Archaeological Curator, with a view to extending these operations where significant archaeological remains have been observed, or scaling back operations where the potential presence of archaeological features is demonstrably low, based on:

- identified prior truncation/disturbance;
- absence of observed features; or

- confirmation of prior survey results which suggest poor survival of archaeological features.

[4.5.404.5.41](#) Any decision to scale back the scope of strip, map, and sample mitigation will only be undertaken after agreement with the relevant Archaeological Curator has been confirmed.

[4.5.414.5.42](#) Following completion of archaeological investigation in accordance with the SSWSI and in consultation with the relevant Archaeological Curator, the relevant area, or agreed parts thereof, will be released to the Main Works Contractor(s) so that construction works may proceed.

Set-piece excavation

[4.5.424.5.43](#) Set-piece excavation will be undertaken where evaluation identifies the extent, and character of archaeological remains of sufficient significance and complexity to require a definitive investigation area, sampling and finds recovery policy to be defined, and where avoidance through micro-siting is not possible.

[4.5.434.5.44](#) The individual defined areas identified for set-piece excavation will be set out in the relevant SSWSI. This will include provision to extend areas if important archaeology continues beyond the defined extent.

[4.5.444.5.45](#) Set-piece excavation and recording will be undertaken to the standards set out at **Section 4.6**, and in accordance with the Sussex Archaeological Standards (2019) at **Appendix C: Sussex Archaeological Standards (2019)**. Any site-specific sampling requirements will be set out within the SSWSIs.

Geoarchaeological monitoring and investigation

[4.5.454.5.46](#) The need and scope of geoarchaeological mitigation will be informed by the results of geoarchaeological monitoring and evaluation. The scope of these works would be secured within a SSWSI, with advice from Historic England's Science Advisor.

4.6 Standards for archaeological work

4.6.1 The standards set out below draw upon, and should be used in conjunction with, the professional standards listed in this section and the Sussex Archaeological Standards (2019) provided in **Appendix C: Sussex Archaeological Standards (2019)** of this document. All archaeological works will be carried out by suitably qualified and experienced archaeologist/s, with relevant technical competences where required.

4.6.2 The following professional standards apply:

- Chartered Institute for Archaeologists (CIfA) Standard and universal guidance for archaeological excavation (CIfA 2023a and 2023b);
- CIfA Guidelines for the Collection, Documentation, Conservation and Research of Archaeological Materials (CIfA 2020b);
- CIfA Standard and universal guidance for archaeological field evaluation (CIfA 2023c and 2023d);

- ClfA Standard and guidance for an archaeological monitoring and recording (ClfA 2023e and 2023f);
- ClfA Standard and guidance for the creation, compilation, transfer and deposition of archaeological archives (ClfA 2020c);
- ClfA Code of conduct: professional ethics in archaeology (ClfA 2022); and
- Sussex Archaeological Standards (2019).

4.6.3 A 'site code' will be obtained by the Archaeological Contractor from the relevant project archive repository in advance of each stage of the works. All parts of Site Archive, including finds, samples, plans, photographs, and excavation paperwork will be marked with this number. It will be printed on the cover of all reports and used as the accession number for deposition of the archive.

4.6.4 Where appropriate, references will be made to professional standards and guidelines, and to the appointed Archaeological Contractor's organisational procedures manuals.

Rapid identification survey

4.6.5 Areas will be walked systematically on regular transects, typically at 25m intervals with the aim of identifying and recording any surviving earthwork features, or structural remains. Each feature or observation will be given a unique record number and will be recorded in plan and by photography. A record will also be made of any artefactual material observed, although modern material would not normally be retained.

Geophysical Survey

4.6.6 As per the existing WSI for geophysical survey (WSP, 2021), the magnetometry survey will be carried out using a Bartington Grad601-2 fluxgate gradiometer, or equivalent instrument. Readings will be taken every 0.25m along lines 1m apart. The survey will be carried out using a grid system accurately tied in with the Ordnance Survey (OS) National Grid.

4.6.7 A record will be made of surface conditions, and of possible sources of modern geophysical interference that may have a bearing on subsequent interpretation of field data. Any areas where it is considered unsafe to work will be excluded from the survey.

4.6.8 [Where geophysical survey is undertaken using other techniques, the survey design should be appropriate to the nature of archaeological remains anticipated and the local geological context. The survey and reporting should be undertaken by an experienced specialist contractor. The scope of such surveys should be set out in a SSWSI, in consultation with the Archaeological Curator, with advice from Historic England where appropriate.](#)

Fieldwalking survey

4.6.9 Fieldwalking survey must be timetabled to take place when arable fields are lying fallow and preferably immediately after ploughing/harrowing.

- 4.6.10 The survey will be carried out using line walking where survey teams traverse linear transects collecting material that they see within their corridor of vision. Survey teams should typically walk transects and observe 2m-wide corridors centred on each individual transect as a basis for artefact collection. Closer or wider spacing of transects may also be considered as appropriate and will be decided by the Archaeological Contractor with the agreement of the ACoW and Archaeological Curator.
- 4.6.11 The strategy for collection, sampling or weighing all materials will be tailored to the expected conditions of the site and the specific research aims of the survey. Artefacts should be placed into a finds bag labelled with a unique ID number and their individual locations plotted using a GNSS. The strategy for collection, sampling or weighing all materials will be tailored to the expected conditions of the site and the specific research aims of the survey. Artefacts should be placed into a finds bag labelled with a unique ID number and their individual locations plotted using a GNSS.
- 4.6.12 Fieldwalking should be carried out by suitably experienced and qualified archaeologists to ensure appropriate artefact identification, recovery and recording.

Machine overburden strip

- 4.6.13 For all areas identified as requiring intrusive archaeological work in the SSWSIs (evaluation trenching, strip, map and sample and set-piece excavation), removal of topsoil, overburden, to the first significant archaeological horizon will be undertaken by a back-acting excavator fitted with a wide (c.1.8m) toothless ditching bucket, under the continuous supervision of the Archaeological Contractor with the authority to halt and direct machine excavation.
- 4.6.14 Spoil will be temporarily stockpiled on-site at an identified location, at a safe distance from the stripped areas, and other constraints, to the satisfaction of the Main Works Contractor. Topsoil, subsoil, and archaeological deposits should be kept separate during excavation, to allow for sequential backfilling of excavation. Topsoil should be examined for archaeological material.
- 4.6.15 Areas stripped for, or under, archaeological investigation must be clearly marked and identified to construction contractors, so that the area is not tracked over, or otherwise disturbed. The supervising site archaeologist will confirm to the contractors when an area has been released from archaeological control, and vehicles can track over the specified area.
- 4.6.16 The first significant archaeological horizon, and all subsequent archaeological deposits will be cleaned by hand. Excavation of any archaeological deposits identified will proceed by hand, to the standards set out below, unless specifically agreed with the Archaeological Curator, or to any site-specific requirements set out in the SSWSIs. If colluvial or alluvial deposits are identified sealing earlier archaeological horizons, the potential for machine stripping of these deposits will be discussed with the relevant Archaeological Curator, once any archaeological features cutting them have been fully excavated and recorded, and it has been established that these deposits are otherwise archaeologically sterile.

- 4.6.17 Following completion of archaeological investigation in accordance with the SSWSI and in consultation with the Archaeological Curator, the ACoW and the Main Works Contractor, each trench, or excavation area, will be backfilled with the spoil and compacted by machine to level fill, unless otherwise instructed by the Main Works Contractor.

Hand excavation

- 4.6.18 There is the presumption that excavation of all archaeological deposits will be done by hand unless it can be shown there will not be a loss of evidence by using a machine.
- 4.6.19 Archaeological features will be hand cleaned prior to excavation, to provide accurate definitions. For linear features, such hand cleaning will be targeted at sample excavation points. Deposits interpreted as natural subsoil should be tested by hand, or machine excavation to determine the validity of this interpretation. Where features are interpreted as natural (e.g., tree throws), a percentage of these features, agreed with the Archaeological Curator, will be hand excavated to establish the accuracy of the interpretation.

Test-pitting

- 4.6.20 Test pits may be hand or machine excavated under archaeological control. Sampling will be undertaken at regular interval depths, with all excavated soils to be dry sieved (if feasible) using a 10mm mesh for recovery of artefacts. A sample of the sieved soils shall be subject to a second phase of sieving using a 4mm mesh to test for presence of small artefacts, e.g., lithic micro-debitage. If significant assemblages of artefacts are identified during the second phase of sieving, then all of the context containing these artefacts will be re-sieved through the 4mm mesh. If the nature of the soils prevents dry sieving, then wet sieving will be used where logistically possible. If required, where soils are difficult to sieve, the material will be placed in clear piles to the side of each test pit and hand sorted.
- 4.6.21 The Archaeological Contractor's flint and finds specialist will identify the character and significance of archaeological finds during test pitting and will provide a summary of results on a regular basis. The summary results may inform the decision to increase the extent of the test pit areas or increase the sample density in review with the client and stakeholders.

Evaluation trenching

- 4.6.22 In evaluation trenching, there is the presumption of the need to cause minimal disturbance to the site; and that significant archaeological features (e.g., building slots or postholes) will be preserved intact even if fills are sampled.
- for linear features, 1.00m wide slots (min.) will be excavated across their width;
 - for discrete features (e.g., pits), typically 50% of their fills will be sampled. Consideration will be given to sampling 100% of discrete features depending on the site type and archaeological or historic period, for example, where Neolithic and Bronze Age sites often have a paucity of cultural remains, a

proportionate and targeted approach for 100% sampling may be adopted to maximise the potential for artefact recovery;

- any natural subsoil surface revealed will be hand cleaned and examined for archaeological deposits and artefacts. Sample excavation of any archaeological features revealed may be necessary in order to gauge their date and character; and
- where extensive occupation deposits or layers are identified, these will be sampled through the use of test pits, as agreed with the Archaeological Curator, to determine their date and character, and to determine whether earlier features are sealed by these deposits.

4.6.23 Metal detecting will be conducted during evaluation trenching by a named and experienced detectorist, before trenches are opened, during the excavation of features within the trenches, and of the spoil.

Excavation

4.6.24 Features will be excavated according to the following sampling strategy:

- features which are, or could be, interpreted as structural will be fully excavated;
- post holes and pits will be examined in section. Full excavation may be appropriate for specific problem-solving, complex depositional sequences and finds recovery. Full excavation may also be appropriate if pits or postholes are small;
- fabricated surfaces (e.g., yards and floors) will be fully exposed and cleaned, and representative sections excavated, to determine their construction and whether they seal earlier deposits. Where earlier features are suspected of underlying surfaces, the surface will be hand-lifted once it has been fully recorded. The collection of spatially distinct samples will be considered in order to investigate the use/function of an area and if different activity zones can be identified;
- all burial deposits and associated remains will be subject to 100% excavation and recorded in accordance with an agreed methodology;
- other features will be sufficiently examined to establish, where possible, their date and function. In general, 50% of the representative non-structural linear cut features; 10% of the fills of substantial linear features (e.g., ditches) will be excavated in order to establish the feature's character, date and morphology and to provide information on activities taking place in close proximity to the feature. These samples may be varied with the agreement of the Archaeological Curator to reflect specific site conditions observed during excavation;
- any stratified layers will be subject to hand excavation in 2.5m or 1.0m systematic, and gridded squares on the basis of the complexity and extent of the layers. The details of which will be agreed with the Archaeological Curator and set out within SSWSIs where required; and

- where complex sequences are observed during the excavation, an amended excavation strategy will be agreed with the Archaeological Curator.
- 4.6.25 The sampling excavation strategy will be reviewed continuously throughout the course of fieldwork and, if necessary, amended in order to take account of changing circumstances and understanding. Any changes or amendments will be agreed in advance of implementation with the Archaeological Curator and confirmed in writing. For any complex remains, a sampling strategy will be discussed and agreed with the Archaeological Curator.
- 4.6.26 Where insufficient dating material or information has been retrieved from a partially sectioned feature, further sampling may be undertaken, subject to consideration of residuality, or other factors that might limit the integrity of archaeological data, with reference to the research objectives, and in consultation and agreement with the Archaeological Curator. This may include bulk or column sampling for scientific dating, and/or environmental analysis (e.g., grain or faunal species) which may provide broad dates.
- 4.6.27 Guidelines for developing site-specific sampling strategies will be set out in the SSWSIs. The sampling strategy will be kept under review during the excavation work, and will consider the following:
- a robust spatial framework of excavation to provide an understanding of the distribution of past activities across the investigation area, including any 'special' deposits and any patterning in artefact distribution. Such a framework will consider the inter-relationship of major features;
 - the investigation of the intersections of features of archaeological date to obtain a phasing of the site; and
 - structural remains and other areas of significant and specific activity (domestic, industrial, religious, hearths, 'special'/ patterned deposits etc.) will be excavated, and recorded to a degree whereby their extent, date form, function and relationship to other features and deposits can be established.
- 4.6.28 Metal detector searches will take place during excavation, including the scanning of areas before they are stripped. Detecting will be undertaken by named, experienced metal detector users, with the SSWSI including reference to their relevant experience. Detecting equipment should be high specification.

Survey

- 4.6.29 Surveying will be done using a survey-grade GPS (e.g., Leica CS20/GS08 or Leica 1200).
- 4.6.30 The site grid will be accurately tied into the OS National Grid and located on the 1:2500 or 1:1250 map of the area. Elevations will be levelled to the Ordnance Datum.

Recording

- 4.6.31 A full and proper record (written, graphic and photographic, as appropriate) will be made for all work in line with the standards set out in the Sussex Archaeological Standards (2019) and relevant professional guidance listed in **paragraph 4.6.2**.
- 4.6.32 A register of all trenches, features, photographs, survey levels, small finds and human remains will be kept.
- 4.6.33 Unique context numbers will be issued for all features, layers, and deposits. Each will be individually documented on a context sheet and drawn in section and plan.
- plans of any archaeological features on-site are to be drawn at 1:20, or 1:50 depending on the complexity of the feature being recorded;
 - sections should be drawn at 1:10, or 1:20 depending on the complexity of the feature being recorded;
 - all levels should relate to Ordnance Datum;
 - a photographic record of the work will consist of digital images (minimum file size of 6MP) taken on a high-resolution digital camera; and
 - photographs will include general site shots and photographs of specific features. Photographs will include a scale, north arrow, site code and feature number (where relevant), and will be listed on the photograph register.

Environmental sampling

- 4.6.34 The on-site sampling policy will be inclusive, as the significance of individual features may not be fully understood, until wider patterns of spatial distribution and phasing are understood. As set out in the general methods above, arrangements for the processing of bulk samples taken for the recovery of environmental materials should be confirmed. The minimum bulk sample size will normally be 40 litres or 100% of the deposit if the deposit does not amount to 40l, though the final sampling and discard policy for individual sites will be agreed in consultation with the WCSS Archaeologist, and the Historic England Regional Scientific Advisor, and set out within the SWSI. Processing of samples should be undertaken while evaluation excavations are being undertaken in order that information can be fed back and inform the ongoing strategy.
- 4.6.35 Archaeological deposits will be sampled systematically in bulk samples. All samples will be collected from the fills of cut features, and from any other securely stratified deposits that have the potential to provide environmental or economic information, such as occupation layers or material accumulating on use surfaces. Particular emphasis will be placed on contexts that may supply material suitable for scientific dating of potential early medieval and prehistoric features. Decisions on sampling must also take account of stratigraphic factors, and consider the opportunity to employ chronological, and spatial controls, in the recovery of samples in order to generate environmental information of sufficient quality to meet the research objectives. Samples from homogenous fills will be taken from different locations within a fill (scatter sample), in line with technical guidance including Historic England guidance (2011) Fig.5).

- 4.6.36 Provision will be made for column and other appropriate samples to be taken for geoarchaeological assessment, and analysis as appropriate and in line with technical guidance including Historic England guidance (2011). Due consideration will be given to the collection of samples suitable for microfossil analysis, and other specialised analysis from suitable deposit sequences, that might inform the pattern of changing environmental conditions over time. Waterlogged and cess deposits will be specifically sampled for microfaunal and invertebrate analysis. Bulk samples will also be taken from any waterlogged deposits present for assessment of organic remains. Any organic artefacts that are retrieved during the excavation will be stored in appropriate conditions and assessed by a qualified archaeological conservator.
- 4.6.37 Industrial residues and waste from craft, and manufacturing processes will also be routinely sampled in line with guidance provided by Historic England (2011).
- 4.6.38 If required, a detailed site-specific sampling policy in line with the Sussex Archaeological Standards and professional guidance will be set out in the SSWSIs in consultation with the Historic England Regional [Science](#) Advisor for [Archaeological Science](#) (South East England). This will detail specific categories of material that are of interest for the individual sites and identify a programme of work to support the research objectives. Revised as appropriate throughout the excavation and post-excavation phases.

Artefact recovery and conservation

- 4.6.39 The recovery of material that can adequately date major archaeological phases is a key requirement. It is recognised that the incidence of artefacts may limit the quality of datable assemblages, and measures for scientific dating are also set out below. However, artefacts remain a key source of dating information.
- 4.6.40 All finds will be collected and processed unless variations are agreed with the Archaeological Curator during the course of excavation.
- 4.6.41 Ceramic finds should be processed, and initial assessment undertaken for dating and significance, concurrently with the excavation, to allow immediate assessment and input into decision-making.
- 4.6.42 Bulk finds such as pottery and animal bone will normally be collected by context. Where it is appropriate and following additional instruction, enhanced recovery techniques and sampling strategies for the recovery, and recording of waterlogged wood and timber, will be set out in respect of specific sites in the SSWSIs as appropriate.
- 4.6.43 Finds will be temporarily stored on-site and removed from site to a secure location as required. Waterlogged organic finds, such as wood and leather, should be removed from site on the day that they are excavated and transferred to a suitable location with facilities to maintain them without degradation of the material.
- 4.6.44 Finds and samples will be exposed, lifted, cleaned (with the exception of organic remains and ceramics encrusted with organic residues), conserved, marked, bagged, boxed and stored in line with the standards in:
- Leigh et al (1998): *First Aid for Finds*;

- ClfA (2020b): *Standard and Guidance for the Collection, Documentation, Conservation and Research of Archaeological Materials*;
- Historic England (2017): *Organic Residue Analysis and Archaeology: Guidance for Good Practice*; and
- The requirements of the recipient museum (the receiving museum will be identified in the relevant SSWSI).

4.6.45 A discard policy acceptable to the relevant receiving museum will only be implemented following quantification, assessment, and recommendation from artefactual and environmental specialists. Certain classes of material, such as post-medieval pottery and building material, may be discarded after recording if a representative sample is kept, but no finds will be discarded without the prior approval of the Archaeological Curator and the receiving museum. The discard policy will be consistent across the scheme.

4.6.46 Where finds require conservation, this will be done in accordance with the guidelines of the Institute for Conservation.

Scientific dating

4.6.47 Achieving coherent site chronologies across all phases of activity is a key objective, as this may help resolve problems in the identification of cultural activity during period when ceramics were not generally available to communities, or where features do not contain readily datable artefacts. A strategy for the selection of samples for scientific dating will be set out for each site in the relevant SSWSI, taking into consideration statistical procedures designed to enhance the accuracy of site chronologies, and in reference to relevant technical guidance including Historic England's (2022) *Radiocarbon Dating and Chronological Modelling: Guidelines and Best Practice*.

4.6.48 Samples of material suitable for scientific dating techniques including AMS C14 dating, archaeomagnetism (for example, charred seeds or in situ burnt clay from appropriate contexts), or thermoluminescence will be collected where available in accordance with SSWSIs. Where a specialist may be required to visit the site and collect samples this will be identified at the earliest opportunity.

4.6.49 Scientific dating will be a significant consideration during the post-excavation assessment and will inform the updated project design provided in **Section 4.9: Post-excavation work, reporting and dissemination**. The assessment of the chronology within a Bayesian framework should be considered if significant remains or sequences are identified.

4.6.50 Scientific dating, undertaken concurrent with the excavation fieldwork, may be required to inform levels of sampling of certain features or structures, such as wooden trackways. If there is the potential for significant waterlogged wooden remains to be found, a wood specialist may be required on site to records and sample remains, and dendrochronology specialists be used to support the dating of remains where necessary.

Geoarchaeological boreholes and test pitting

- 4.6.51 The methodology for geoarchaeological investigations will be set out in accordance with the Historic England guidelines for Environmental Archaeology (Historic England 2011) and Geoarchaeology (Historic England 2015a).
- 4.6.52 Geoarchaeological boreholes and test pits will target areas within the DCO Order Limits where other investigations have not previously been undertaken and also as a component of other archaeological investigations.
- 4.6.53 Boreholes will be undertaken by mechanical excavation (i.e. drilling rigs), following hand dug starter pits where necessary. Within deposits with geoarchaeological potential, continuous samples will be collected and cores recovered by techniques that cause minimal disturbance. Samples will be retrieved in plastic tubes and retained for off-site assessment. Gross description and preliminary interpretation of the soil and sediment will be made on site and an overview of the stratigraphy produced to characterise the deposit sequence and identify soil / sediment processes. The geoarchaeologist will keep a field log of the boreholes and a photographic record of the site and cores. Borehole locations will be surveyed, with each borehole position located to a six figure national grid reference, and levelled to metres above ordnance datum. The borehole samples will be sealed and labelled and kept in controlled storage during the assessment and analysis phases of the work.
- 4.6.54 Cores will be split or extruded, cleaned and recorded off-site according to standard sedimentary criteria (Jones et al 2004). The data from the geoarchaeological borehole investigation will be combined with any previous geotechnical information to reconstruct a site stratigraphy. Deposits should be viewed in terms of their landscape context and in relation to the wider terrain and sub-surface topography.
- 4.6.55 If suitable organic sediment is recovered, consideration will be given to carrying out radiocarbon (¹⁴C) dating, in order to provide a dating framework for the stratigraphic sequence. Where undertaken, the number of samples should be discussed in advance with Historic England's Science Advisor.
- 4.6.56 The presence/absence of environmental remains will be assessed by choosing the 'best' borehole sequence (i.e. that retained unopened from site), sub-sampling key horizons and/or deposits and examining for a range of environmental proxies. Sub-samples will be submitted to external specialists for the assessment of microfossils (such as pollen, ostracods and diatoms).
- 4.6.57 The combined information on the terrain, buried topography, site stratigraphy and palaeoenvironmental will be used to preliminary reconstruct past environmental changes and depositional processes across the site. This information will be used to assess the potential for further detailed palaeoenvironmental work.

4.7 Procedures in respect of statutorily designated remains

Human remains

- 4.7.1 Treatment of any human remains encountered in the course of archaeological fieldwork, including their removal, will be undertaken in accordance with Article 19 of the DCO.
- 4.7.2 In the event of archaeological human remains being encountered they will be left in situ, covered and protected and the Coroner, and the relevant Archaeological Curator for that given stage of the scheme will be informed.
- 4.7.3 Human remains will be left in situ during evaluation work, unless considered at risk or there is value in lifting the human remains to guide future mitigation. During the mitigation phase of works, it is expected that all human remains will be fully excavated, and that this will be done at the earliest opportunity following their discovery.
- 4.7.4 The Archaeological Contractor will arrange receipt of the appropriate documentation and License from the Department of Justice, to enable the legal removal of any human remains encountered in the works. The Archaeological Contractor is to comply with the conditions of any issued License.
- 4.7.5 If removal is agreed, all subsequent work will comply with relevant regulations (including local authority environmental health regulations) and technical guidance (e.g., Historic England, 2018 and ClfA and BABAO, 2017).
- 4.7.6 The Archaeological Contractor will have available within the team, or on call, an appropriately qualified and experienced osteo-archaeologist, to supervise the excavation and removal of human remains from the site. The Archaeological Contractor will use an appropriately qualified and experienced archaeological conservator to assist where appropriate in the lifting of human remains, and grave goods/cremation vessels.

Protected military remains

- 4.7.7 The Protection of Military Remains Act 1986 applies to any aircraft which have crashed while in military service, and to certain wrecks of vessels which were wrecked while in military service. Protection of Military Remains Act 1986 makes it an offence to disturb, move, or unearth military remains which have been designated.
- 4.7.8 There are no designated protected areas or controlled sites within the site boundary, and there are no records of military vessels or aircraft having been lost within the proposed DCO Order Limits.
- 4.7.9 Where remains are observed during archaeological investigation or construction work, intrusive work should cease, and the site be secured while consultation with the Ministry of Defence and the Archaeological Curators is undertaken and arrangement agreed for their recording, removal and appropriate treatment is agreed.

Treasure

[4.7.10](#) Any items which are recovered which could be deemed as treasure will be subject to the provisions of the *Treasure Act 1996*, and the *Treasure (Designation) Order 2002*. Such material shall normally be removed from site to a secure location at the end of the working day on which it is found. In addition to the statutory authorities, the relevant Portable Antiquities Officer should be informed.

[4.7.10](#)[4.7.11](#) In the event of the discovery of archaeological finds which fall under the *Treasure Act 1996*, every effort should be made to ensure that treasure is donated to or acquired by the relevant museum and are thus made available for ongoing exhibition and research as part of the wider project archive. In the first instance, ~~£~~The Applicant will make every effort to encourage and facilitate the donation of treasure items by the finders/landowner to the appropriate museum.

4.8 Finds Processing

4.8.1 All finds processing, conservation work and storage of finds must be carried out in compliance with the Chartered Institute for Archaeologists Guidelines for the collection, documentation, conservation and research of archaeological materials (CIfA 2020b). Finds should not be left unprocessed on site during the completion of the fieldwork.

4.8.2 The deposition and disposal of artefacts must be agreed with the legal owner and the recipient museum prior to the work taking place. Where the landowner decides to retain artefacts, adequate provision must be made for recording them. Details of land ownership should be provided by RED.

4.8.3 All retained artefacts must be cleaned and packaged in accordance with the requirements of the recipient museum. Further guidance is set out in **Section 4.9**.

4.9 Post-excavation work, reporting and dissemination

Project Archive

4.9.1 Before the commencement of fieldwork, contact should be made with the landowners and recipient museum to make the relevant arrangements. Details of land ownership should be provided by RED.

[4.9.2](#) The Archaeological Contractor will specify the receiving museum, and confirm that arrangements for receipt of archaeological material, and project archives, have been agreed before the commencement of fieldwork. This will include identification of existing capacity for storage of archaeological material at the receiving museum and any arrangements required to be made between the Applicant and the receiving museum to expand that capacity to accommodate finds arising in connection with the authorised project including any necessary contributions from the Applicant towards the same. Given the scale of the project and anticipated size of the archaeological archive, if deposition fees are unable to cover costs, it is anticipated that contributions from the Applicant beyond the deposition fees may be required by the receiving museum towards:

- [Shelving units in order to ensure physical storage capacity can meet the anticipated requirements of the Project once these are established; and](#)
- [A designated documentation officer for a period defined by the requirements of the Project, to ensure sufficient staff capacity to document the Project archive.](#)

[4.9.24.9.3](#) [Funds for the archaeological archive deposition fees will be ringfenced to ensure archiving obligations can be fulfilled.](#)

[4.9.34.9.4](#) The archive and the finds must be deposited in the receiving museum, subject to landowner permission, within six months of completion of the post-excavation work and report.

[4.9.44.9.5](#) The Archaeological Curator will require confirmation that the archive has been submitted in accordance with the SSWSI.

Reporting

[4.9.54.9.6](#) Reports will be produced for all archaeological survey and fieldwork undertaken. The type of report produced will reflect the nature of the investigations, as detailed below. Reports must also be produced for all archaeological investigations undertaken.

Rapid Identification Survey

[4.9.64.9.7](#) The reporting of the Rapid Identification Survey will comprise a plan of the survey areas noting any archaeological features, areas of disturbance, or findspots observed during the survey.

[4.9.74.9.8](#) This plan will be supported by summary text describing each observation noted on the survey plan and will set out any additional evidence that has supported interpretation of these observations. The plan will then set out a summary of the anticipated presence of archaeological remains within the survey area and recommendations for further archaeological works. Site photographs will be used to illustrate each identified feature or observation as appropriate.

[4.9.84.9.9](#) Appropriate supporting evidence will typically include, but not be limited to, Light Detection and Ranging digital terrain models, results of archaeological trenching or geophysical survey in adjacent fields and historic mapping.

Geophysical Survey

[4.9.94.9.10](#) The interpretation of the survey data will be undertaken by an experienced archaeological geophysicist. This individual will also be knowledgeable of the prevailing ground conditions within the survey area that could affect the interpretation.

[4.9.104.9.11](#) Reporting of the geophysical survey results will be as per the existing approved WSI (WSP, 2021).

Fieldwalking survey

[4.9.114.9.12](#) Where fieldwalking survey is undertaken, a report will be produced detailing the survey results. The report will include a plan of the survey area with location of recorded finds. The report will also acknowledge the limitations of the survey. The report will be made available to the Archaeological Curator/s on completion of the survey to allow for further evaluation and mitigation strategies to be developed and agreed with the Archaeological Curator.

[4.9.124.9.13](#) The archaeological contractor will submit a digital version of the report with Online Access to the Index of Archaeological Investigations⁵. A copy of the full summary sheet shall be included as an appendix to the report.

Evaluation trenching and test-pitting

[4.9.134.9.14](#) Where trial trenching and test-pitting is undertaken, an initial assessment of the results of the works will be undertaken, and an interim report will be made available to the Archaeological Curator within six weeks following completion of trenching or as agreed in the SSWSI.

[4.9.144.9.15](#) The purposes of the interim report are to:

- confirm the completion of fieldwork;
- provide an indicative timetable for detailed post-excavation assessment and reporting; and
- signpost any project findings to inform research and development management pending the production of the full report.

[4.9.154.9.16](#) This interim summary reporting will incorporate the following:

- mapping of the results of the works undertaken;
- key findings set out as bullet points highlighting any key observations and implications for the agreed Research Agenda;
- an updated project design with indicative timetable compiled and agreed for post-excavation assessment and full reporting; and
- indicative scope of Post Excavation Assessment.

[4.9.164.9.17](#) It is intended that the interim report presents only a very brief synthesis of the results of the fieldwork to allow for early dissemination of summary results and project planning. Tables or bullet points will be used to provide a concise but intelligible summary. Detailed plans and maps or analysis of stratigraphic, artefactual or ecofactual material will not be included.

[4.9.174.9.18](#) Full and detailed reporting of the results of the trial trenching and test-pitting should be produced within eight weeks of the completion of fieldwork, except where otherwise agreed by the Archaeological Curator (e.g., where further works are carried out immediately and reporting of trial trenching is more logically deferred to the production of the final reporting of archaeological fieldwork).

⁵ Available at: <http://www.oasis.ac.uk/> [Accessed 09 December 2022].

[4.9.184.9.19](#) A draft of the full illustrated report will be compiled on the results of the fieldwork and assessment of the artefacts, palaeoenvironmental samples etc. The report will include: a non-technical summary; an introduction to the project; an archaeological and historical background; an objective text account of the archaeological results, supported by tabulated data that enables appropriate re-assessment of the results by other parties without recourse to the project archive; a quantification and assessment of the finds and environmental materials; and an interpretative conclusion regarding the archaeological content of the site. The report will include appropriate illustrations of the site, its context and individual trenches, features and contexts where appropriate.

[4.9.194.9.20](#) A single hard copy, and a digital version of the revised report will be submitted to the Archaeological Curator upon receipt of comments on the draft report.

[4.9.204.9.21](#) Project data will be submitted containing image files in JPEG or TIFF format, digital text files in Microsoft Word format, and illustrations in an up-to-date AutoCAD format. A fully collated version of the report will be included in PDF format.

[4.9.214.9.22](#) A hard copy of the report will be lodged with the WCSS HER upon completion.

[4.9.224.9.23](#) The Archaeological Contractor will submit a digital version of the report with Online Access to the Index of Archaeological Investigations. A copy of the full summary sheet shall be included as an appendix to the report.

[4.9.234.9.24](#) The archive will consist of the report, within which documentary and raw and processed digital data records generated during the fieldwork, will be presented. This will include a georeferenced .dxf or GIS shapefile copy of the interpretation of the results for the West Sussex HER. This report will be part of the larger project archive.

Geoarchaeological boreholes and test pitting

[4.9.244.9.25](#) Where geoarchaeological investigations are undertaken, a report will be produced summarising the results; illustrating the location of the core samples within the wider distribution of buried deposits in plan and in schematic section; identifying their potential for past landscape reconstruction; and recommending a proposal for any further analysis that might be appropriate. The final report will be subject to same dissemination and archive requirements as outlined for evaluation and test-pitting reporting.

Post-excavation assessment

Purpose

[4.9.254.9.26](#) The intention of carrying out a Post Excavation Assessment (PXA) is to provide a summary of the results of the fieldwork and material recovered during the excavation, to consider its potential to address archaeological questions, and to allow costed recommendations to be made for further investigation of artefacts and environmental material recovered during excavation and the final reporting,

which will be carried out following the completion of all of the archaeological fieldwork.

[4.9.264.9.27](#) The PXA is intended to be a summary document rather than a detailed record. However, the level of reporting will provide sufficient detail to allow recommendations to be made, fully costed and justified.

[4.9.274.9.28](#) Where works are carried out by multiple archaeological contractors, arrangements for coordination of separate PXAs, or production of a single collated PXA will be agreed with the Archaeological Curator in advance of fieldwork commencing.

[4.9.284.9.29](#) Excavation plans for each Site will be supplied to the Archaeological Curator in a georeferenced GIS compatible format, e.g., shapefiles.

[4.9.294.9.30](#) Drafts of the PXA will be provided for review by the Archaeological Curator, followed by a single hard master-copy, and a digital version of the final report, which will be submitted after the receipt of comments on the draft reports. The PXA will also include a completed OASIS form, appended.

Form

[4.9.304.9.31](#) The PXA will comprise:

- introduction:
 - ▶ scope of the Proposed Development;
 - ▶ circumstances and dates of fieldwork and previous work; and
 - ▶ comments on the organisation of the report.
- original research aims;
- summary of the documented history of the site(s);
- interim statement on the results of fieldwork;
- summary of the site archive and work carried out for assessment:
 - ▶ site records: quantity, work done on records during post- excavation assessment;
 - ▶ finds: factual summary of material and records, quantity, range, variety, preservation, work done during post-excavation assessment. All artefacts must be fully quantified by context, material type and date, and presented in a tabular format;
 - ▶ environmental material (recovered by hand): factual summary of quantity, range, variety, preservation, work done on the material during the PXA, including quantification by context and material type in tabular format, of human and animal bone, shell, wood etc.
 - ▶ environmental material (recovered through sampling): factual summary of quantity, range, variety, preservation, work done on the material during the PXA, including quantification by context, sample number, and type of sample (e.g., bulk, dendrochronological, monolith) in tabular format. The

percentage of each sample that has been a) processed and b) analysed must be described; and

- ▶ documentary records: list of relevant sources discovered, quantity, variety, intensity of study of sources during post- excavation assessment.
- potential of the Data:
 - ▶ an appraisal of the extent to which the site archive might enable the data to meet the research aims of the Proposed Development, sub-divided according to the research aims of the Proposed Development rather than the form of the data;
 - ▶ a statement of the potential of the data in developing new research aims, to contribute to other projects and to advance methodologies; and
 - ▶ summary statement of the significance of the data.
- additional information will normally include:
 - ▶ supporting illustrations at appropriate scales;
 - ▶ sufficient supporting data, tabulated or in appendices, and/or details of the contents of the project archive, to permit the interrogation of the stated conclusions; and
 - ▶ index, references and disclaimers.

Updated Project Design

Purpose

[4.9.314.9.32](#) An Updated Project Design (UPD) for the whole Rampion 2 archaeological project will be prepared on completion of the PXA reports, providing a scope and programme for the analysis, reporting, publication and dissemination of the findings. It will bring together the results of all stages of the archaeological project and provide a framework for further investigation of the material recovered and results.

[4.9.324.9.33](#) A draft of the UPD will be provided for review by the Archaeological Curator, followed by a single hard master-copy, and a digital version of the final report, which will be submitted after the receipt of comments on the draft report. The UPD will also include a completed OASIS form, appended.

Form

[4.9.334.9.34](#) The UPD will include:

- Proposals for the further recording, analysis or other work required on the stratigraphic data, artefacts and ecofacts;
- Sufficient supporting data, tabulated or in appendices, and/or details of the contents of the Rampion 2 archive, to permit the interrogation of the stated conclusions; and

- Proposed discard strategy;
- Proposals for scientific dating (potentially an initial suite of dates and a second after provisional results from the artefact and ecofact analysis are received);
- Proposals for a Bayesian analysis to refine chronologies, with regard to the selection of contexts and samples for scientific dating.
- Proposals for comparative analysis of the geophysical survey and excavation results, particularly correlations of results by size/type of features; archaeological period; and underlying geology and soil types;
- Proposals for further analysis;
- Proposals for final reporting and publication, including format/medium and a synopsis of the content;
- Proposals for any further work required on the project archive, such as consolidation or conservation;
- Task lists, programme, costings, and timescale for the proposed further work, to include publication (both academic and popular) and archive deposition;
- Details of the proposed project team;
- Proposals for continuing liaison and communication with the Archaeological Curator during the remaining post-excavation process.

Online Access to the Index of Archaeological Investigations (OASIS)

[4.9.344.9.35](#) The overall aim of the OASIS project is to provide an online index to the mass of archaeological grey literature that has been produced as a result of the advent of large-scale developer funded fieldwork.

[4.9.354.9.36](#) The archaeological consultant or contractor must therefore complete the Online Access to the Index of Archaeological Investigations form⁶ in respect of the scope of works set out in each SSWSI.

[4.9.364.9.37](#) Once a report has become a public document by submission to or incorporation into the West Sussex HER, West Sussex HER will validate the Online Access to the Index of Archaeological Investigations form thus placing the information into the public domain on the OASIS website. The Archaeological Contractor must indicate that they agree to this procedure within the method statement submitted to the Archaeological Curator.

Publication

[4.9.374.9.38](#) Formal publication of the results of some or all of the fieldwork is likely to be required. The results of the works will be reviewed, and decisions taken on the scope and level of any publication(s) following the submission of the PXA reports and review. This will consider the most appropriate route for dissemination, and the scope of any dissemination, including consideration of whether thematically or

⁶ Available at: <http://ads.ahds.ac.uk/project/oasis/> [Accessed 09 December 2022].

chronologically related sites should be reported together. Details of publication will be addressed in the UPD.

~~4.9.38~~4.9.39 Provision will be made for full grey literature research archive reports for all sites that do not proceed to publication.

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5. Health, Safety, Security and Environment

- 5.1.1 Health and Safety will take priority over all other requirements. A conditional aspect of all archaeological work is both safe access to the area of work, and a safe working environment. All relevant health and safety legislation, regulations, and codes of practice should be respected and adhered to. Site-specific risk assessments will be carried out in respect of each element of the mitigation fieldwork prior to commencement of the fieldwork, and copies sent to the representatives of the client for approval.
- 5.1.2 Where conflict between Health and Safety and progressing the archaeological project is identified, every effort will be made by RED and the Main Works Contractor(s), in discussion with the archaeological contractors and Archaeological Curator, to identify a safe way of completing the archaeological investigations to appropriate standards.
- 5.1.3 Copies of the successful Archaeological Contractor's insurance policies will be required in advance by the client or their nominated representative.
- 5.1.4 The appointed Main Works Contractor(s) will take responsibility for securing the excavation areas (e.g., by fencing), provision of welfare, backfilling and reinstatement of the excavation areas and the removal of materials brought onto the site during the excavation.
- 5.1.5 Service plans will be supplied by the Main Works Contractor(s). Any archaeological intervention must respect all requirements for safe stand-off distances and working practices in regard of these features.
- 5.1.6 Any specific site security requirements will be set out within the SSWSIs, and these will be discussed and agreed with RED and the Main Works Contractor(s).

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6. Monitoring

- 6.1.1 Archaeological monitoring arrangements will be set out separately within the SSWSIs in regard to the different stages in the fieldwork.
- 6.1.2 The Archaeological Curator will be informed of the start date and timetable in advance of any work commencing.
- 6.1.3 Reasonable access to the site will be afforded to the Archaeological Curator, or their nominee at all times, for the purposes of monitoring the archaeological excavations.
- 6.1.4 Regular communication between the ACoW, Archaeological Contractor, the Archaeological Curator, RED and other interested parties must be maintained to ensure the aims and objectives of this Outline WSI and the SSWSIs are achieved.

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7. Public Outreach

- 7.1.1 It is recognized that the archaeological works will generate significant public interest. In response to this, a programme of public outreach will be instigated.
- 7.1.2 A proportionate programme of outreach activities, commensurate to the findings of the archaeological mitigation works, will be provided by RED. The scope of these works will [be developed in conjunction with the WSCC archaeologist and the relevant local authority archaeological curators, and will](#) be defined in a method statement, provided to the relevant consultees for their agreement, in advance of the commencement of the archaeological mitigation works.
- 7.1.3 The following activities are ~~provisionally~~ suggested as appropriate, proportionate and deliverable methods of providing public outreach:
- [Reporting important discoveries via available social media and/or other channels to a range of audiences;](#)
 - ~~and p~~Promoting specific engagement events (e.g., talks, open days etc) at an appropriate phase via available social media and/or other channels;
 - Press releases to local media where particularly significant remains are identified or where specific events are to be promoted and can appropriately be communicated. These will be coordinated and issued through the wider Rampion 2 communications programme;
 - Publicly accessible talk/s, provided by the Archaeological Contractor(s) to local interest groups, such as schools, Parish groups/councils, discussing the results of fieldwork;
 - An invitation to specialist broadcast media production(s), for example BBC Digging for Britain, to cover key findings or major set piece excavations in order to reach a national audience;
 - Where reasonably practicable in a safe manner, open days. This would be most relevant to any larger set-piece excavations; and
 - Production of popular publications (additional to the formal publication of results) describing the significant discoveries for a general audience. Any popular publications will be linked to school curriculum at KS2, KS3, KS4.
- 7.1.4 The feasibility and planning of any outreach activity should give due consideration to site safety, public safety, and the avoidance of damage to archaeological sites.

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8. Glossary of terms and abbreviations

Table 8-1 Glossary of terms and abbreviations

Term (acronym)	Definition
ADC	Arun District Council
ACoW	Archaeological Clerk of Works
AMS C14	Accelerated Mass Spectrometry (AMS) carbon-14 dating technique.
Baseline	Refers to existing conditions as represented by latest available survey and other data which is used as a benchmark for making comparisons to assess the impact of development.
Baseline conditions	The environment as it appears (or would appear) immediately prior to the implementation of the Proposed Development together with any known or foreseeable future changes that will take place before completion of the Proposed Development.
Bronze Age	<p>This period follows on from the Neolithic and is characterized by the increasing use of Bronzework. It is subdivided in the Early, Middle and Late Bronze Age.</p> <p>Archaeological period lasting from 2,600-700 BC</p>
CDC	Chichester District Council
Chartered Institute for Archaeologists (CIfA)	CIfA is the leading professional body representing archaeologists working in the UK and overseas.
Development Consent Order (DCO)	This is the means of obtaining permission for developments categorised as Nationally Significant Infrastructure Projects, under the Planning Act 2008.
Development Consent Order Application	An application for consent to undertake a Nationally Significant Infrastructure Project made to the Planning Inspectorate who will consider the application and make a recommendation to the Secretary of State, who will decide on whether development consent should be granted for the Proposed Development.
Early Medieval	This archaeological period dates from the breakdown of Roman rule in Britain in c. 410 AD to the Norman invasion

Term (acronym)	Definition
	in 1066 and is to be used for monuments of post-Roman, Saxon and Viking date.
Early Prehistoric	Archaeological period lasting from 50,000 to 4,000 BC, for monuments which are characteristic of the Palaeolithic to Mesolithic but cannot be specifically assigned.
Embedded environmental measures	Equate to 'primary environmental measures' as defined by Institute of Environmental Management and Assessment (2016). They are measures to avoid or reduce environmental effects that are directly incorporated into the preferred masterplan for the Proposed Development.
Environmental Impact Assessment (EIA)	The process of evaluating the likely significant environmental effects of a proposed project or development over and above the existing circumstances (or 'baseline').
Environmental Statement (ES)	The written output presenting the full findings of the Environmental Impact Assessment (EIA).
Event Unique Identification (EvUID)	This is the reference number or code for previous archaeological events recorded within the respective Historic Environment Records.
Formal consultation	Formal consultation refers to statutory consultation that is required under Section 42 and Section 47 of the Planning Act 2008 with the relevant consultation bodies and the public on the preliminary environmental information.
GIS	Geographic Information System software
Good Practice in Planning Advice (GPA) 2	Good Practice in Planning Advice 2 (GPA 2) Managing Significance in Decision-Taking in the Historic Environment (Historic England, 2015b)
Good Practice in Planning Advice (GPA) 3	Good Practice in Planning Advice 3 (GPA 3) The Setting of Heritage Assets 2 nd Edition (Historic England, 2016b)
GPS	Global Positioning System.
HDC	Horsham District Council
HDD	Horizontal Directional Drill
HER	Historic Environment Record

Term (acronym)	Definition
Heritage	The historic environment and especially valued assets and qualities such as historic buildings and cultural traditions.
Historic England	The public body that champions and protects England's historic places.
Horizontal Directional Drill (HDD)	An engineering technique avoiding open trenches.
Impact	The changes resulting from an action.
Informal consultation	Informal consultation refers to the voluntary consultation that RED undertake in addition to the formal consultation requirements.
Iron Age	This period follows on from the Bronze Age in 800 BC and is characterized by the use of iron for making tools and monuments such as hillforts and <i>oppida</i> . The Iron Age ends with the Roman invasion in 43 AD.
Km	kilometres
Likely Significant Effects	It is a requirement of Environmental Impact Assessment Regulations to determine the likely significant effects of the Proposed Development on the environment which should relate to the level of an effect and the type of effect.
Listed Building (LB)	A building which is for the time being included in a list compiled or approved by the secretary of state, any object or structure fixed to the building; any object or structure within the curtilage of the building which, although not fixed to the building, forms part of the land and has done so since before 1 July 1948 shall be treated as part of the building.
LPA	Local Planning Authority
Medieval	The Medieval period, or Middle Ages, begins with the Norman invasion in 1066 and ends with the dissolution of the monasteries in 1540.
Mesolithic	The Middle Stone Age, lasting from 10,000 – 4,000 BC, falling between the Palaeolithic and the Neolithic; marks the beginning of a move from a hunter gatherer society towards food producing society.

Term (acronym)	Definition
Monument Unique Identification (MonUID)	This is the reference number or code for known assets, sites and artefacts contained within the Historic Environment Records.
MSDC	Mid Sussex District Council
National Heritage List for England (NHLE)	It is the only official, up to date, register of all nationally protected historic buildings and sites in England – listed buildings, scheduled monuments, protected wrecks, registered parks and gardens, and battlefields.
Nationally Significant Infrastructure Project (NSIP)	Nationally Significant Infrastructure Projects are major infrastructure developments in England and Wales which are consented by DCO under the Planning Act 2008. These include proposals for offshore wind farms with an installed capacity over 100MW.
Neolithic	This period follows on from the Palaeolithic and the Mesolithic in 4,000 BC and is itself succeeded by the Bronze Age in 2,600 BC. This period is characterized by the practice of a farming economy and extensive monumental constructions.
NHLE	National Heritage List for England
NPPF	National Planning Policy Framework
NPS	National Policy Statement
OASIS	Online Access to the Index of Archaeological Investigations (OASIS).
Ordnance Survey (OS)	Ordnance Survey is the national mapping agency for Great Britain. Since 1 April 2015 part of Ordnance Survey has operated as Ordnance Survey Ltd, a government-owned company, 100% in public ownership.
Palaeolithic	The period is defined by the practice of hunting and gathering and the use of chipped flint tools. This period, lasting between 50,000 – 10,000 BC, is usually divided up into the Lower, Middle and Upper Palaeolithic.
Preliminary Environmental Information Report (PEIR)	The written output of the Environmental Impact Assessment undertaken for the Proposed Development. It is developed to support formal consultation and presents the preliminary findings of the assessment to allow an informed view to be developed of the Proposed Development, the assessment approach that has been undertaken, and the preliminary conclusions on the likely

Term (acronym)	Definition
Planning Inspectorate	significant effects of the Proposed Development and environmental measures proposed.
Plough soil	Agricultural deposit formed as a result of the modification of soils by humans for agricultural.
Post medieval	Begins with the dissolution of the monasteries in 1540 and ends with the death of Queen Victoria in 1901. Use more specific period where known.
Proposed Development	The development that is subject to the application for development consent, as described in Chapter 4: The Proposed Development, Volume 2 of the ES (Document Reference: 6.2.4).
Proposed DCO Order Limits	The proposed DCO Order Limits combines the search areas for the offshore and onshore infrastructure associated with the Proposed Development. It is defined as the area within which the Proposed Development and associated infrastructure will be located, including the temporary and permanent construction and operational work areas.
PXA	Post Excavation Assessment
RED	Rampion Extension Development Limited
Roman	Traditionally begins with the Roman invasion in 43AD and ends with the emperor Honorius directing Britain to see to its own defence in 410 AD.
RPG	Registered parks and garden
Scoping Opinion	A Scoping Opinion is adopted by the Secretary of State for a Proposed Development.
Scoping Report	A report that presents the findings of an initial stage in the Environmental Impact Assessment process.
Secretary of State	The Minister for Department for Energy Security and Net Zero (DESNZ).

Term (acronym)	Definition
SERF	South East Historic Environment Research Framework
Significance	A measure of the importance of the environmental effect, defined by criteria specific to the environmental aspect.
SM	Scheduled Monument
SNDP	South Downs National Park
SNDPA	South Downs National Park Authority
SSWSI	Site-specific Written Scheme of Investigation
The Applicant	Rampion Extension Development Limited (RED)
West Sussex Historic Environment Record (HER)	This record collection provides details of all known archaeological assets, sites and former archaeological events within West Sussex.
WSCC	West Sussex County Council
WSI	Written Scheme of Investigation
WTGs	Offshore Wind Turbine Generators
UPD	Update Project Design

9. References

Chichester District Council, East Sussex County Council, West Sussex County Council, (2019). *Sussex Archaeological Standards 2019*. Available at <https://www.eastsussex.gov.uk/media/mpsjdjmm/ar-sussex-archaeological-standards-2019-final-accessible-version-nov-2022.pdf> [Accessed 04 April 2024]

ClfA (2023a) *Standard for archaeological excavation*. Available at:

[REDACTED]
[REDACTED] [Accessed 04 April 2024]

ClfA (2023b) *Universal guidance for archaeological excavation*. Available at:

[REDACTED]
[REDACTED] [Accessed 04 April 2024]

ClfA (2023c) *Standard for archaeological field evaluation*. Available at:

[REDACTED]
[REDACTED] [Accessed 04 April 2024]

ClfA (2023d) *Universal guidance for archaeological field evaluation*. Available at:

[REDACTED]
[REDACTED] [Accessed 04 April 2024]

ClfA (2023e) *Standard for archaeological monitoring and recording*. Available at:

[REDACTED]
[REDACTED] [04 April 2024]

ClfA (2023f) *Universal guidance for archaeological monitoring and recording*. Available at:

[REDACTED]
[REDACTED] [04 April 2024]

ClfA (2022) *Code of conduct: professional ethics in archaeology*. Available at:

[REDACTED]
[REDACTED] [Accessed 04 April 2024]

ClfA (2020a) *Standard and Guidance for archaeological geophysical survey*

[REDACTED] Accessed
04 April 2024]

ClfA (2020b) *Guidelines for the Collection, Documentation, Conservation and Research of Archaeological Materials*. Available at:

[REDACTED] [Accessed 04
April 2024]

ClfA (2020c) *Standard and guidance for the creation, compilation, transfer and deposition of archaeological archives*. Available at:

[REDACTED] [Accessed
04 April 2024]

ClfA and BABAO (2017) *Updated Guidelines to the Standards for Recording Human Remains*. Available at:

[Redacted]
[Redacted] [Accessed 04 April 2024]

Historic England (2023a) *Curating the Palaeolithic*. Available at: <https://historicengland.org.uk/images-books/publications/curating-the-palaeolithic/heag313-curating-the-palaeolithic/> [Accessed 08 March 2024]

Historic England (2023b) *Managing Lithic Sites*. Available at: <https://historicengland.org.uk/images-books/publications/managing-lithic-sites/heag318-managing-lithic-sites/> [Accessed 08 March 2024]

Historic England (2017) *Organic Residue Analysis and Archaeology*. Available at: <https://historicengland.org.uk/images-books/publications/organic-residue-analysis-and-archaeology/> [Accessed 04 April 2024]

Historic England. (2018). *The Role of the Human Osteologist in an Archaeological Fieldwork Project*. Swindon. Historic England.

Historic England. (2016a). *Preserving Archaeological Remains. Decision-taking for Sites under Development*. Available at: <https://historicengland.org.uk/images-books/publications/preserving-archaeological-remains/heag100a-preserving-archaeological-remains/> [Accessed 04 April 2024]

Historic England. (2016b). *Good Practice in Planning Advice 3 (GPA 3) The Setting of Heritage Assets 2nd Edition*

Historic England. (2015a). *Geoarchaeology. Using earth sciences to understand the archaeological record*. Available at: <https://historicengland.org.uk/images-books/publications/geoarchaeology-earth-sciences-to-understand-archaeological-record/heag067-geoarchaeology/> [Accessed 04 April 2024]

Historic England. (2015b). *Good Practice in Planning Advice 2 (GPA 2) Managing Significance in Decision-Taking in the Historic Environment*

Historic England, (2011). *A Guide to the Theory and Practice of Methods, from Sampling and Recovery to Post-excavation (second edition)*. Available at: <https://historicengland.org.uk/images-books/publications/environmental-archaeology-2nd/> [Accessed 04 April 2024]

Leigh, D, (1998). *First Aid for Finds: Practical Guide for Archaeologists United Kingdom Institute for Conservation of Historic & Artistic Works*. Archaeology Section.

Planning Act 2008, (2008). [Online]. Available at: <https://www.legislation.gov.uk/ukpga/2008/29/contents> [Accessed 04 April 2024].

Schmidt, A. Linford, P. Linford, N. David, A. Gaffney, C. Sarris and A. Fassbinder, J. (2016). *EAC Guidelines for the Use of Geophysics in Archaeology: Questions to Ask and Points to Consider*. EAC Guidelines 2, Archaeolingua, Belgium.

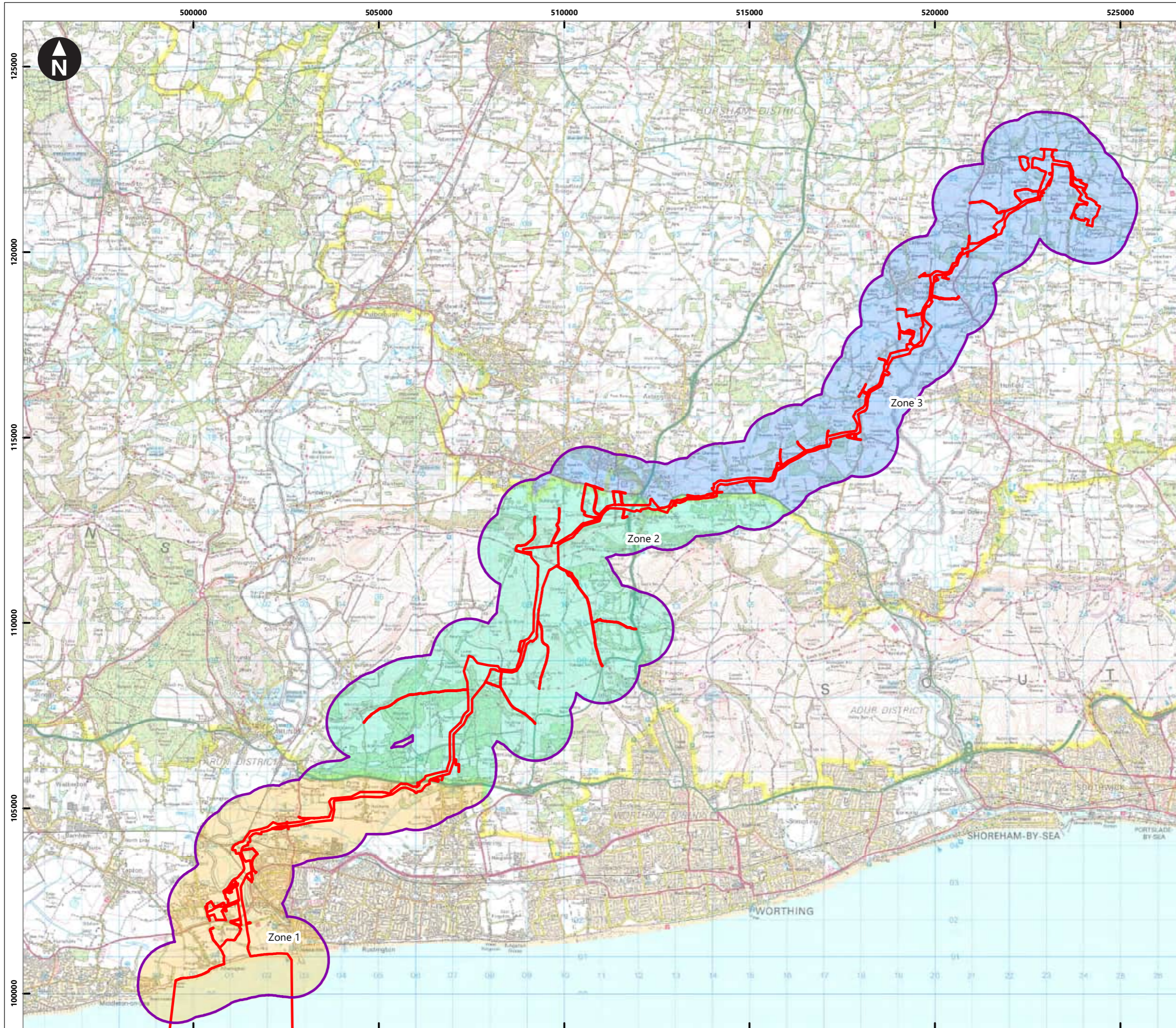
The Treasure (Designation) Order 2002. [Online] Available at: <https://www.legislation.gov.uk/uksi/2002/2666/introduction/made> [19 December 2022].

Treasure Act 1996. [Online] Available at:
<https://www.legislation.gov.uk/ukpga/1996/24/introduction> [Accessed 19 December 2022].

WSP, (2021). *Rampion 2 Wind Farm Onshore Archaeological Geophysical Survey Written Scheme of Investigation*. WSP, London.

Figures

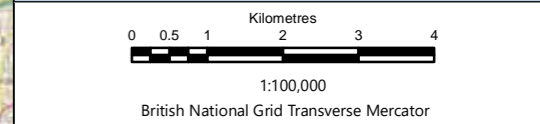
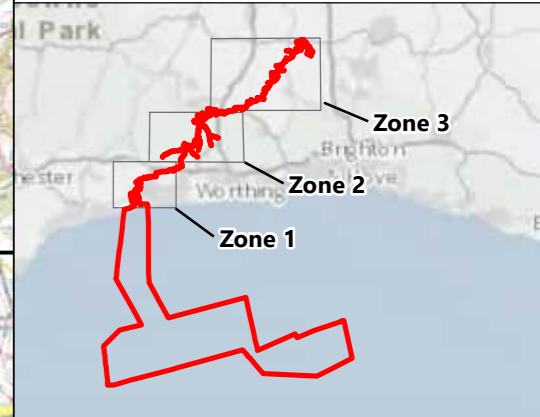
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Key

- Proposed DCO Order Limits
- 1km study area
- Zone 1
- Zone 2
- Zone 3



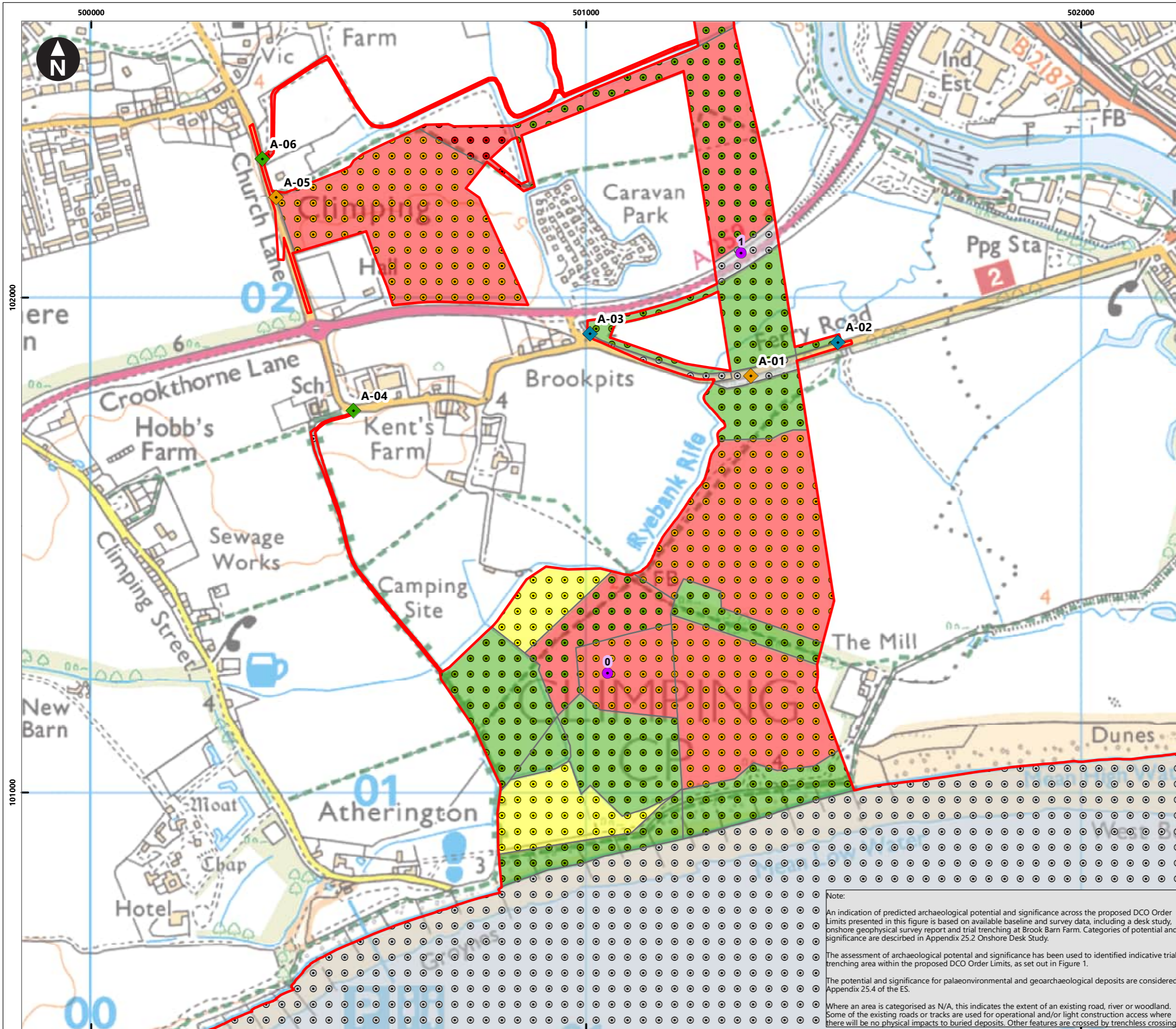
Rampion Extension Development


Rampion 2 Offshore Wind Farm
 Figure 1 Proposed DCO Order Limits and Landscape Zones

Outline Onshore Written Scheme of Investigations

System Identifier: 42285-WSPE-ES-ON-FG-OH-0019	Version: 1.0
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Company: WSP	Drawn By: SHEPS	Chk/Aprvd: ASTBD	Drawn Date: 13/07/2023	Status: Final
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Key

Proposed DCO Order Limits

Archaeological potential

- Very High
- High
- Medium
- Low
- Uncertain
- N/A

Heritage significance

- High
- Medium
- Low
- Very Low
- Uncertain
- N/A

Onshore cable route KM points

- Onshore Substation connection
- Onshore cable route

Access from public highway

- Construction
- Construction & operational
- Light construction
- Light construction & operational
- Operational

Scale: 0 0.045 0.09 0.18 0.27 0.36 Kilometres
 1:7,500
 British National Grid Transverse Mercator

Rampion Extension Development

Rampion 2 WIND FARM

Rampion 2 Offshore Wind Farm

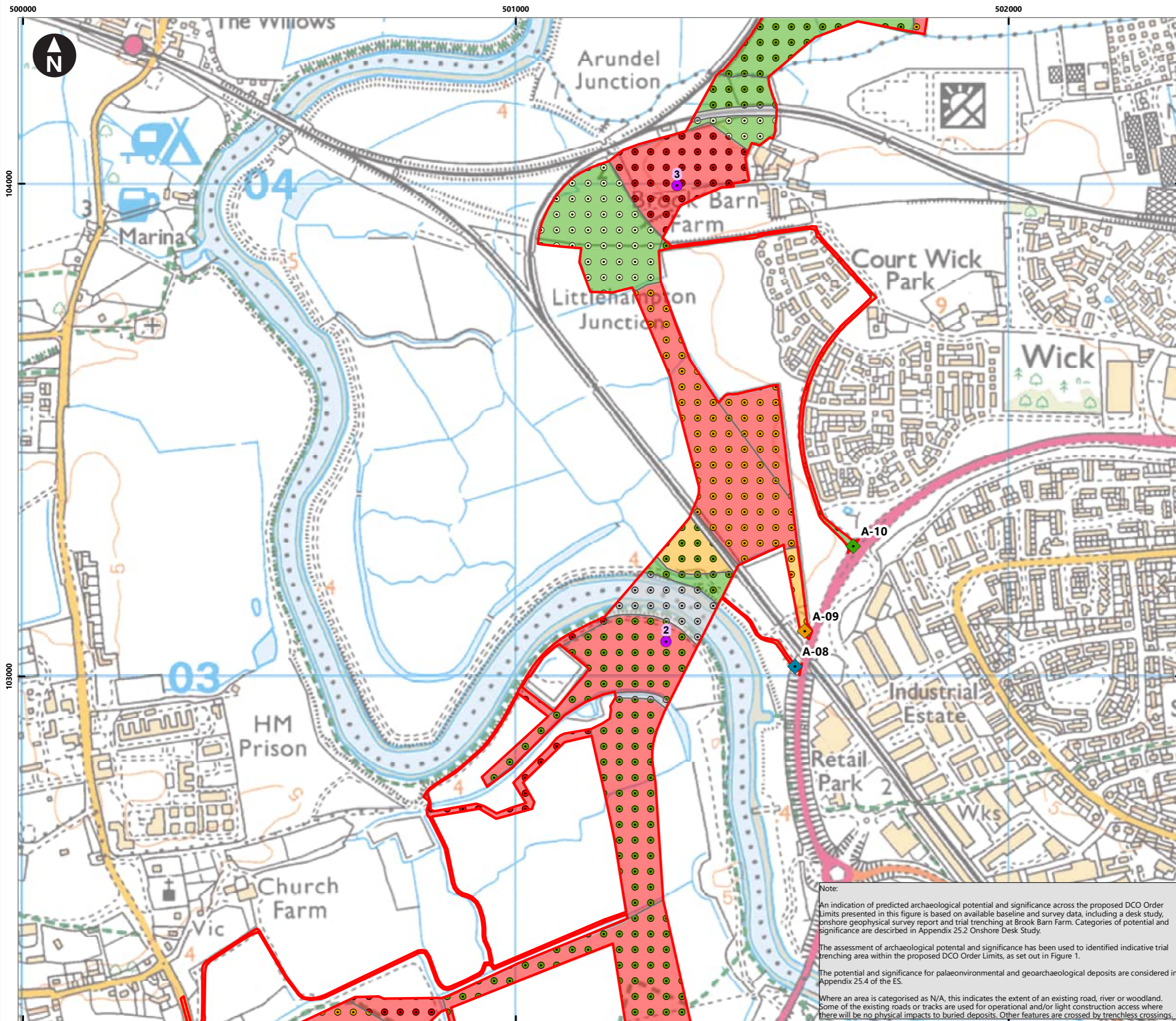
Figure 2 Indicative areas of onshore archaeological potential and significance

Page 1 of 24

System Identifier: 42285-WSP-EX-ON-FG-OH-4775 Version: 1.0

Company: WSP Drawn By: BRYAA Chk/Prvrd: ATKIS Drawn Date: 22/04/2024 Status: DRAFT

Note:
 An indication of predicted archaeological potential and significance across the proposed DCO Order Limits presented in this figure is based on available baseline and survey data, including a desk study, onshore geophysical survey report and trial trenching at Brook Barn Farm. Categories of potential and significance are described in Appendix 25.2 Onshore Desk Study.
 The assessment of archaeological potential and significance has been used to identify indicative trial trenching areas within the proposed DCO Order Limits, as set out in Figure 1.
 The potential and significance for palaeoenvironmental and geoarchaeological deposits are considered in Appendix 25.4 of the ES.
 Where an area is categorised as N/A, this indicates the extent of an existing road, river or woodland. Some of the existing roads or tracks are used for operational and/or light construction access where there will be no physical impacts to buried deposits. Other features are crossed by trenchless crossings.



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Key

Proposed DCO Order Limits

Archaeological potential

- Very High
- High
- Medium
- Low
- Uncertain
- N/A

Heritage significance

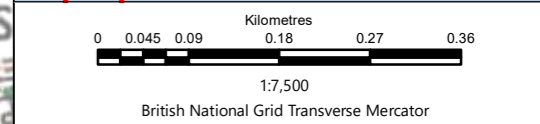
- High
- Medium
- Low
- Very Low
- Uncertain
- N/A

Onshore cable route KM points

- Onshore Substation connection
- Onshore cable route

Access from public highway

- Construction
- Construction & operational
- Light construction
- Light construction & operational
- Operational



Rampion Extension Development

Rampion 2 Offshore Wind Farm

Figure 2 Indicative areas of onshore archaeological potential and significance

Page 2 of 24

System Identifier: 42285-WSP-EX-ON-FG-OH-4775 Version: 1.0

Company: WSP Drawn By: BRYAA Chk/Prvd: ATKIS Drawn Date: 22/04/2024 Status: DRAFT

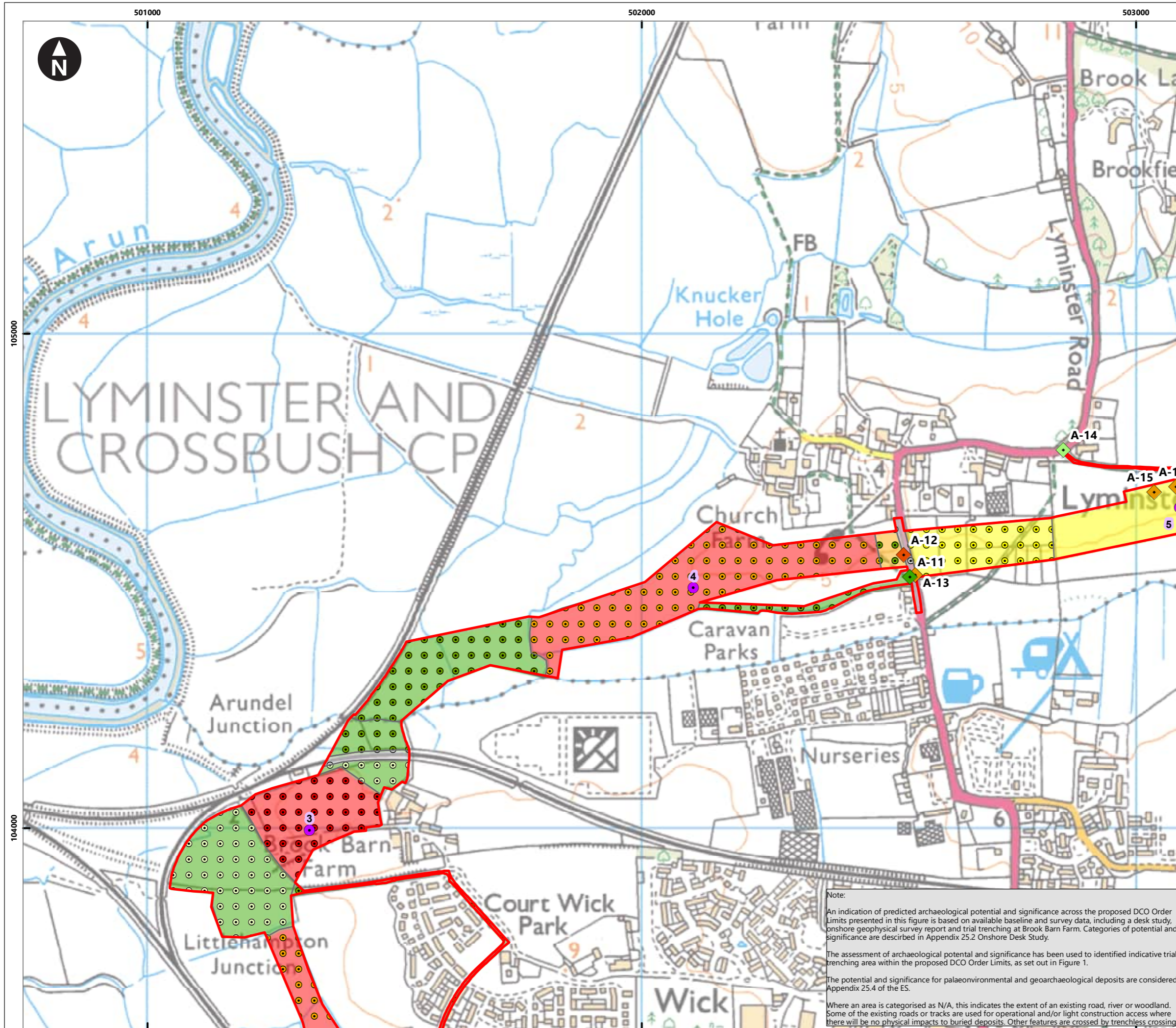
Note:

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 Ordnance Survey 0100031673

Key

Proposed DCO Order Limits

Archaeological potential

- Very High
- High
- Medium
- Low
- Uncertain
- N/A

Heritage significance

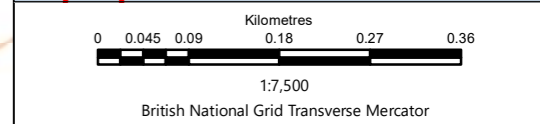
- High
- Medium
- Low
- Very Low
- Uncertain
- N/A

Onshore cable route KM points

- Onshore Substation connection
- Onshore cable route

Access from public highway

- Construction
- Construction & operational
- Light construction
- Light construction & operational
- Operational



Rampion Extension Development

Rampion 2 Offshore Wind Farm

Figure 2 Indicative areas of onshore archaeological potential and significance

System Identifier:		Version:	
42285-WSP-EX-ON-FG-OH-4775		1.0	
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Status:	DRAFT		

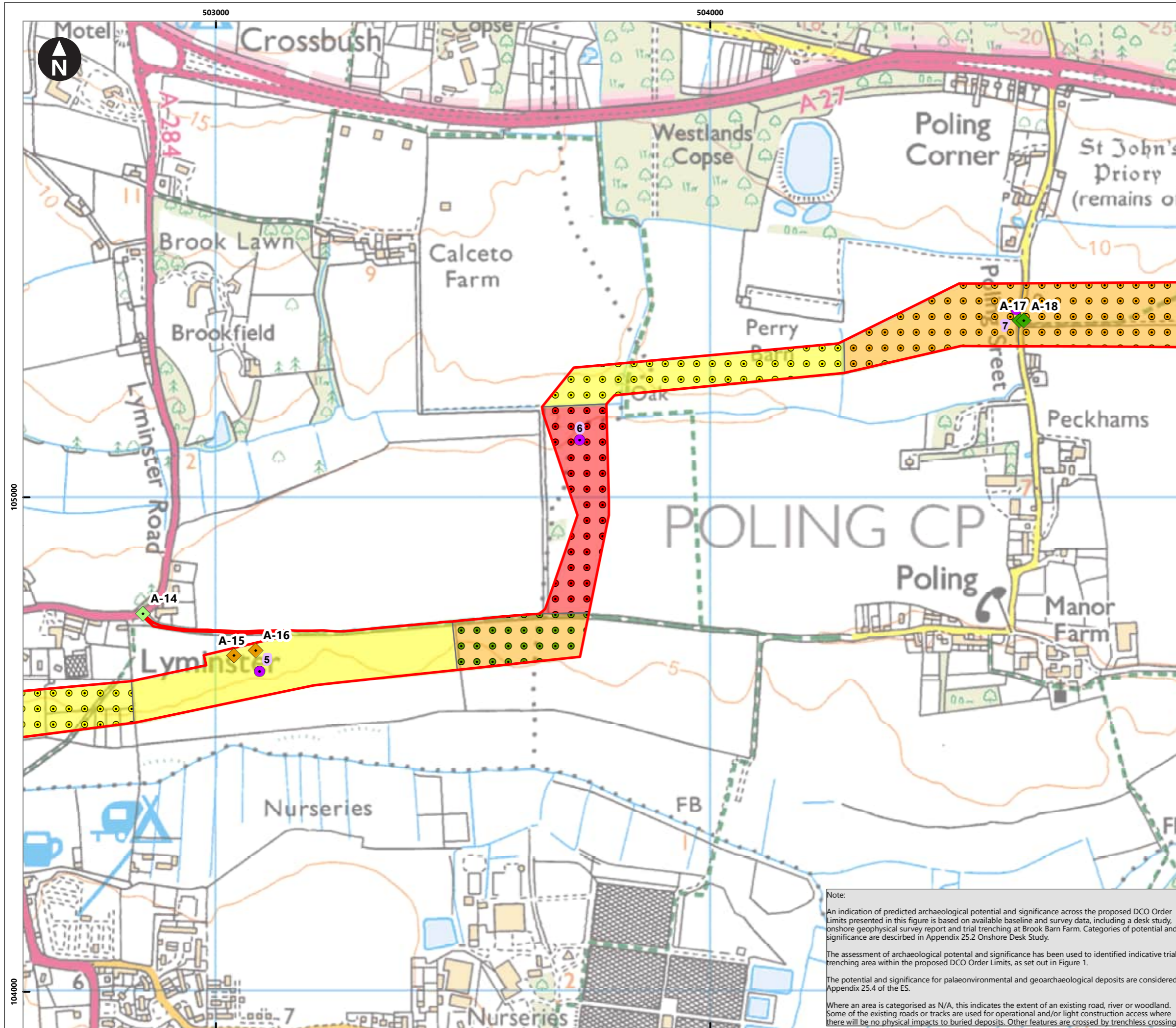
Note:

An indication of predicted archaeological potential and significance across the proposed DCO Order Limits presented in this figure is based on available baseline and survey data, including a desk study, onshore geophysical survey report and trial trenching at Brook Barn Farm. Categories of potential and significance are described in Appendix 25.2 Onshore Desk Study.

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Where an area is categorised as N/A, this indicates the extent of an existing road, river or woodland. Some of the existing roads or tracks are used for operational and/or light construction access where there will be no physical impacts to buried deposits. Other features are crossed by trenchless crossings.



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 Ordnance Survey 0100031673

Key

Proposed DCO Order Limits

Archaeological potential

- Very High
- High
- Medium
- Low
- Uncertain
- N/A

Heritage significance

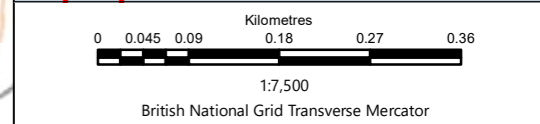
- High
- Medium
- Low
- Very Low
- Uncertain
- N/A

Onshore cable route KM points

- Onshore Substation connection
- Onshore cable route

Access from public highway

- Construction
- Construction & operational
- Light construction
- Light construction & operational
- Operational



Rampion Extension Development

Rampion 2 Offshore Wind Farm

Figure 2 Indicative areas of onshore archaeological potential and significance

System Identifier: 42285-WSP-EX-ON-FG-OH-4775 Version: 1.0

Company: WSP Drawn By: BRYAA Chk/Prvd: ATKIS Drawn Date: 22/04/2024 Status: DRAFT

Note:

An indication of predicted archaeological potential and significance across the proposed DCO Order Limits presented in this figure is based on available baseline and survey data, including a desk study, onshore geophysical survey report and trial trenching at Brook Barn Farm. Categories of potential and significance are described in Appendix 25.2 Onshore Desk Study.

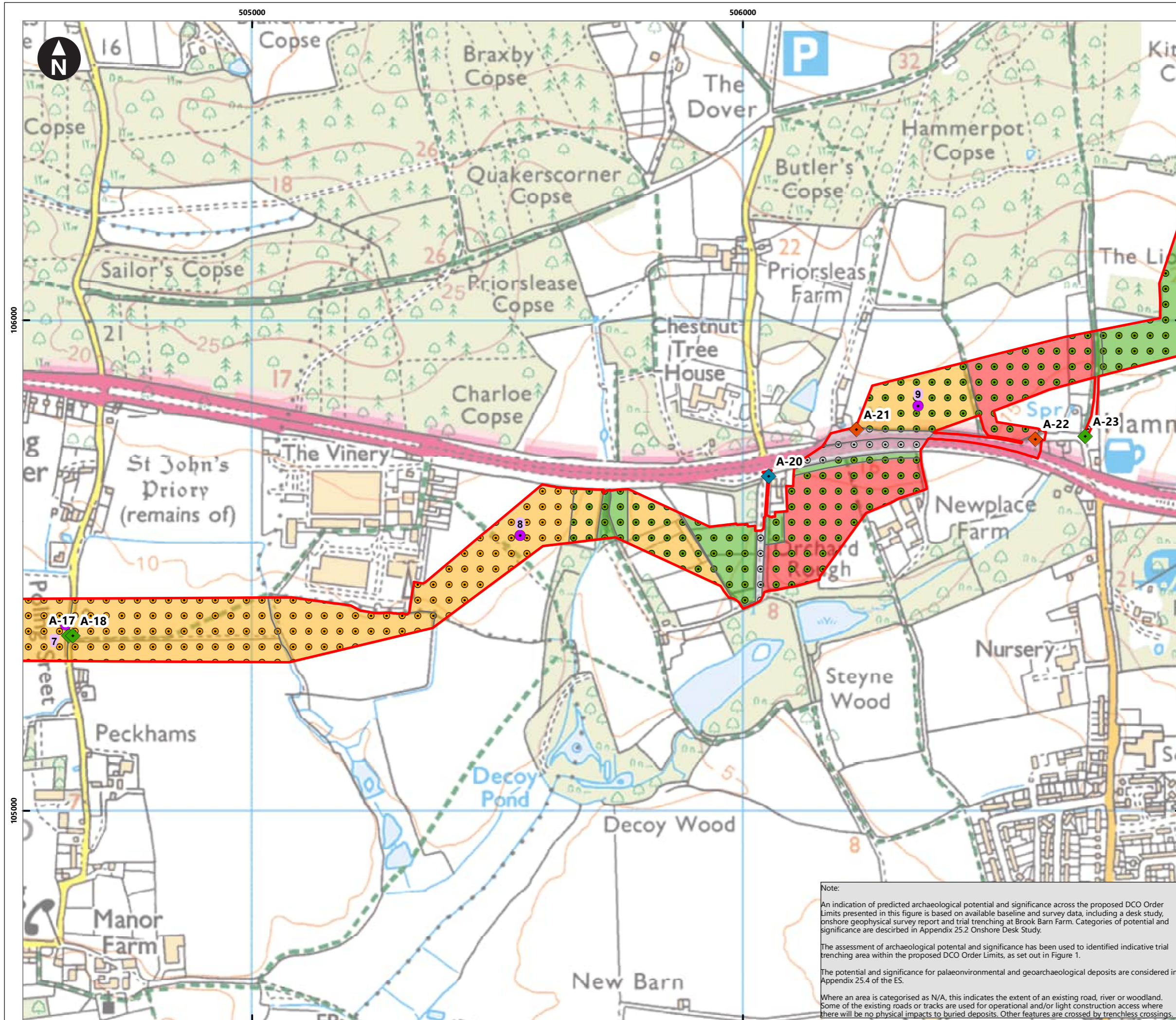
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105000

104000



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Ordnance Survey 0100031673

Key

- Proposed DCO Order Limits

Archaeological potential

- Very High
- High
- Medium
- Low
- Uncertain
- N/A

Heritage significance

- High
- Medium
- Low
- Very Low
- Uncertain
- N/A

Onshore cable route KM points

- Onshore Substation connection
- Onshore cable route

Access from public highway

- Construction
- Construction & operational
- Light construction
- Light construction & operational
- Operational

Scale: 0 0.045 0.09 0.18 0.27 0.36 Kilometres
1:7,500
British National Grid Transverse Mercator

Rampion Extension Development

Rampion 2 WIND FARM

Rampion 2 Offshore Wind Farm

Figure 2 Indicative areas of onshore archaeological potential and significance

Page 5 of 24

System Identifier: 42285-WSPE-EX-ON-FG-OH-4775 Version: 1.0

Company: WSP Drawn By: BRYAA Chk/Prvd: ATKIS Drawn Date: 22/04/2024 Status: DRAFT

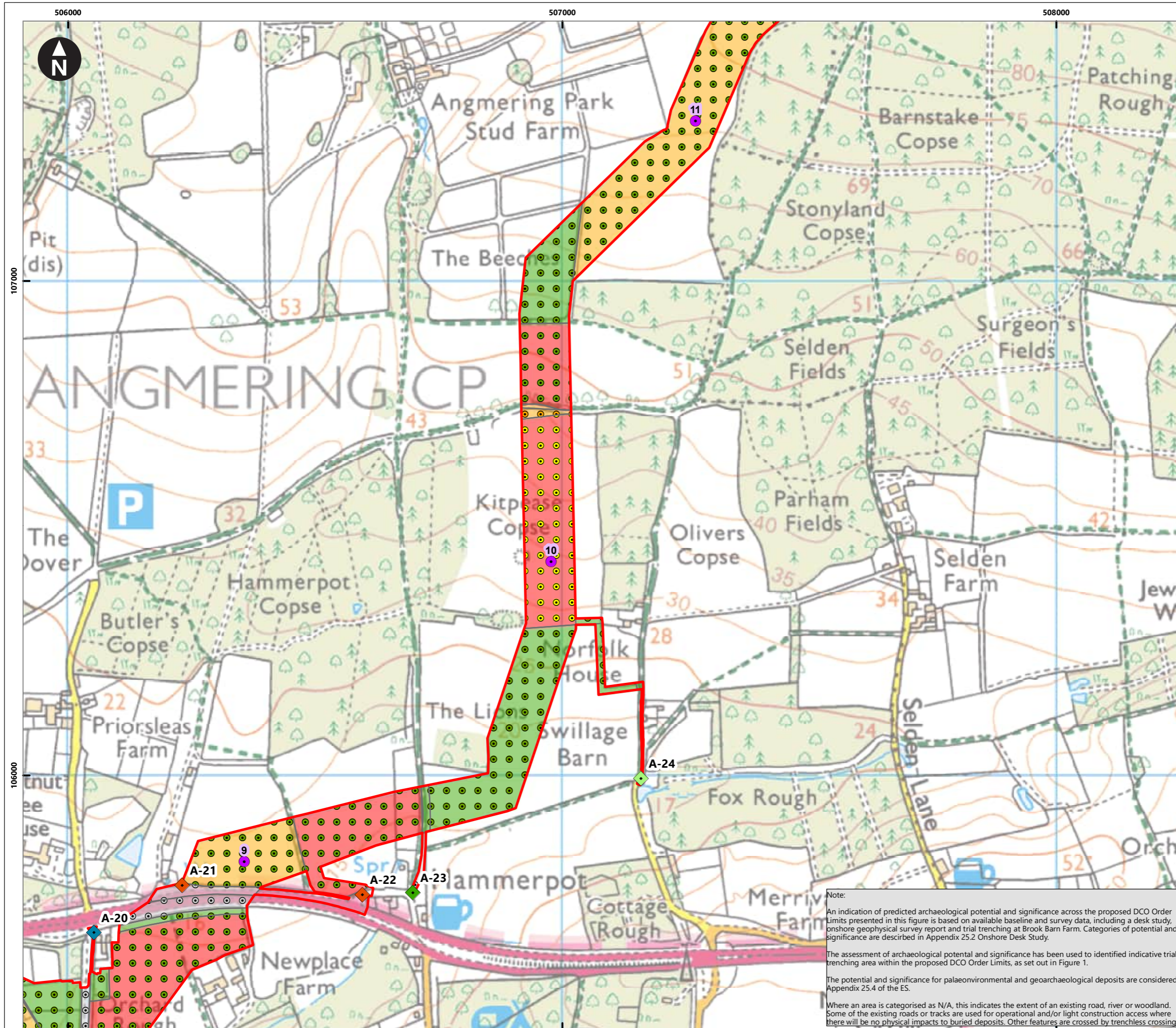
Note:

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Key

Proposed DCO Order Limits

Archaeological potential

- Very High
- High
- Medium
- Low
- Uncertain
- N/A

Heritage significance

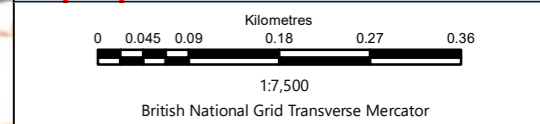
- High
- Medium
- Low
- Very Low
- Uncertain
- N/A

Onshore cable route KM points

- Onshore Substation connection
- Onshore cable route

Access from public highway

- Construction
- Construction & operational
- Light construction
- Light construction & operational
- Operational



Rampion Extension Development

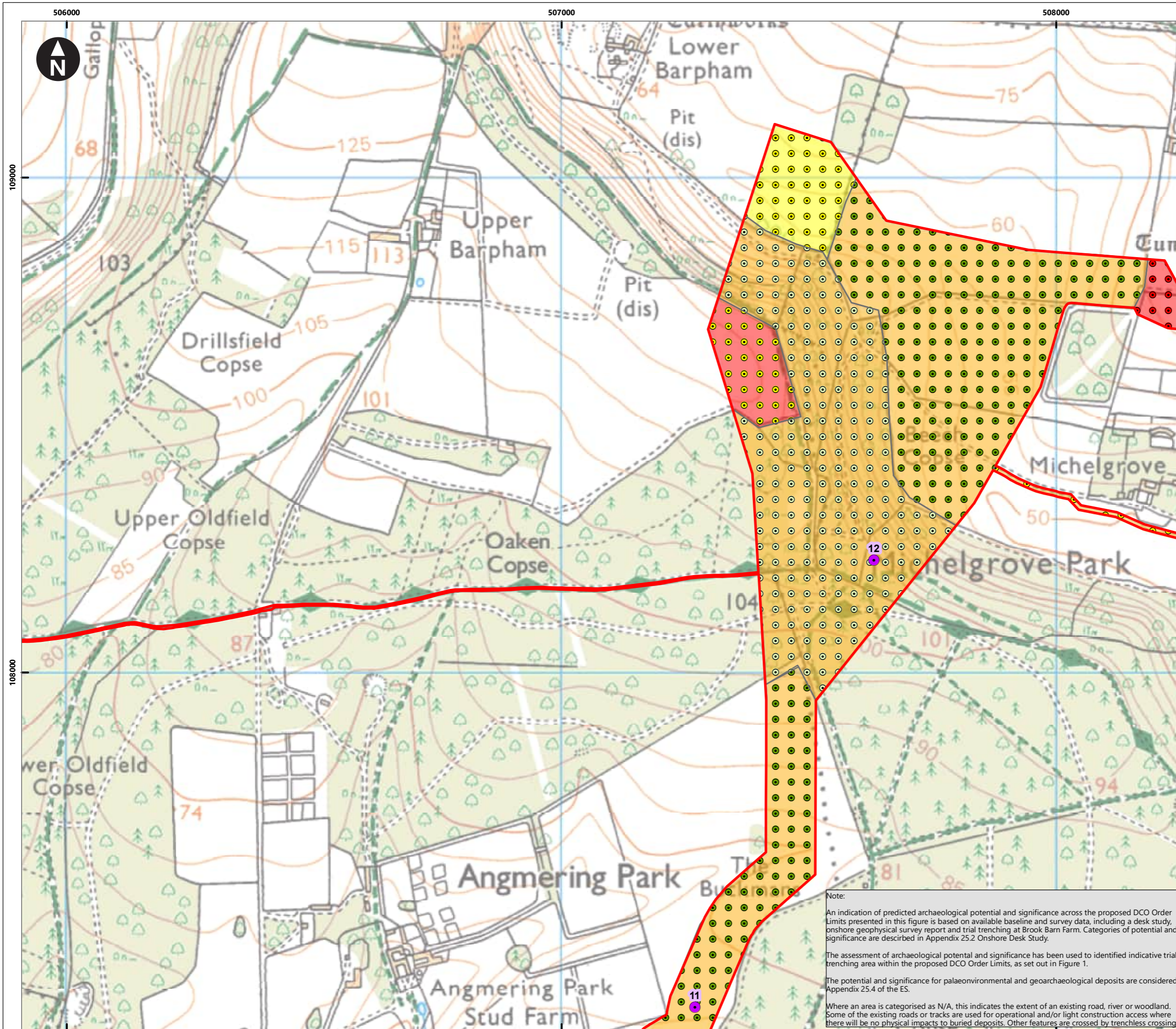
Rampion 2 Offshore Wind Farm

Figure 2 Indicative areas of onshore archaeological potential and significance

System Identifier: 42285-WSP-EX-ON-FG-OH-4775
 Version: 1.0

Company: WSP
 Drawn By: BRYAA
 Chk/Prvd: ATKIS
 Drawn Date: 22/04/2024
 Status: DRAFT

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 Ordnance Survey 0100031673

Key

Proposed DCO Order Limits

Archaeological potential

- Very High
- High
- Medium
- Low
- Uncertain
- N/A

Heritage significance

- High
- Medium
- Low
- Very Low
- Uncertain
- N/A

Onshore cable route KM points

- Onshore Substation connection
- Onshore cable route

Access from public highway

- Construction
- Construction & operational
- Light construction
- Light construction & operational
- Operational

Note:

An indication of predicted archaeological potential and significance across the proposed DCO Order Limits presented in this figure is based on available baseline and survey data, including a desk study, onshore geophysical survey report and trial trenching at Brook Barn Farm. Categories of potential and significance are described in Appendix 25.2 Onshore Desk Study.

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Scale: 0 0.045 0.09 0.18 0.27 0.36 Kilometres
 1:7,500
 British National Grid Transverse Mercator

Rampion Extension Development

Rampion 2 WIND FARM

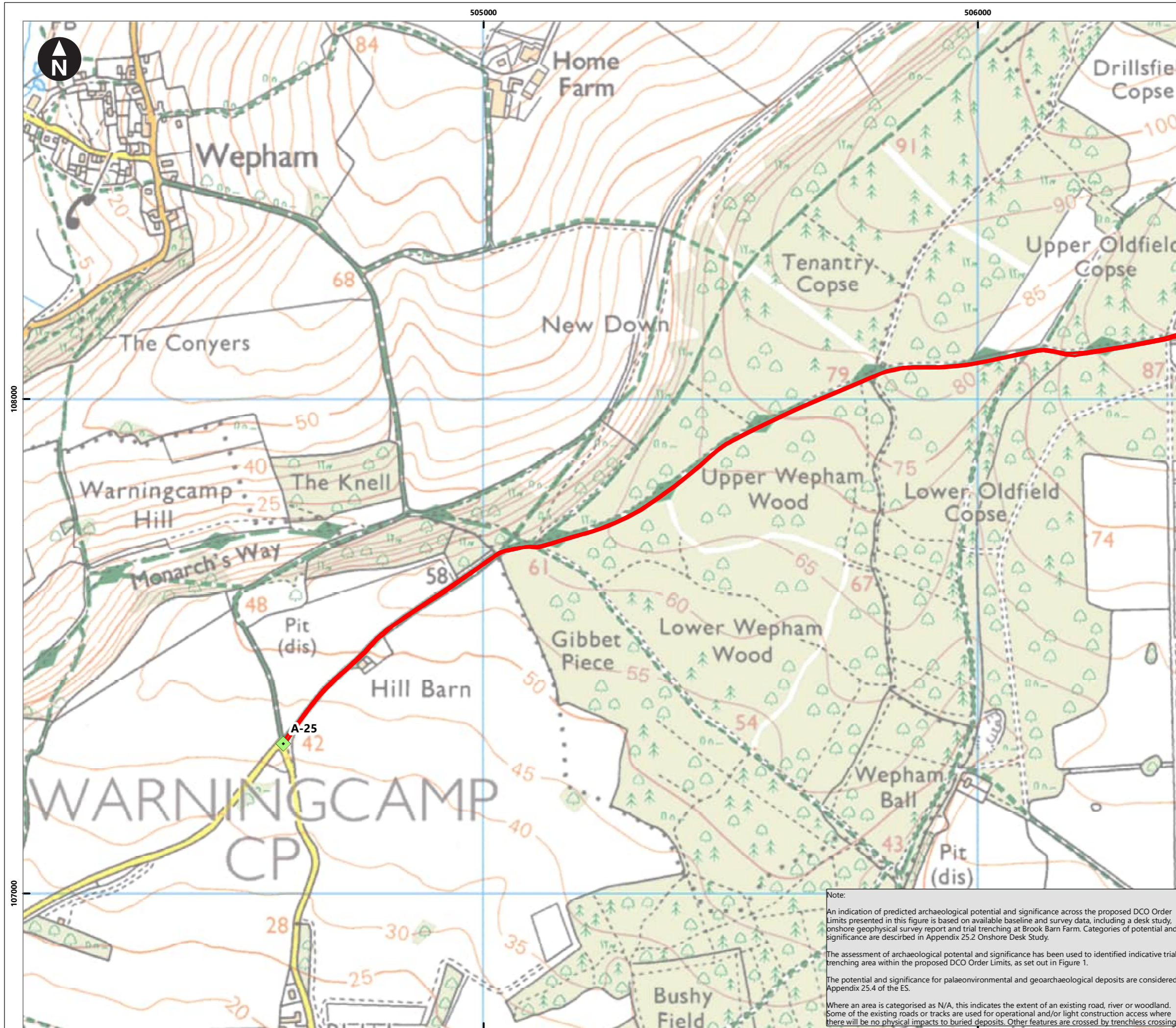
Rampion 2 Offshore Wind Farm

Figure 2 Indicative areas of onshore archaeological potential and significance

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System Identifier: 42285-WSP-EX-ON-FG-OH-4775 Version: 1.0

Company: WSP Drawn By: BRYAA Chk/Prvrd: ATKIS Drawn Date: 22/04/2024 Status: DRAFT



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Key

- Proposed DCO Order Limits

Archaeological potential

- Very High
- High
- Medium
- Low
- Uncertain
- N/A

Heritage significance

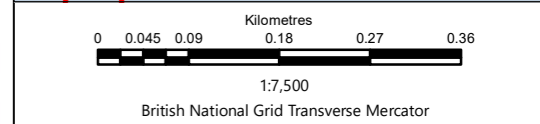
- High
- Medium
- Low
- Very Low
- Uncertain
- N/A

Onshore cable route KM points

- Onshore Substation connection
- Onshore cable route

Access from public highway

- Construction
- Construction & operational
- Light construction
- Light construction & operational
- Operational



Rampion Extension Development

Rampion 2 Offshore Wind Farm

Figure 2 Indicative areas of onshore archaeological potential and significance

System Identifier:		Version:	
42285-WSPE-EX-ON-FG-OH-4775		1.0	
Company:	Drawn By:	Chk/Prvrd:	Drawn Date:
WSP	BRYAA	ATKIS	22/04/2024
Status:	DRAFT		

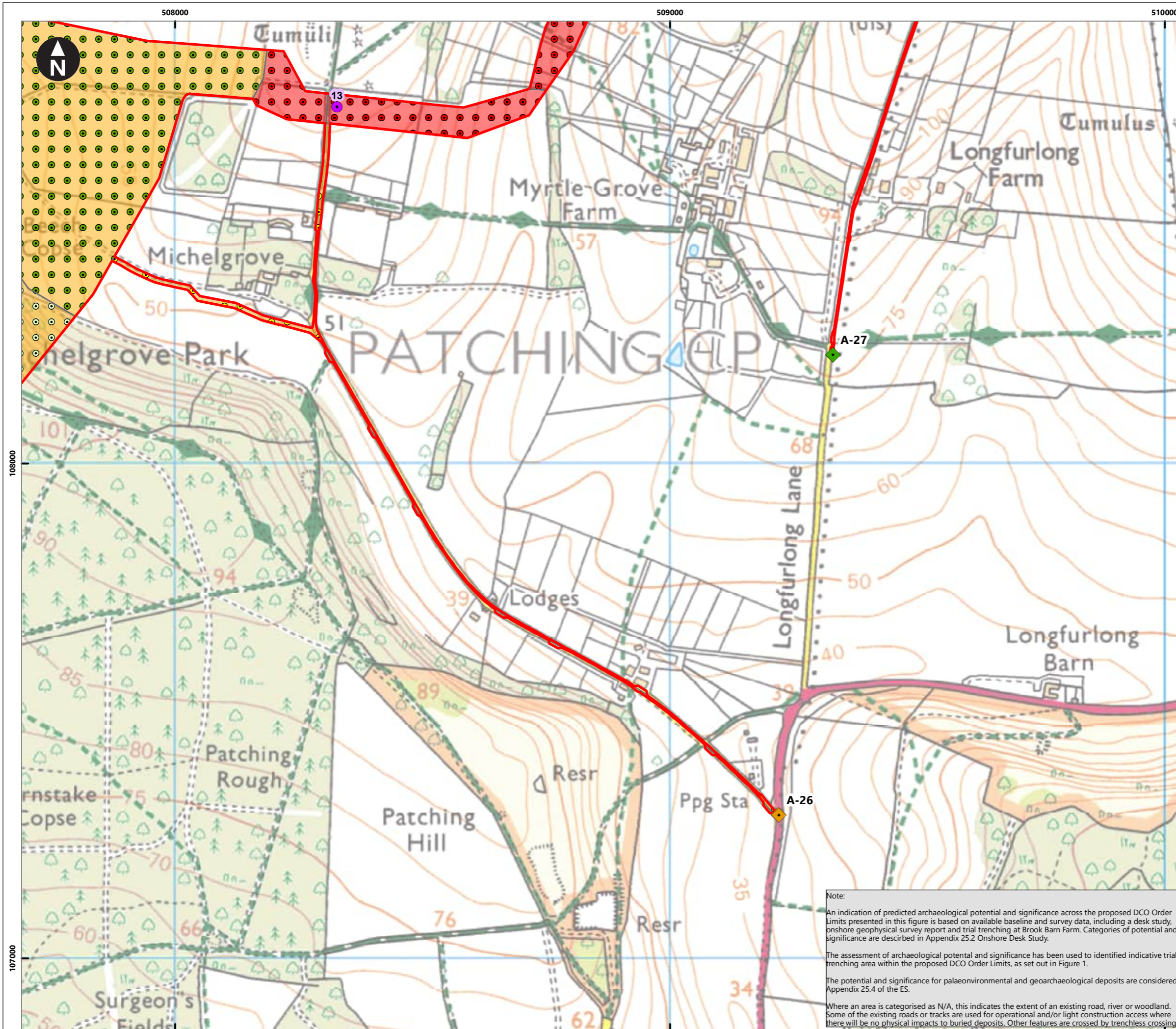
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 Ordnance Survey 0100031673

Key

Proposed DCO Order Limits

Archaeological potential

- Very High
- High
- Medium
- Low
- Uncertain
- N/A

Heritage significance

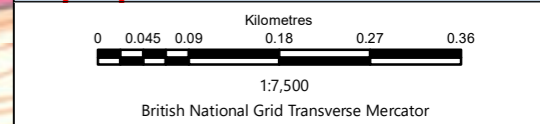
- High
- Medium
- Low
- Very Low
- Uncertain
- N/A

Onshore cable route KM points

- Onshore Substation connection
- Onshore cable route

Access from public highway

- Construction
- Construction & operational
- Light construction
- Light construction & operational
- Operational



Rampion Extension Development

Rampion 2 Offshore Wind Farm

Figure 2 Indicative areas of onshore archaeological potential and significance

System Identifier:		Version:	
42285-WSPE-EX-ON-FG-OH-4775		1.0	
Company:	Drawn By:	Chk/Prvrd:	Drawn Date:
WSP	BRYAA	ATKIS	22/04/2024
Status:	DRAFT		

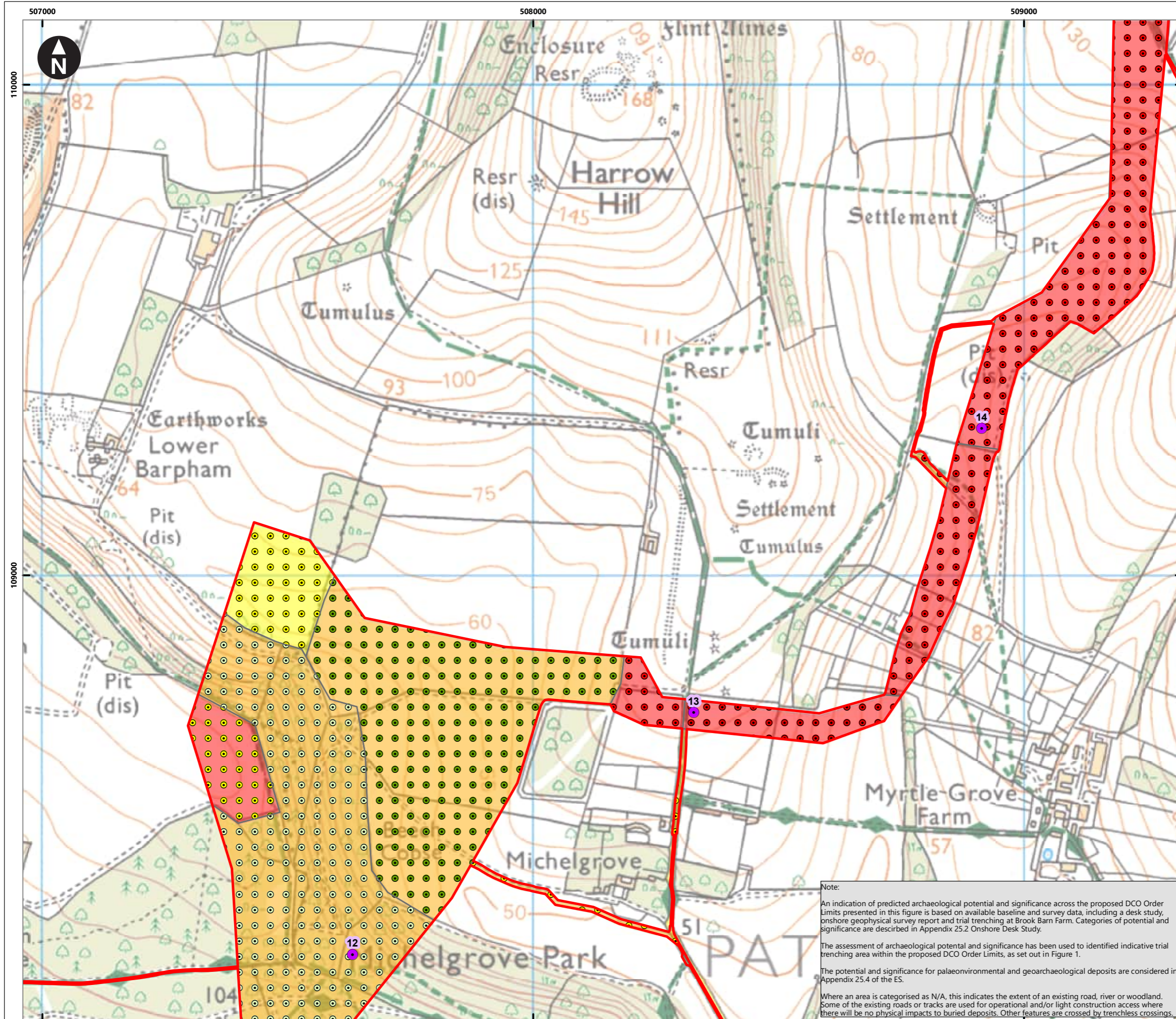
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Key

Proposed DCO Order Limits
 [Red outline]

Archaeological potential

- Very High (Dark red)
- High (Red)
- Medium (Orange)
- Low (Light green)
- Uncertain (Yellow)
- N/A (White)

Heritage significance

- High (Red dots)
- Medium (Orange dots)
- Low (Light green dots)
- Very Low (Light green dots)
- Uncertain (Yellow dots)
- N/A (White dots)

Onshore cable route KM points

- Onshore Substation connection (Blue circle)
- Onshore cable route (Purple circle)

Access from public highway

- Construction (Orange diamond)
- Construction & operational (Yellow diamond)
- Light construction (Light blue diamond)
- Light construction & operational (Light green diamond)
- Operational (Dark green diamond)

Inset Map: Shows the project location within a regional context, including towns like Arundel and Selsey.

Scale: 0 to 0.36 Kilometres, 1:7,500
 British National Grid Transverse Mercator

Rampion Extension Development

Rampion 2 Offshore Wind Farm

Figure 2 Indicative areas of onshore archaeological potential and significance

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System Identifier: 42285-WSP-EX-ON-FG-OH-4775
 Version: 1.0

Company: WSP | Drawn By: BRYAA | Chk/Prvrd: ATKIS | Drawn Date: 22/04/2024 | Status: DRAFT

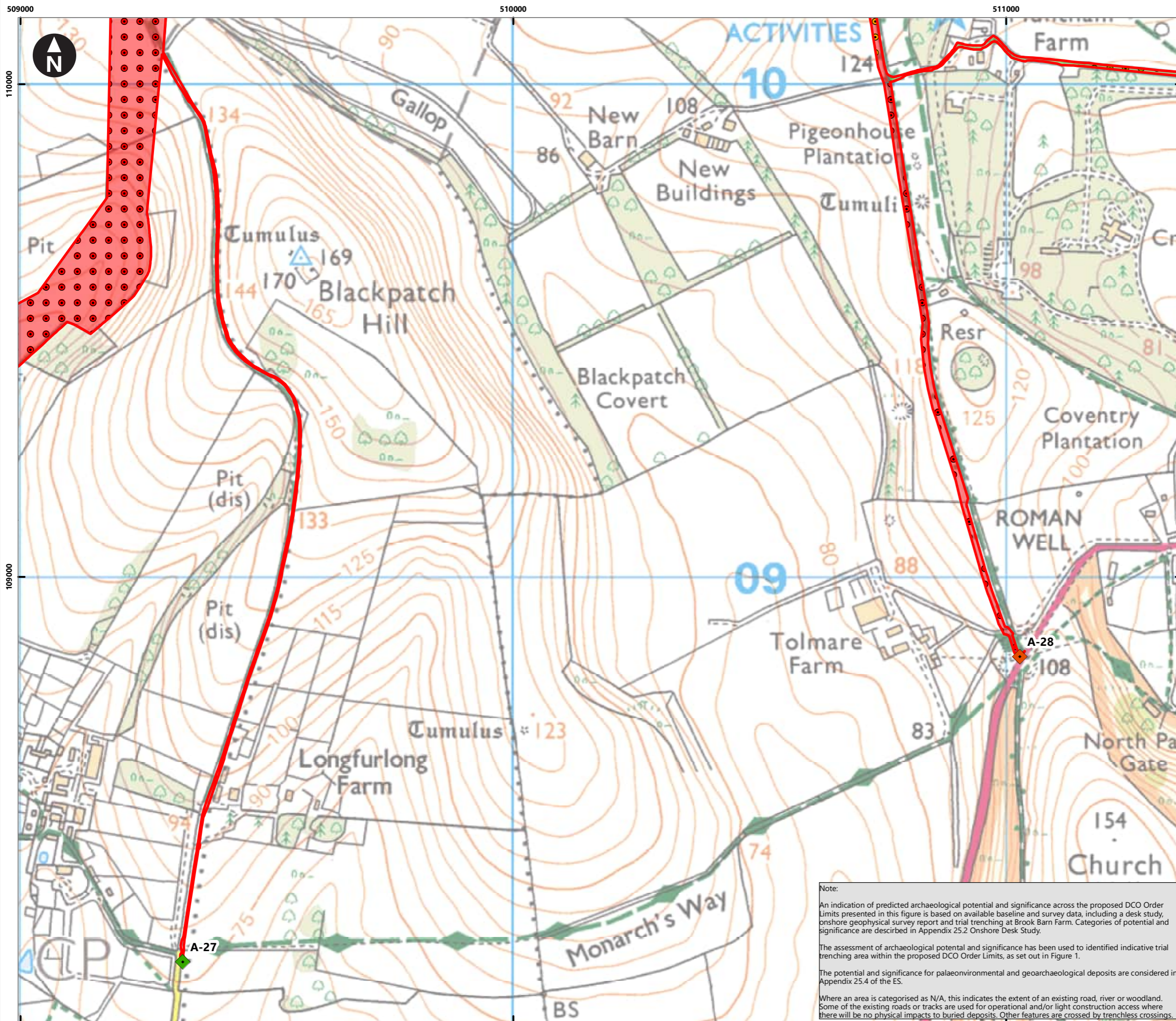
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Key

Proposed DCO Order Limits

Archaeological potential

- Very High
- High
- Medium
- Low
- Uncertain
- N/A

Heritage significance

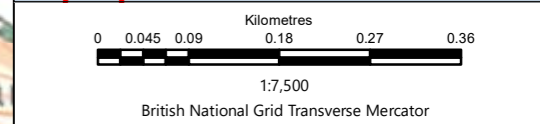
- High
- Medium
- Low
- Very Low
- Uncertain
- N/A

Onshore cable route KM points

- Onshore Substation connection
- Onshore cable route

Access from public highway

- Construction
- Construction & operational
- Light construction
- Light construction & operational
- Operational



Rampion Extension Development

Rampion 2 Offshore Wind Farm

Figure 2 Indicative areas of onshore archaeological potential and significance

System Identifier: 42285-WSP-EX-ON-FG-OH-4775 Version: 1.0

Company: WSP	Drawn By: BRYAA	Chk/Prvrd: ATKIS	Drawn Date: 22/04/2024	Status: DRAFT
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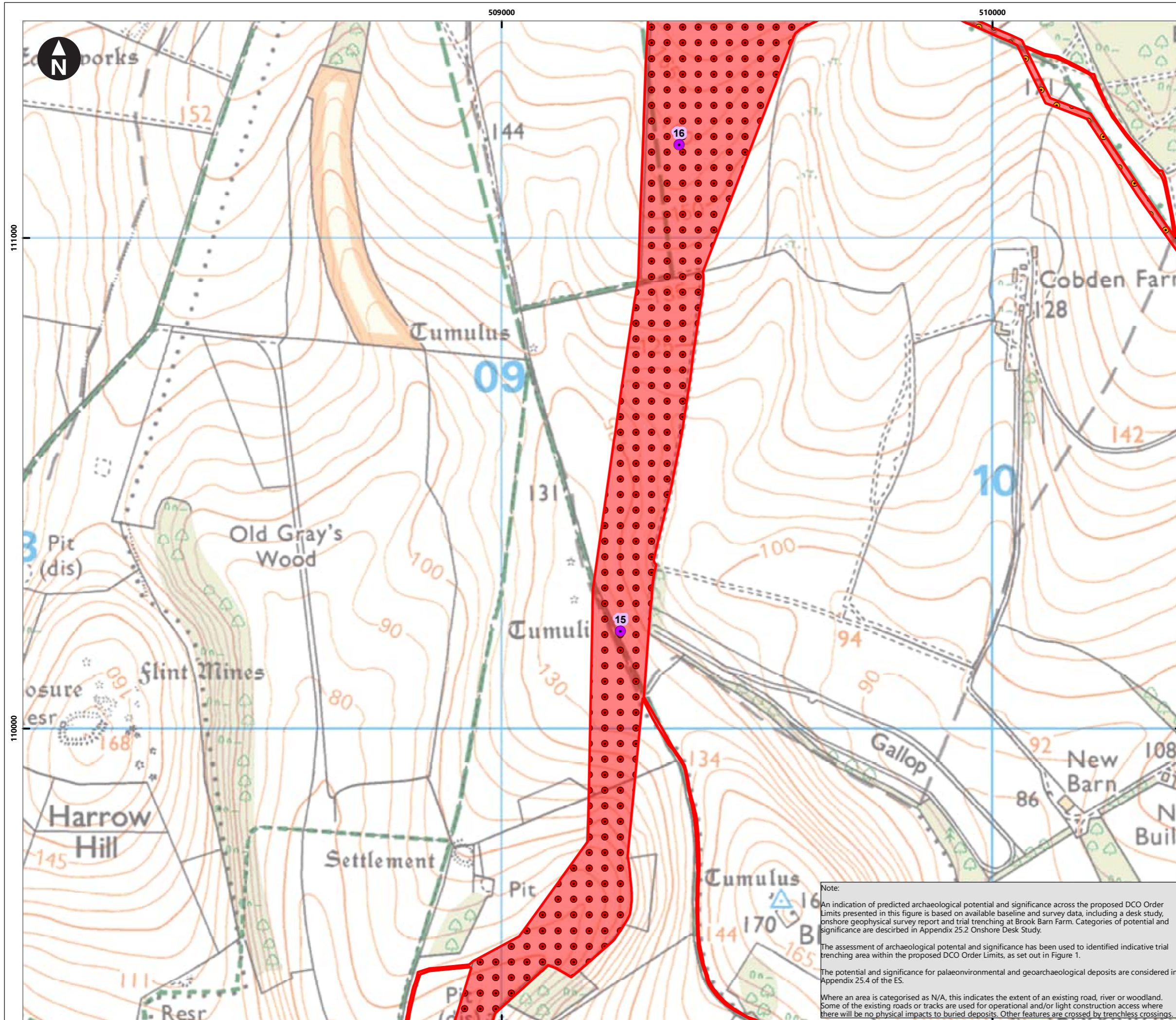
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Key

- Proposed DCO Order Limits

Archaeological potential

- Very High
- High
- Medium
- Low
- Uncertain
- N/A

Heritage significance

- High
- Medium
- Low
- Very Low
- Uncertain
- N/A

Onshore cable route KM points

- Onshore Substation connection
- Onshore cable route

Access from public highway

- Construction
- Construction & operational
- Light construction
- Light construction & operational
- Operational

0 0.045 0.09 0.18 0.27 0.36
 1:7,500
 British National Grid Transverse Mercator

Rampion Extension Development

Rampion 2 Offshore Wind Farm

Figure 2 Indicative areas of onshore archaeological potential and significance

Page 12 of 24

System Identifier: 42285-WSP-EX-ON-FG-OH-4775 Version: 1.0

Company: WSP Drawn By: BRYAA Chk/Prvd: ATKIS Drawn Date: 22/04/2024 Status: DRAFT

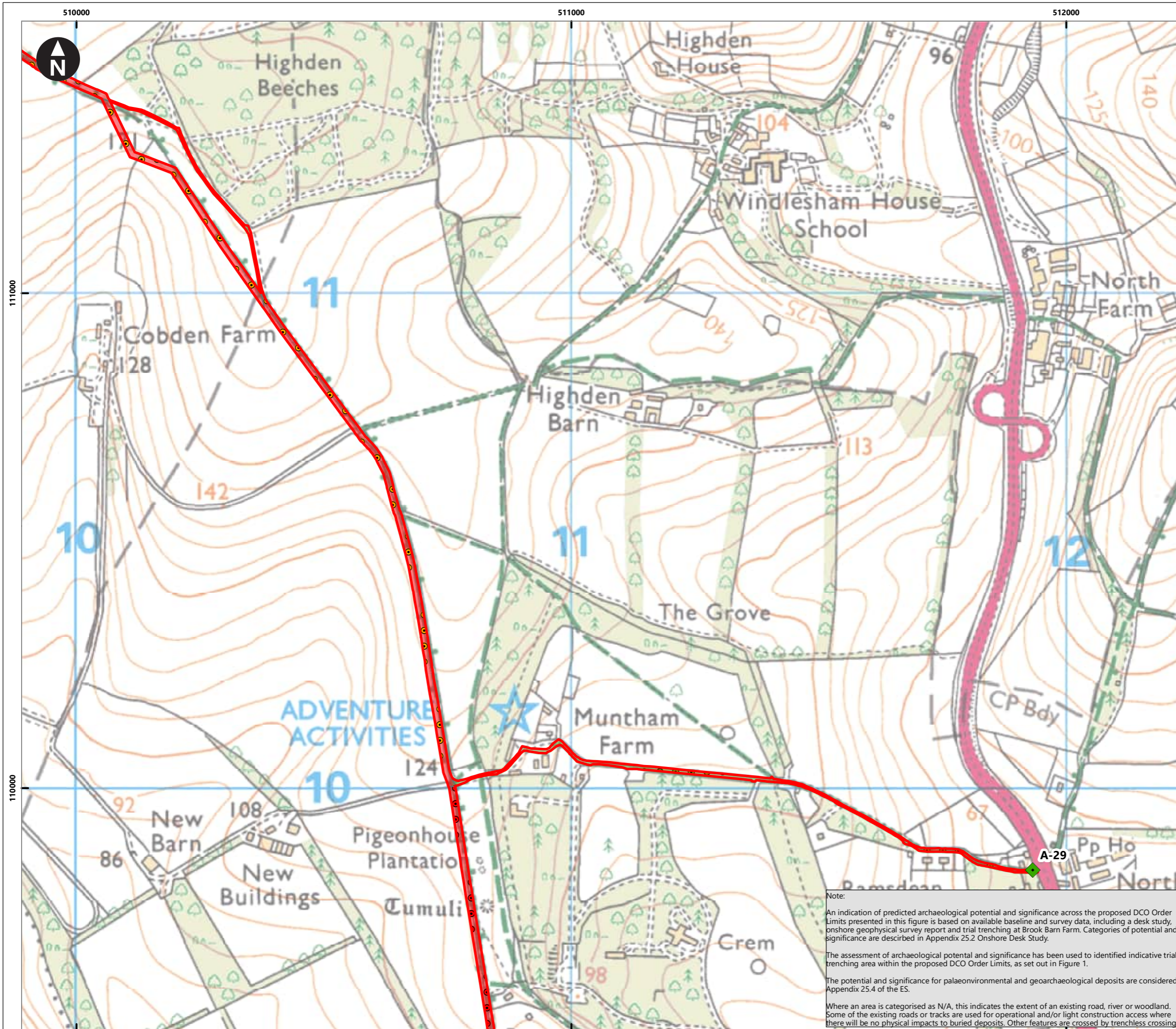
Note:

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Key

Proposed DCO Order Limits

Archaeological potential

- Very High
- High
- Medium
- Low
- Uncertain
- N/A

Heritage significance

- High
- Medium
- Low
- Very Low
- Uncertain
- N/A

Onshore cable route KM points

- Onshore Substation connection
- Onshore cable route

Access from public highway

- Construction
- Construction & operational
- Light construction
- Light construction & operational
- Operational

0 0.045 0.09 0.18 0.27 0.36
 1:7,500
 British National Grid Transverse Mercator

Rampion Extension Development

Rampion 2 WIND FARM

Rampion 2 Offshore Wind Farm

Figure 2 Indicative areas of onshore archaeological potential and significance

Page 13 of 24

System Identifier: 42285-WSP-EX-ON-FG-OH-4775 Version: 1.0

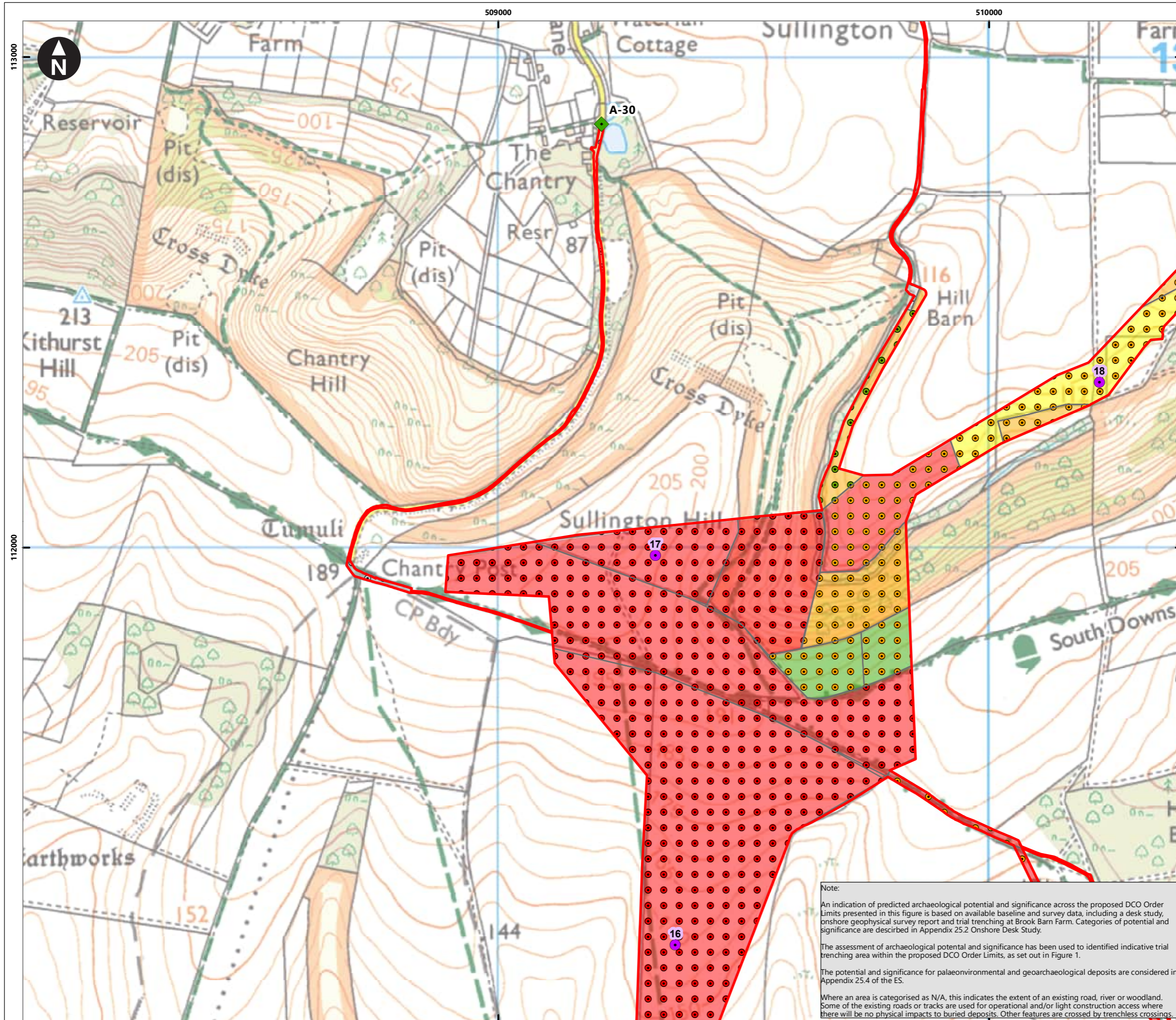
Company: WSP Drawn By: BRYAA Chk/Prvrd: ATKIS Drawn Date: 22/04/2024 Status: DRAFT

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Key

Proposed DCO Order Limits

Archaeological potential

- Very High
- High
- Medium
- Low
- Uncertain
- N/A

Heritage significance

- High
- Medium
- Low
- Very Low
- Uncertain
- N/A

Onshore cable route KM points

- Onshore Substation connection
- Onshore cable route

Access from public highway

- Construction
- Construction & operational
- Light construction
- Light construction & operational
- Operational

Scale: 0 0.045 0.09 0.18 0.27 0.36 Kilometres
 1:7,500
 British National Grid Transverse Mercator

Rampion Extension Development

Rampion 2 WIND FARM

Rampion 2 Offshore Wind Farm

Figure 2 Indicative areas of onshore archaeological potential and significance

Page 14 of 24

System Identifier: 42285-WSP-EX-ON-FG-OH-4775 Version: 1.0

Company: WSP Drawn By: BRYAA Chk/Prvd: ATKIS Drawn Date: 22/04/2024 Status: DRAFT

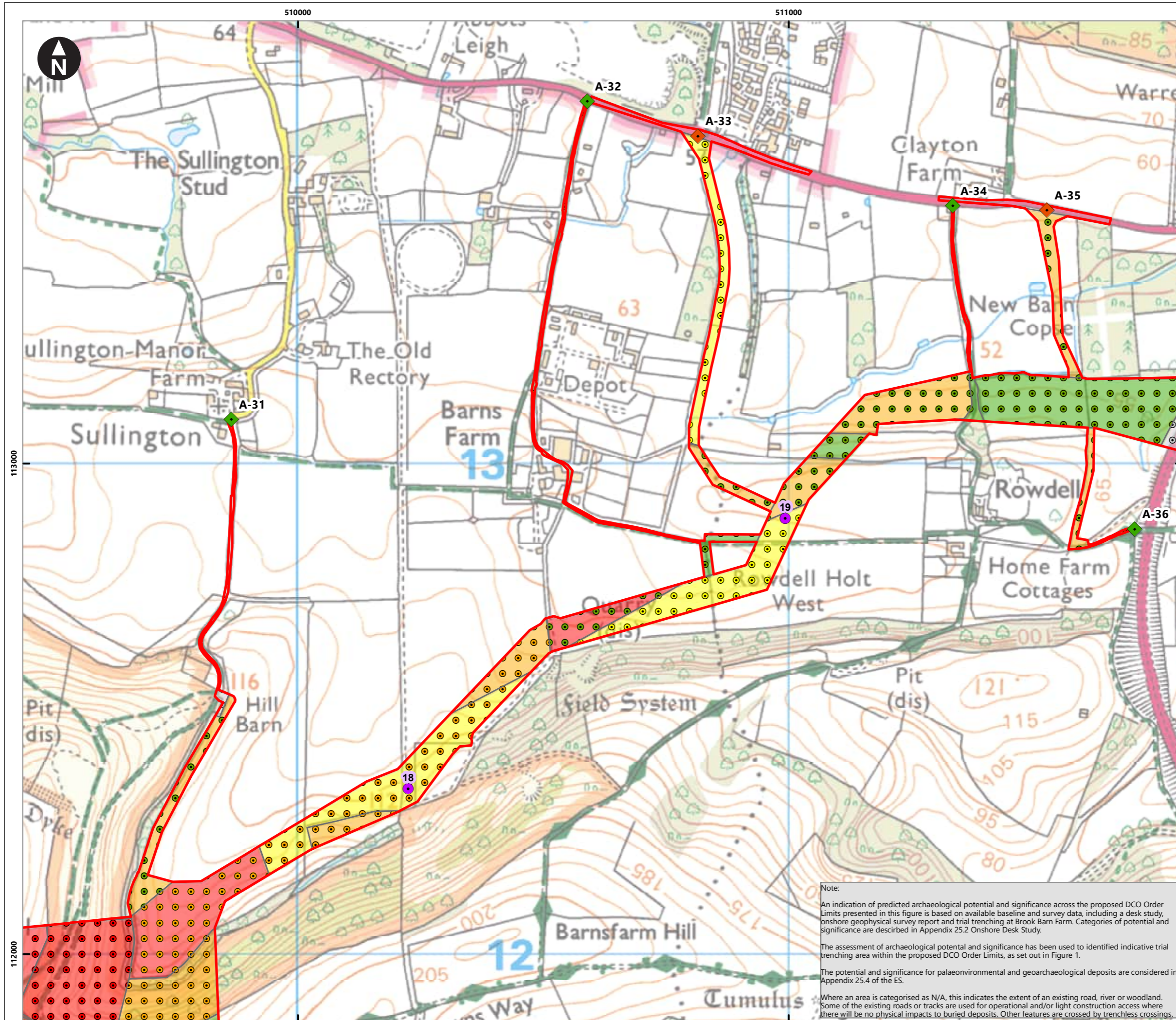
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Key

- Proposed DCO Order Limits

Archaeological potential

- Very High
- High
- Medium
- Low
- Uncertain
- N/A

Heritage significance

- High
- Medium
- Low
- Very Low
- Uncertain
- N/A

Onshore cable route KM points

- Onshore Substation connection
- Onshore cable route

Access from public highway

- Construction
- Construction & operational
- Light construction
- Light construction & operational
- Operational

Scale: 0 0.045 0.09 0.18 0.27 0.36 Kilometres
 1:7,500
 British National Grid Transverse Mercator

Rampion Extension Development

Rampion 2 Offshore Wind Farm

Figure 2 Indicative areas of onshore archaeological potential and significance

Page 15 of 24

System Identifier: 42285-WSP-EX-ON-FG-OH-4775 Version: 1.0

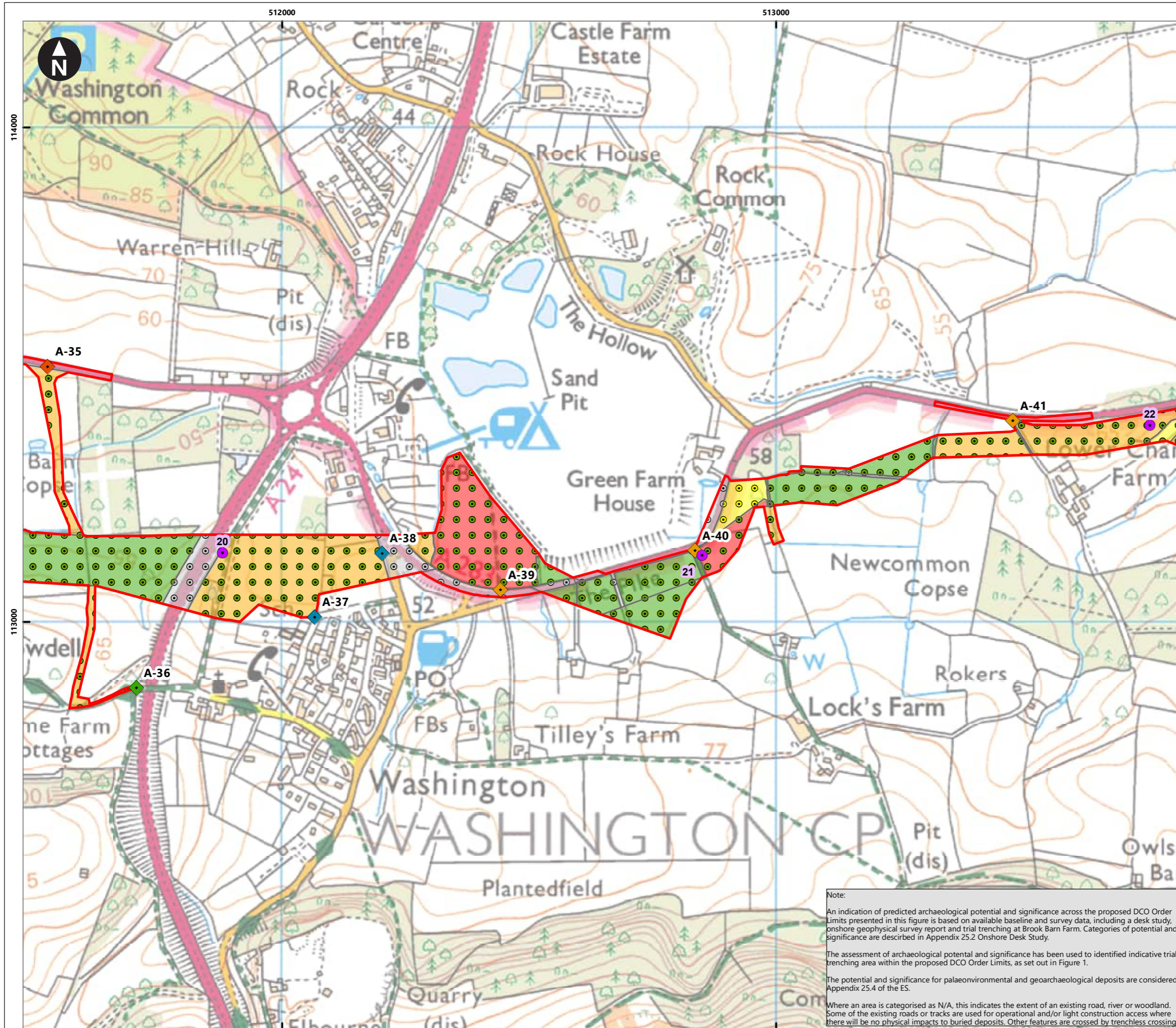
Company: WSP Drawn By: BRYAA Chk/Prvrd: ATKIS Drawn Date: 22/04/2024 Status: DRAFT

Note:
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Key

Proposed DCO Order Limits

Archaeological potential

- Very High
- High
- Medium
- Low
- Uncertain
- N/A

Heritage significance

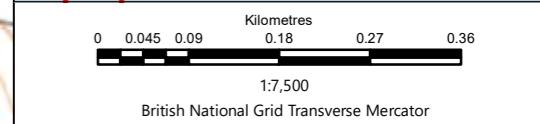
- High
- Medium
- Low
- Very Low
- Uncertain
- N/A

Onshore cable route KM points

- Onshore Substation connection
- Onshore cable route

Access from public highway

- Construction
- Construction & operational
- Light construction
- Light construction & operational
- Operational



Rampion Extension Development

Rampion 2 Offshore Wind Farm

Figure 2 Indicative areas of onshore archaeological potential and significance

System Identifier:		Version:	
42285-WSP-EX-ON-FG-OH-4775		1.0	
Company:	Drawn By:	Chk/Prvrd:	Drawn Date:
WSP	BRYAA	ATKIS	22/04/2024
Status:	DRAFT		

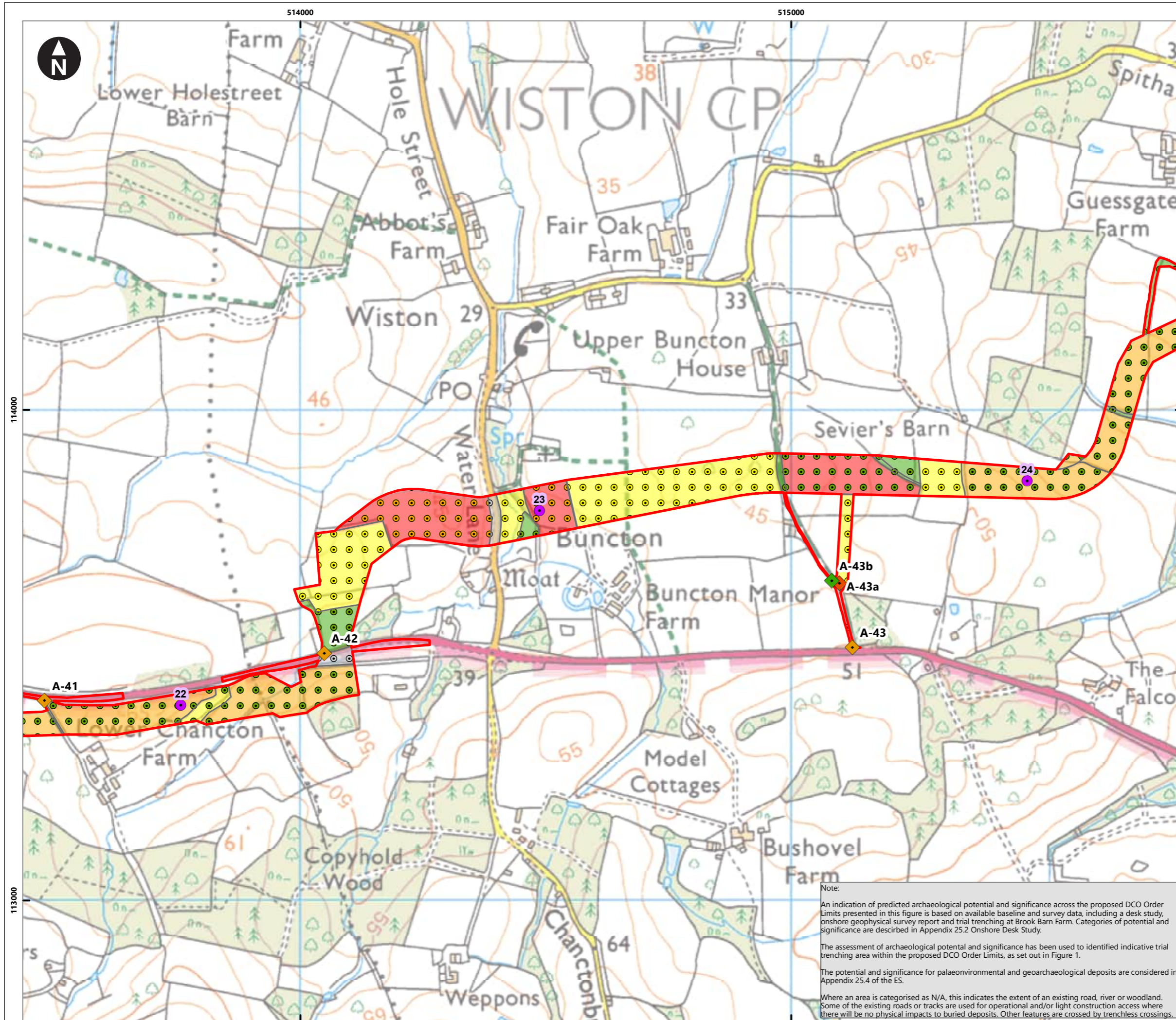
Note:

An indication of predicted archaeological potential and significance across the proposed DCO Order Limits presented in this figure is based on available baseline and survey data, including a desk study, onshore geophysical survey report and trial trenching at Brook Barn Farm. Categories of potential and significance are described in Appendix 25.2 Onshore Desk Study.

The assessment of archaeological potential and significance has been used to identify indicative trial trenching area within the proposed DCO Order Limits, as set out in Figure 1.

The potential and significance for palaeoenvironmental and geoarchaeological deposits are considered in Appendix 25.4 of the ES.

Where an area is categorised as N/A, this indicates the extent of an existing road, river or woodland. Some of the existing roads or tracks are used for operational and/or light construction access where there will be no physical impacts to buried deposits. Other features are crossed by trenchless crossings.



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Key

- Proposed DCO Order Limits
- Archaeological potential**
 - Very High
 - High
 - Medium
 - Low
 - Uncertain
 - N/A
- Heritage significance**
 - High
 - Medium
 - Low
 - Very Low
 - Uncertain
 - N/A
- Onshore cable route KM points**
 - Onshore Substation connection
 - Onshore cable route
- Access from public highway**
 - Construction
 - Construction & operational
 - Light construction
 - Light construction & operational
 - Operational

0 0.045 0.09 0.18 0.27 0.36
 Kilometres
 1:7,500
 British National Grid Transverse Mercator

Rampion Extension Development

Rampion 2 Offshore Wind Farm

Figure 2 Indicative areas of onshore archaeological potential and significance

Page 17 of 24

System Identifier: 42285-WSP-EX-ON-FG-OH-4775 Version: 1.0

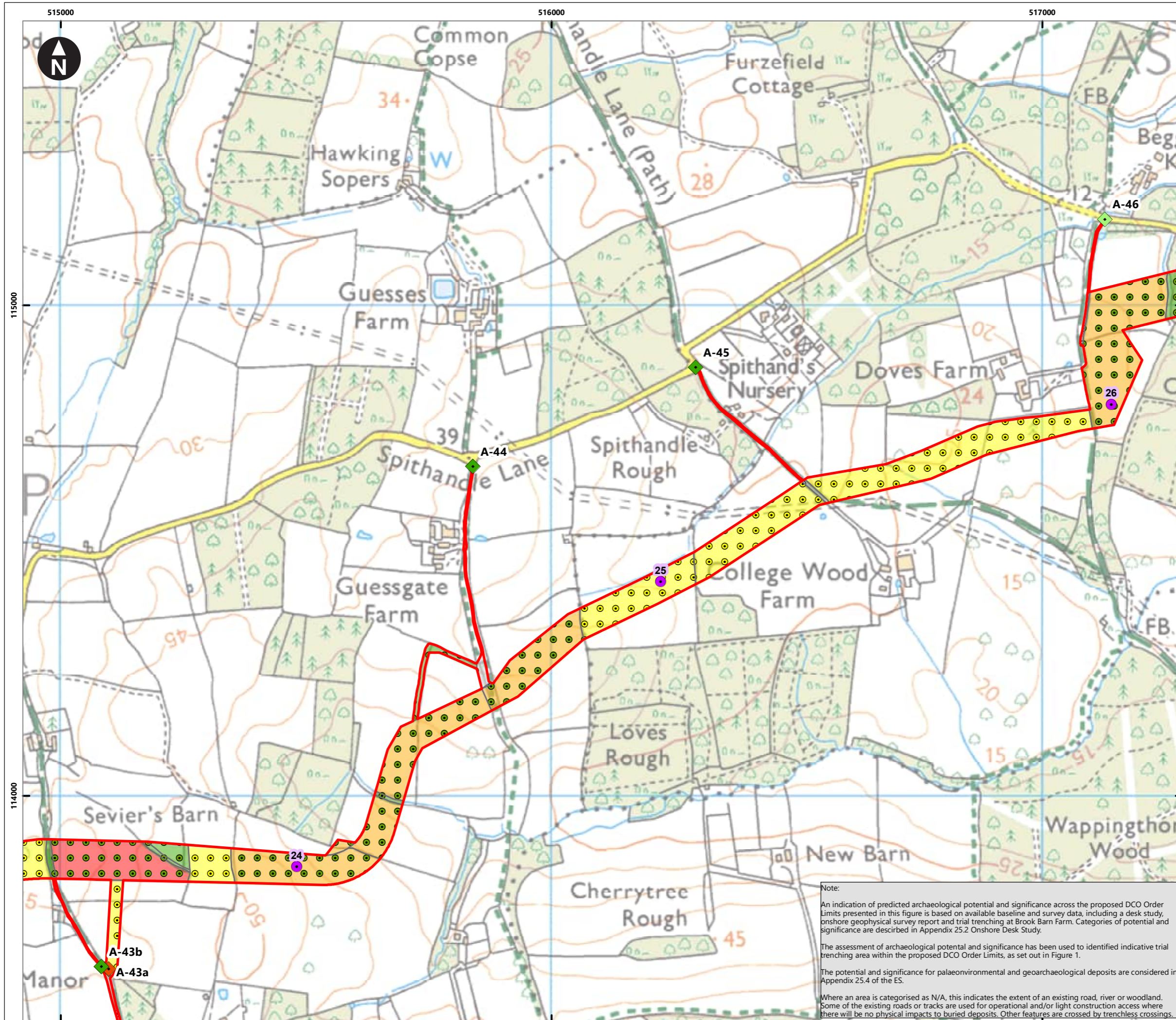
Company: WSP Drawn By: BRYAA Chk/Prvd: ATKIS Drawn Date: 22/04/2024 Status: DRAFT

Note:
 An indication of predicted archaeological potential and significance across the proposed DCO Order Limits presented in this figure is based on available baseline and survey data, including a desk study, onshore geophysical survey report and trial trenching at Brook Barn Farm. Categories of potential and significance are described in Appendix 25.2 Onshore Desk Study.

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 Ordnance Survey 0100031673

Key

- Proposed DCO Order Limits

Archaeological potential

- Very High
- High
- Medium
- Low
- Uncertain
- N/A

Heritage significance

- High
- Medium
- Low
- Very Low
- Uncertain
- N/A

Onshore cable route KM points

- Onshore Substation connection
- Onshore cable route

Access from public highway

- Construction
- Construction & operational
- Light construction
- Light construction & operational
- Operational

Scale: 0 0.045 0.09 0.18 0.27 0.36 Kilometres
 1:7,500
 British National Grid Transverse Mercator

Rampion Extension Development

Rampion 2 WIND FARM

Rampion 2 Offshore Wind Farm

Figure 2 Indicative areas of onshore archaeological potential and significance

Page 18 of 24

System Identifier: 42285-WSP-EX-ON-FG-OH-4775 Version: 1.0

Company: WSP Drawn By: BRYAA Chk/Prvd: ATKIS Drawn Date: 22/04/2024 Status: DRAFT

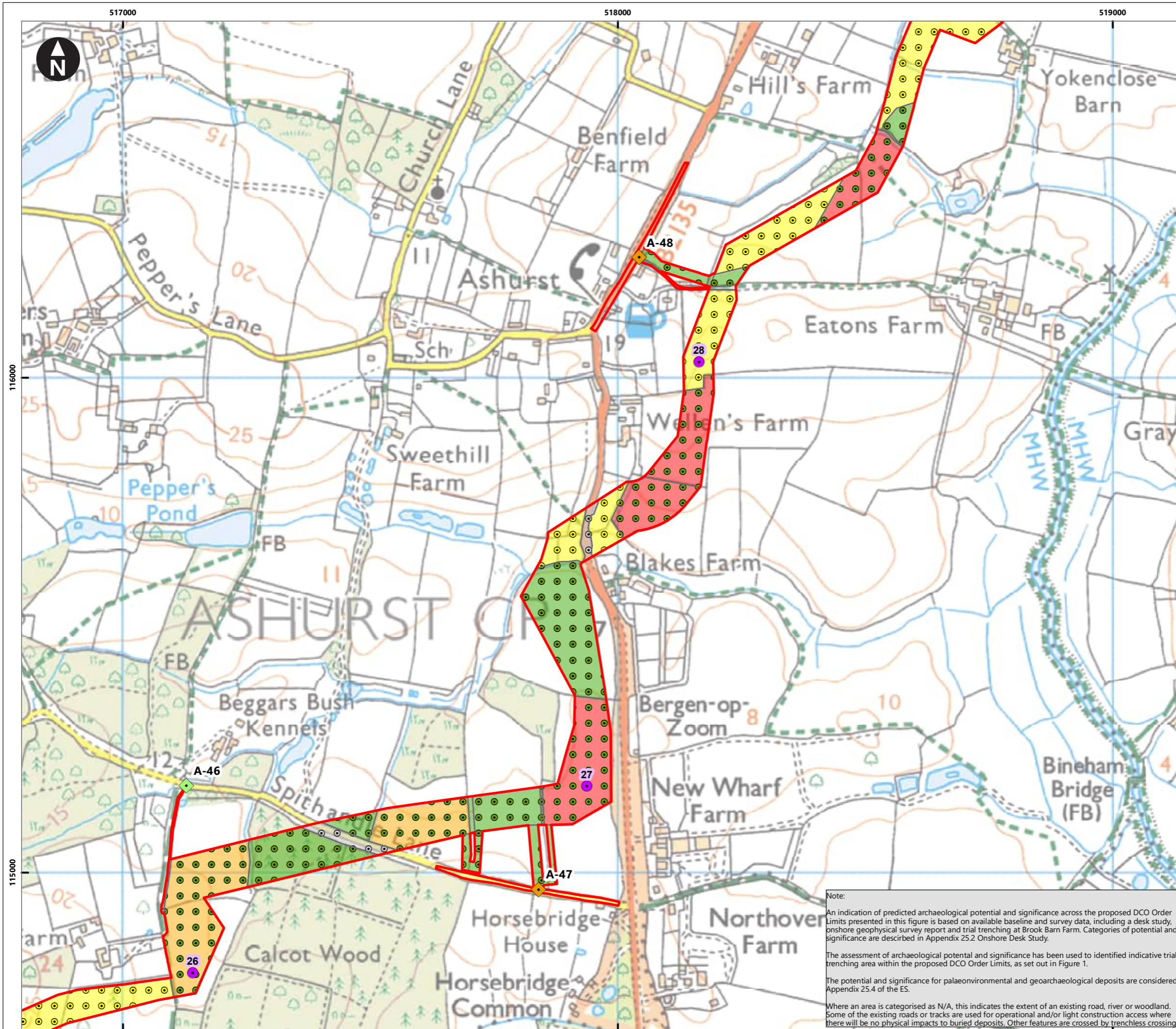
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An indication of predicted archaeological potential and significance across the proposed DCO Order Limits presented in this figure is based on available baseline and survey data, including a desk study, onshore geophysical survey report and trial trenching at Brook Barn Farm. Categories of potential and significance are described in Appendix 25.2 Onshore Desk Study.

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Key

- Proposed DCO Order Limits

Archaeological potential

- Very High
- High
- Medium
- Low
- Uncertain
- N/A

Heritage significance

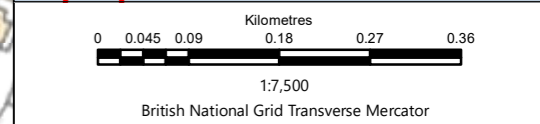
- High
- Medium
- Low
- Very Low
- Uncertain
- N/A

Onshore cable route KM points

- Onshore Substation connection
- Onshore cable route

Access from public highway

- Construction
- Construction & operational
- Light construction
- Light construction & operational
- Operational



Rampion Extension Development

Rampion 2 Offshore Wind Farm

Figure 2 Indicative areas of onshore archaeological potential and significance

System Identifier: 42285-WSP-EX-ON-FG-OH-4775 Version: 1.0

Company: WSP	Drawn By: BRYAA	Chk/Prvd: ATKIS	Drawn Date: 22/04/2024	Status: DRAFT
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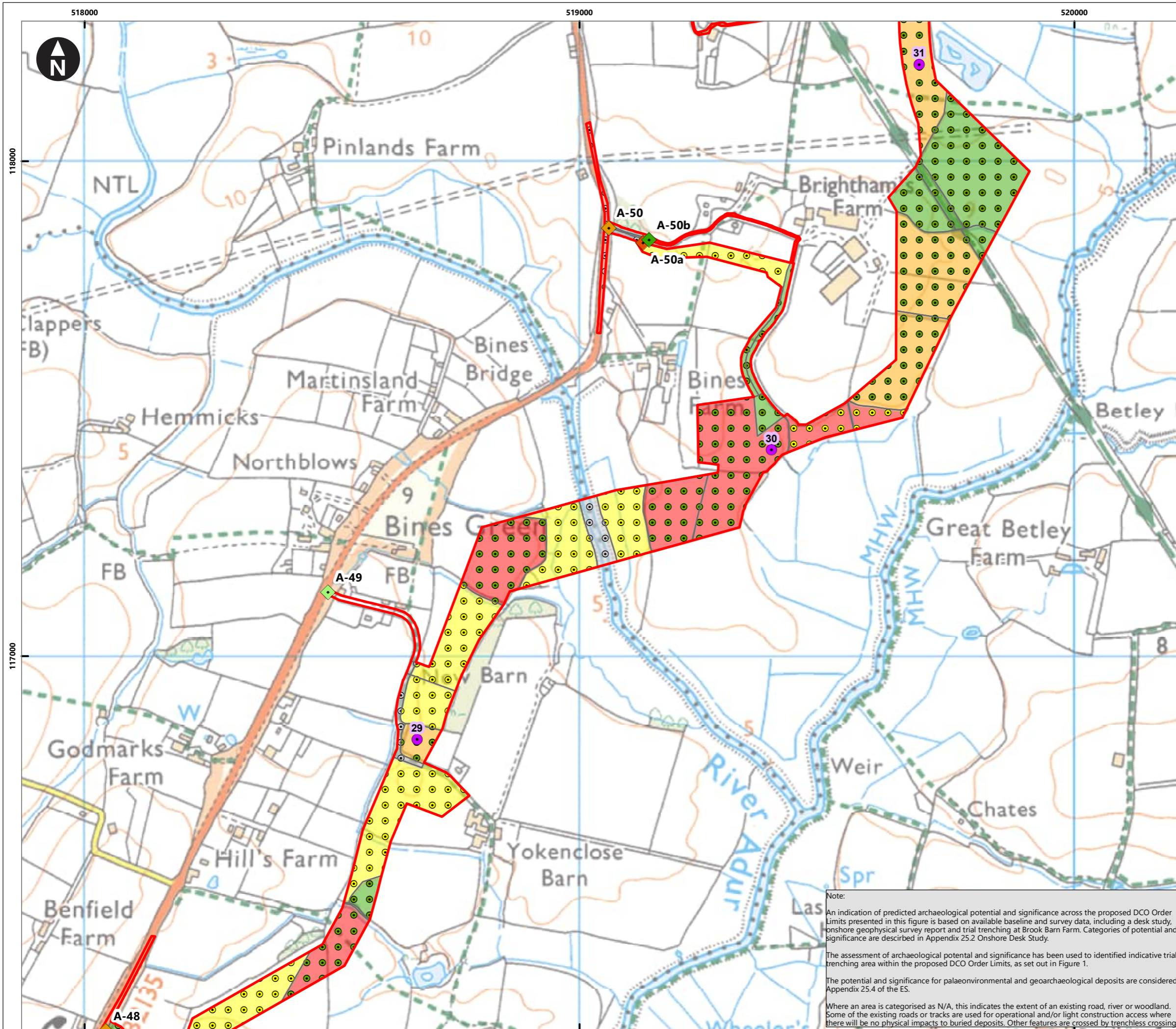
Note:

An indication of predicted archaeological potential and significance across the proposed DCO Order Limits presented in this figure is based on available baseline and survey data, including a desk study, onshore geophysical survey report and trial trenching at Brook Barn Farm. Categories of potential and significance are described in Appendix 25.2 Onshore Desk Study.

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The potential and significance for palaeoenvironmental and geoarchaeological deposits are considered in Appendix 25.4 of the ES.

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Key

- Proposed DCO Order Limits
- Archaeological potential**
 - Very High
 - High
 - Medium
 - Low
 - Uncertain
 - N/A
- Heritage significance**
 - High
 - Medium
 - Low
 - Very Low
 - Uncertain
 - N/A
- Onshore cable route KM points**
 - Onshore Substation connection
 - Onshore cable route
- Access from public highway**
 - Construction
 - Construction & operational
 - Light construction
 - Light construction & operational
 - Operational

Note:

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Scale: 0 0.045 0.09 0.18 0.27 0.36 Kilometres
1:7,500
British National Grid Transverse Mercator

Rampion Extension Development

Rampion 2 WIND FARM

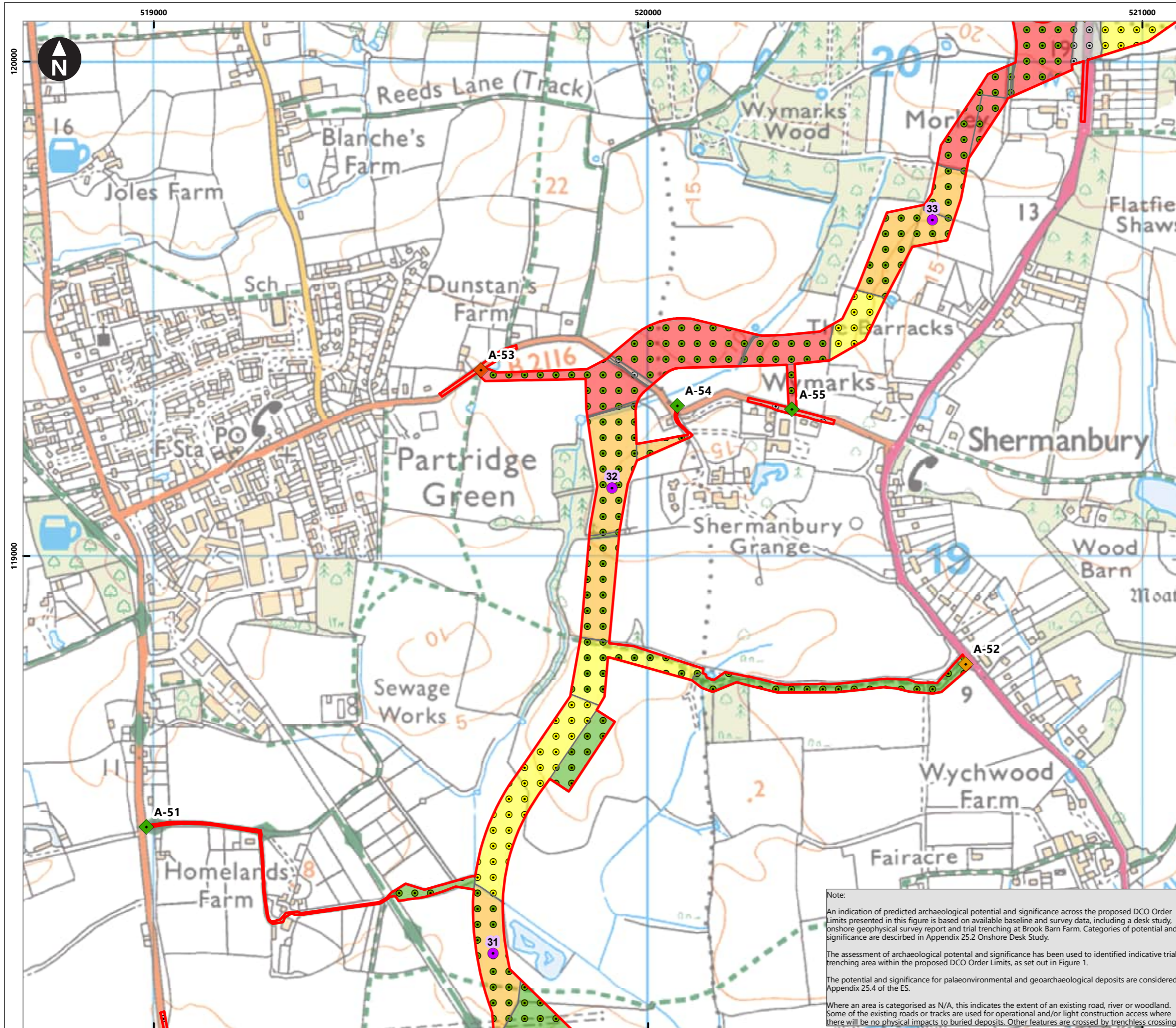
Rampion 2 Offshore Wind Farm

Figure 2 Indicative areas of onshore archaeological potential and significance

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System Identifier: 42285-WSPE-EX-ON-FG-OH-4775 Version: 1.0

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Key

Proposed DCO Order Limits

Archaeological potential

- Very High
- High
- Medium
- Low
- Uncertain
- N/A

Heritage significance

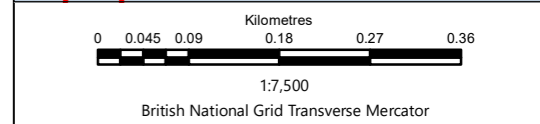
- High
- Medium
- Low
- Very Low
- Uncertain
- N/A

Onshore cable route KM points

- Onshore Substation connection
- Onshore cable route

Access from public highway

- Construction
- Construction & operational
- Light construction
- Light construction & operational
- Operational



Rampion Extension Development

Rampion 2 Offshore Wind Farm

Figure 2 Indicative areas of onshore archaeological potential and significance

System Identifier:		Version:	
42285-WSPE-EX-ON-FG-OH-4775		1.0	
Company:	Drawn By:	Chk/Prvrd:	Drawn Date:
WSP	BRYAA	ATKIS	22/04/2024
Status:	DRAFT		

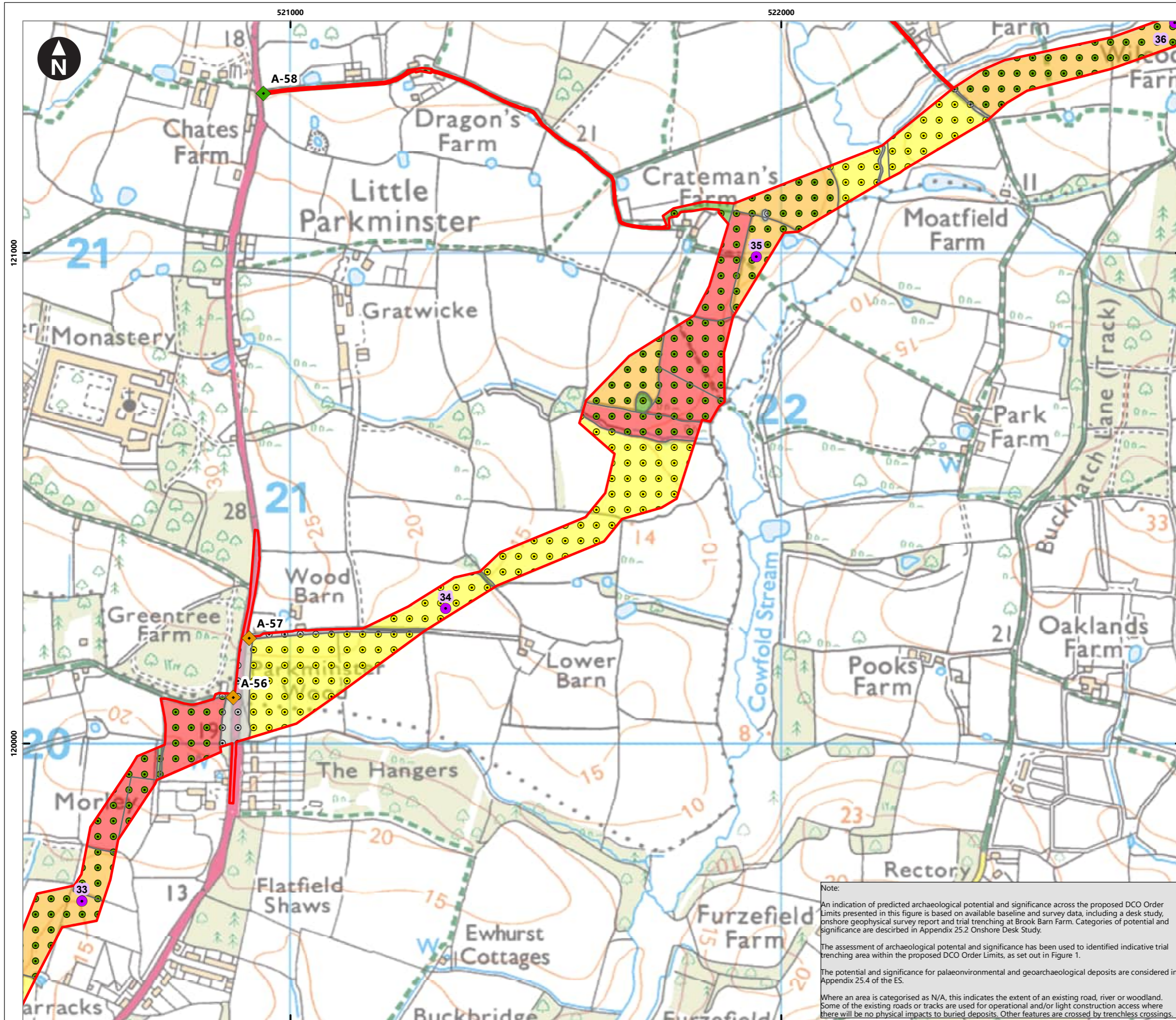
Note:

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Key

Proposed DCO Order Limits

Archaeological potential

- Very High
- High
- Medium
- Low
- Uncertain
- N/A

Heritage significance

- High
- Medium
- Low
- Very Low
- Uncertain
- N/A

Onshore cable route KM points

- Onshore Substation connection
- Onshore cable route

Access from public highway

- Construction
- Construction & operational
- Light construction
- Light construction & operational
- Operational

Scale: 0 0.045 0.09 0.18 0.27 0.36 Kilometres
 1:7,500
 British National Grid Transverse Mercator

Rampion Extension Development

Rampion 2 WIND FARM

Rampion 2 Offshore Wind Farm

Figure 2 Indicative areas of onshore archaeological potential and significance

Page 22 of 24

System Identifier: 42285-WSP-EX-ON-FG-OH-4775 Version: 1.0

Company: WSP Drawn By: BRYAA Chk/Prvrd: ATKIS Drawn Date: 22/04/2024 Status: DRAFT

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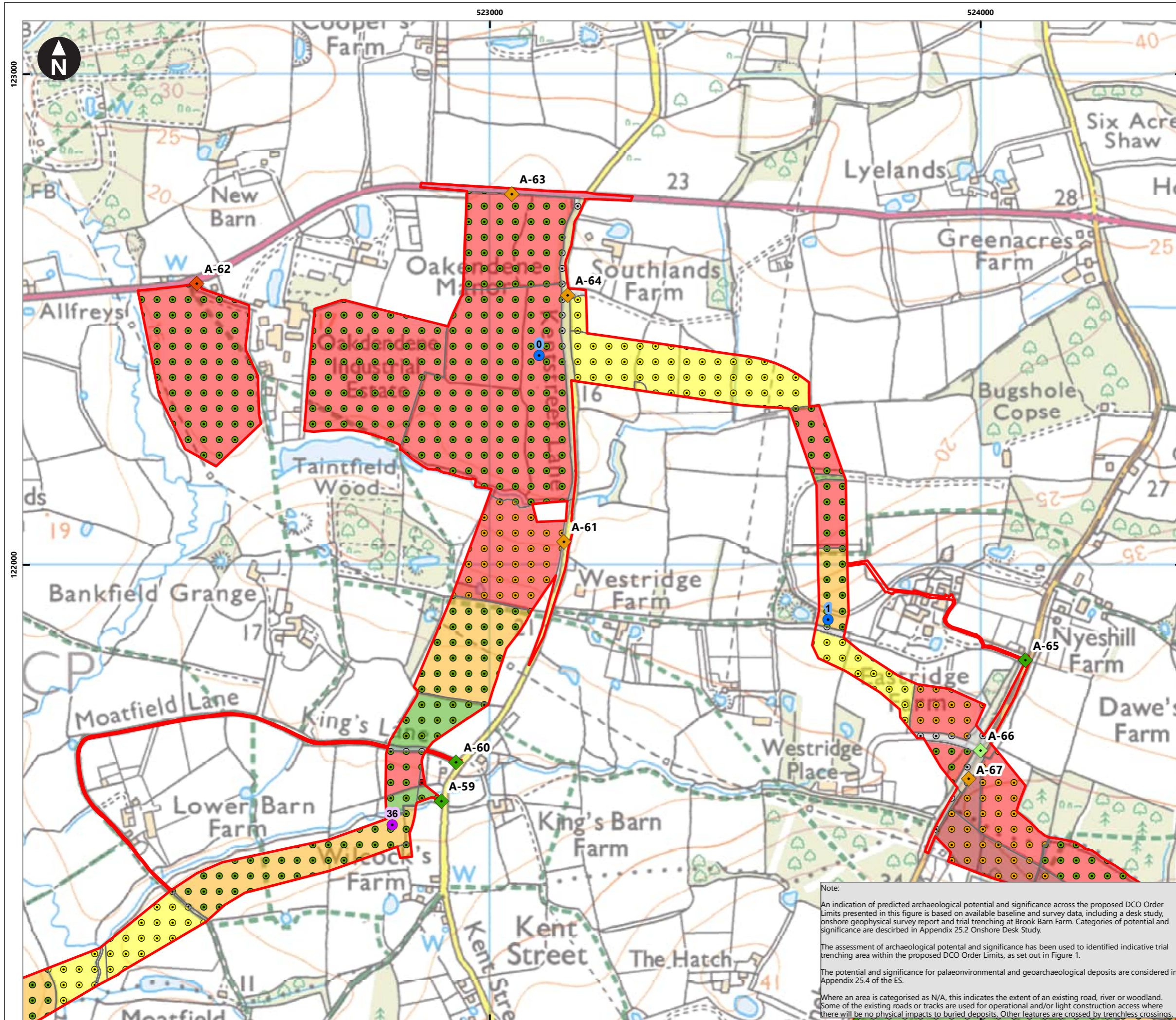
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Key

- Proposed DCO Order Limits

Archaeological potential

- Very High
- High
- Medium
- Low
- Uncertain
- N/A

Heritage significance

- High
- Medium
- Low
- Very Low
- Uncertain
- N/A

Onshore cable route KM points

- Onshore Substation connection
- Onshore cable route

Access from public highway

- Construction
- Construction & operational
- Light construction
- Light construction & operational
- Operational

0 0.045 0.09 0.18 0.27 0.36
 Kilometres
 1:7,500
 British National Grid Transverse Mercator

Rampion Extension Development

Rampion 2 Offshore Wind Farm

Figure 2 Indicative areas of onshore archaeological potential and significance

Page 23 of 24

System Identifier: 42285-WSP-EX-ON-FG-OH-4775 Version: 1.0

Company: WSP	Drawn By: BRYAA	Chk/Prvrd: ATKIS	Drawn Date: 22/04/2024	Status: DRAFT
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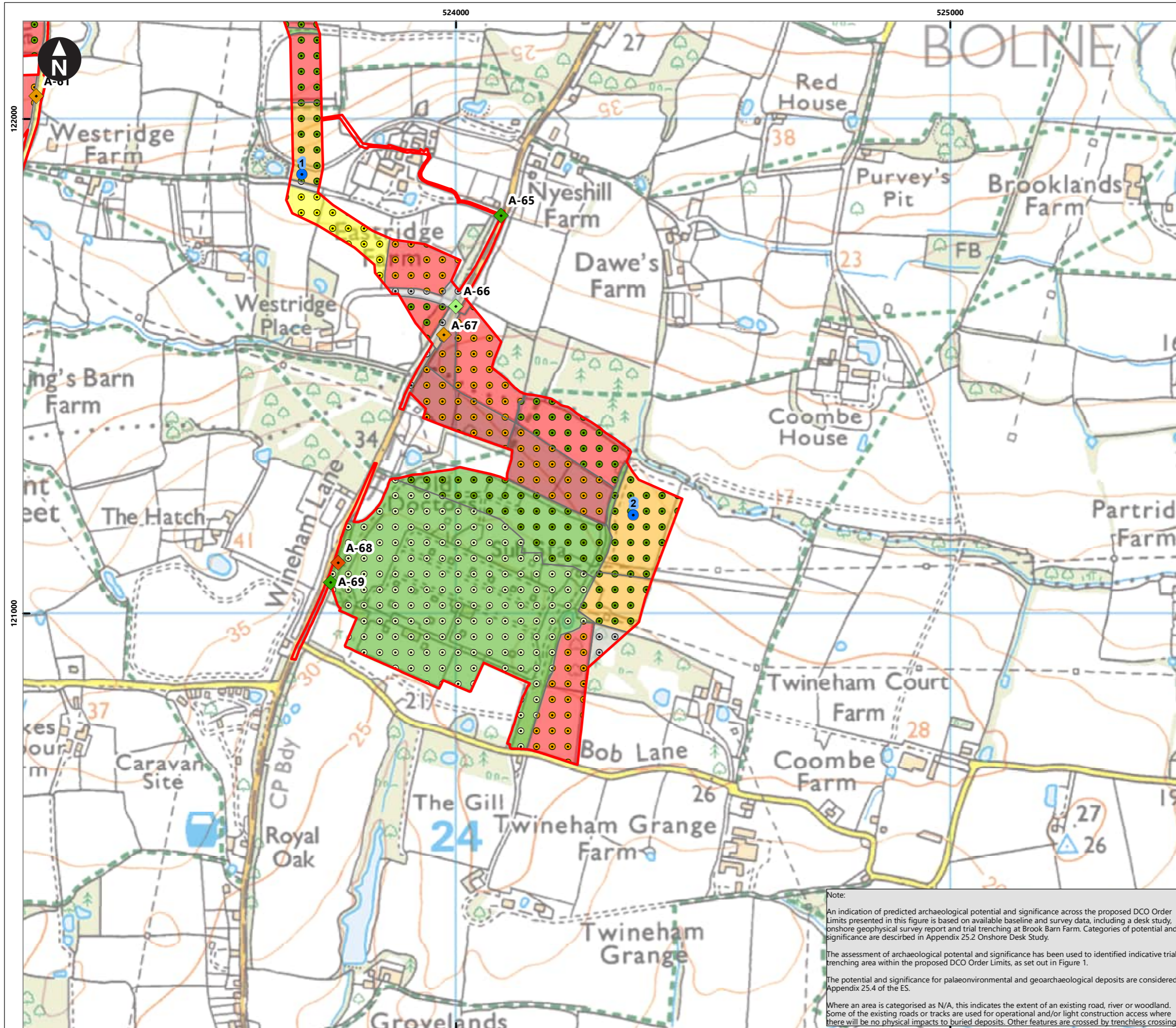
Note:

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Key

- Proposed DCO Order Limits

Archaeological potential

- Very High
- High
- Medium
- Low
- Uncertain
- N/A

Heritage significance

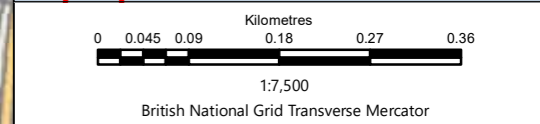
- High
- Medium
- Low
- Very Low
- Uncertain
- N/A

Onshore cable route KM points

- Onshore Substation connection
- Onshore cable route

Access from public highway

- Construction
- Construction & operational
- Light construction
- Light construction & operational
- Operational



Rampion Extension Development

Rampion 2 Offshore Wind Farm

Figure 2 Indicative areas of onshore archaeological potential and significance

System Identifier: 42285-WSP-EX-ON-FG-OH-4775 Version: 1.0

Company: WSP	Drawn By: BRYAA	Chk/Prvrd: ATKIS	Drawn Date: 22/04/2024	Status: DRAFT
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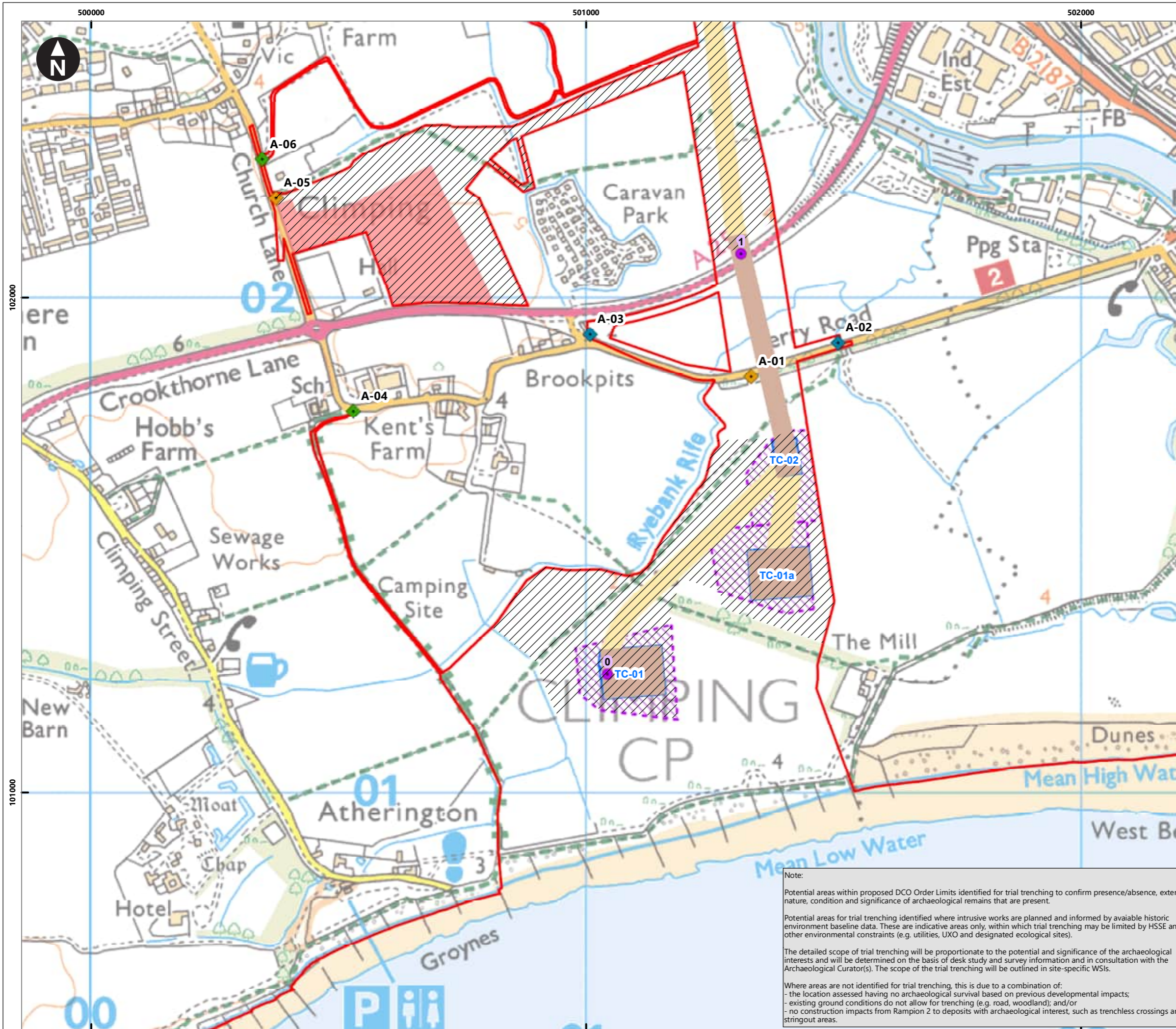
Note:

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The assessment of archaeological potential and significance has been used to identify indicative trial trenching area within the proposed DCO Order Limits, as set out in Figure 1.

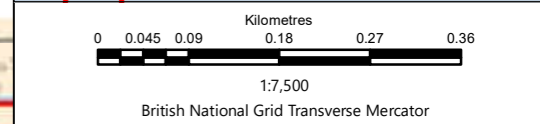
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- Key**
- Proposed DCO Order Limits
 - Potential area for trial trenching
 - Existing National Grid Substation
 - Bolney Substation extension (GIS)
 - Bolney Substation extension (AIS)
 - Temporary construction compound
 - Onshore substation site
 - Trenchless Crossing (TC) compounds
 - Trenchless Crossing (TC) compound alternatives
 - Trenchless Crossing (TC) limits of deviation
- Proposed onshore cable construction corridor**
- Indicative trenchless section
 - Indicative open cut section
- Onshore cable route KM points**
- Onshore Substation connection
 - Onshore cable route
- Access from public highway**
- ◆ Construction
 - ◆ Construction & operational
 - ◆ Light construction
 - ◆ Light construction & operational
 - ◆ Operational



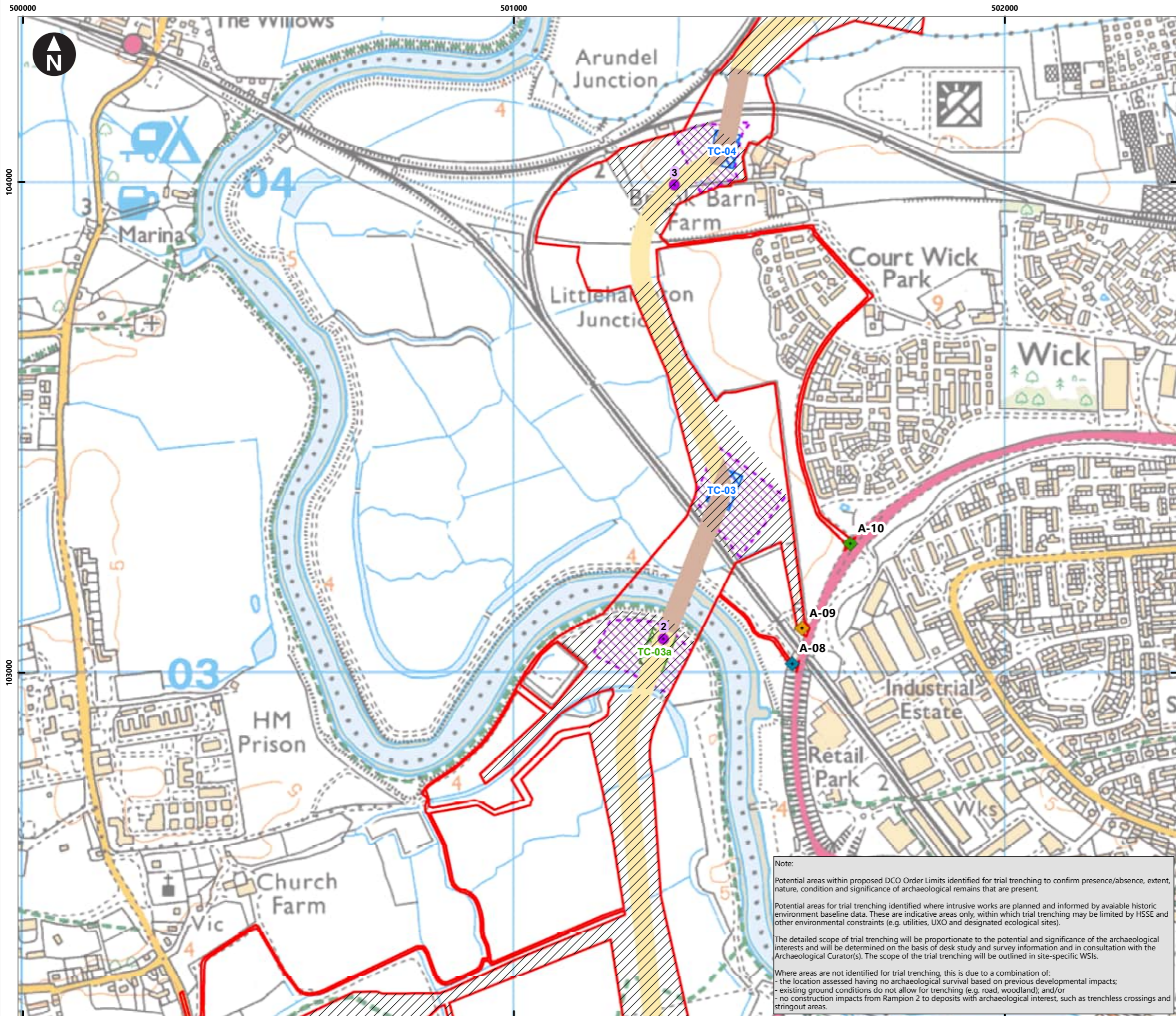
Rampion Extension Development

Rampion 2 Offshore Wind Farm

Figure 3 Potential areas of proposed archaeological trial trenching

Note:
 Potential areas within proposed DCO Order Limits identified for trial trenching to confirm presence/absence, extent, nature, condition and significance of archaeological remains that are present.
 Potential areas for trial trenching identified where intrusive works are planned and informed by available historic environment baseline data. These are indicative areas only, within which trial trenching may be limited by HSSE and other environmental constraints (e.g. utilities, UXO and designated ecological sites).
 The detailed scope of trial trenching will be proportionate to the potential and significance of the archaeological interests and will be determined on the basis of desk study and survey information and in consultation with the Archaeological Curator(s). The scope of the trial trenching will be outlined in site-specific WSIs.
 Where areas are not identified for trial trenching, this is due to a combination of:
 - the location assessed having no archaeological survival based on previous developmental impacts;
 - existing ground conditions do not allow for trenching (e.g. road, woodland); and/or
 - no construction impacts from Rampion 2 to deposits with archaeological interest, such as trenchless crossings and stringout areas.

System Identifier: 42285-WSPE-EX-ON-FG-OH-2253		Version: 1.0
Company: WSP	Drawn By: BRYAA	Chk/Prvrd: ATKIS
Drawn Date: 22/04/2024	Status: DRAFT	



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 Ordnance Survey 0100031673

Key

- Proposed DCO Order Limits
- Potential area for trial trenching
- Existing National Grid Substation
- Bolney Substation extension (GIS)
- Bolney Substation extension (AIS)
- Temporary construction compound
- Onshore substation site
- Trenchless Crossing (TC) compounds
- Trenchless Crossing (TC) compound alternatives
- Trenchless Crossing (TC) limits of deviation

Proposed onshore cable construction corridor

- Indicative trenchless section
- Indicative open cut section

Onshore cable route KM points

- Onshore Substation connection
- Onshore cable route

Access from public highway

- ◆ Construction
- ◆ Construction & operational
- ◆ Light construction
- ◆ Light construction & operational
- ◆ Operational

Note:

Potential areas within proposed DCO Order Limits identified for trial trenching to confirm presence/absence, extent, nature, condition and significance of archaeological remains that are present.

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Where areas are not identified for trial trenching, this is due to a combination of:

- the location assessed having no archaeological survival based on previous developmental impacts;
- existing ground conditions do not allow for trenching (e.g. road, woodland); and/or
- no construction impacts from Rampion 2 to deposits with archaeological interest, such as trenchless crossings and stringout areas.

Map Information:

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 British National Grid Transverse Mercator
 Scale bar: 0, 0.045, 0.09, 0.18, 0.27, 0.36 Kilometres

Project Information:


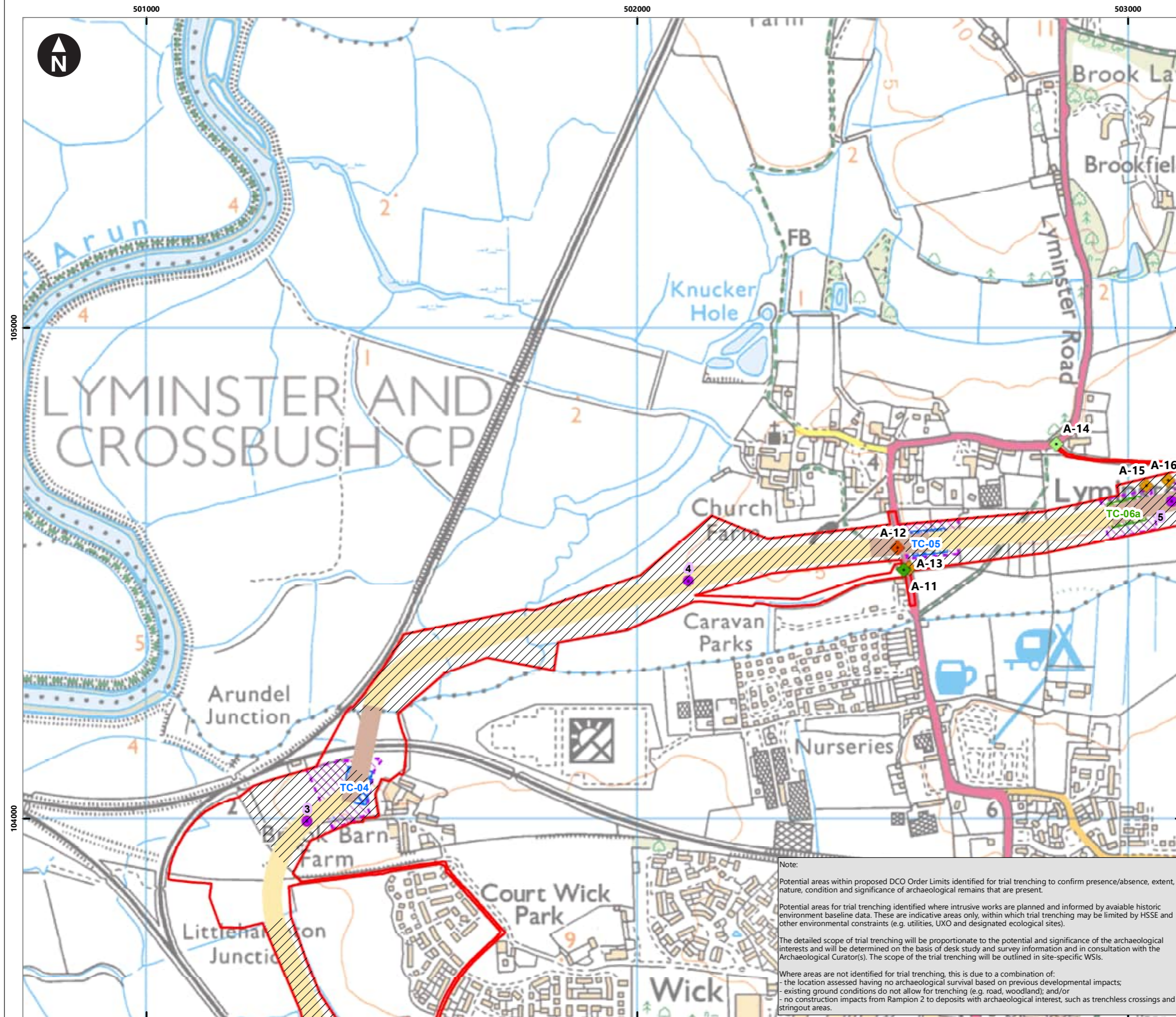
Rampion Extension Development

 Rampion 2 Offshore Wind Farm

Figure 3 Potential areas of proposed archaeological trial trenching

Page 2 of 24

System Identifier: 42285-WSPE-EX-ON-FG-OH-2253 **Version:** 1.0

Company: WSP **Drawn By:** BRYAA **Chk/Prvd:** ATKIS **Drawn Date:** 22/04/2024 **Status:** DRAFT



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Key

- Proposed DCO Order Limits
- Potential area for trial trenching
- Existing National Grid Substation
- Bolney Substation extension (GIS)
- Bolney Substation extension (AIS)
- Temporary construction compound
- Onshore substation site
- Trenchless Crossing (TC) compounds
- Trenchless Crossing (TC) compound alternatives
- Trenchless Crossing (TC) limits of deviation

Proposed onshore cable construction corridor

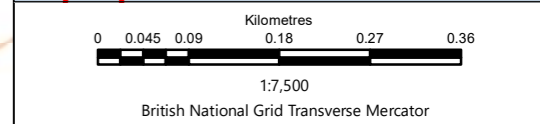
- Indicative trenchless section
- Indicative open cut section

Onshore cable route KM points

- Onshore Substation connection
- Onshore cable route

Access from public highway

- ◆ Construction
- ◆ Construction & operational
- ◆ Light construction
- ◆ Light construction & operational
- ◆ Operational



Rampion Extension Development

Rampion 2 Offshore Wind Farm

Figure 3 Potential areas of proposed archaeological trial trenching

Note:

Potential areas within proposed DCO Order Limits identified for trial trenching to confirm presence/absence, extent, nature, condition and significance of archaeological remains that are present.

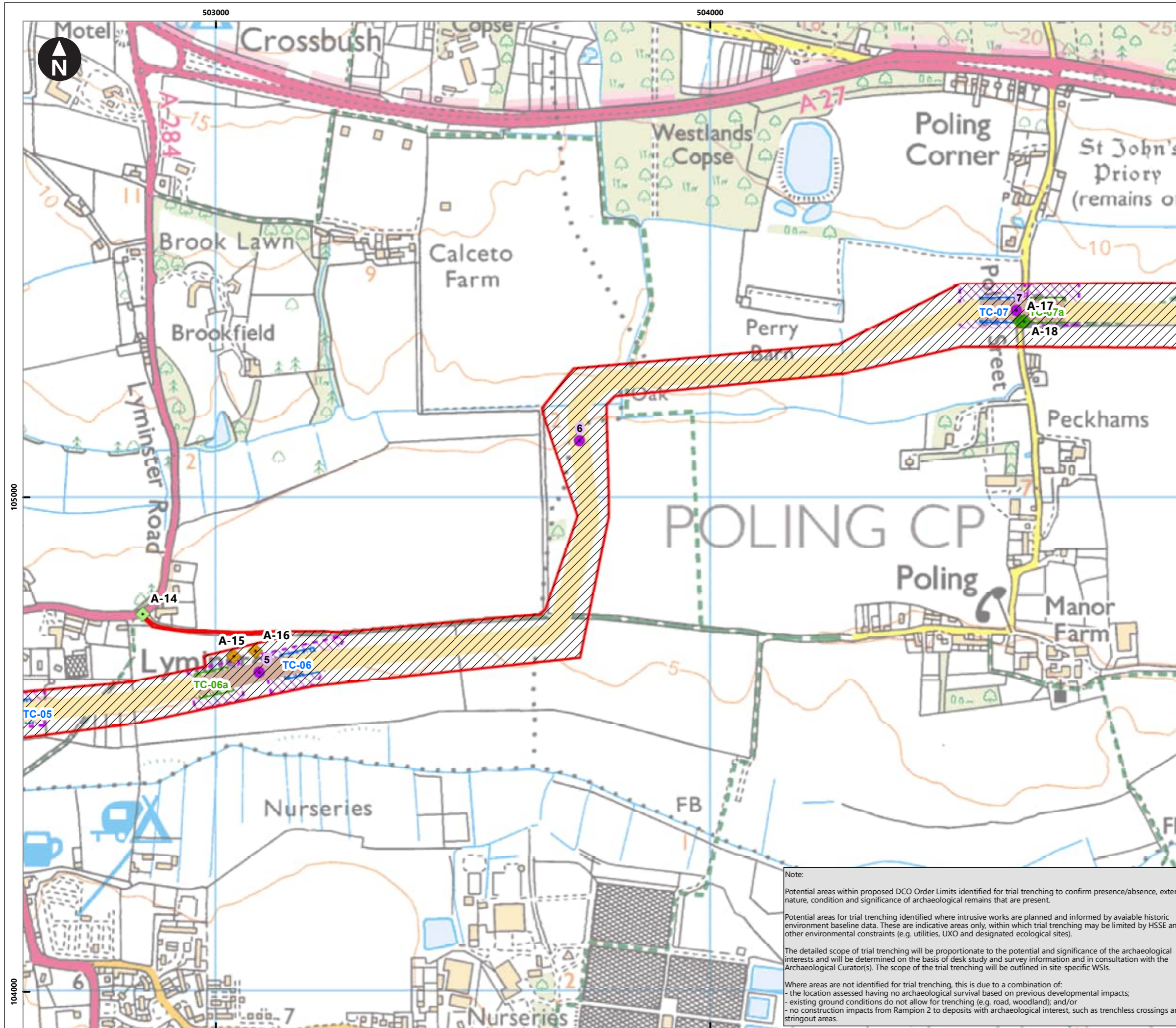
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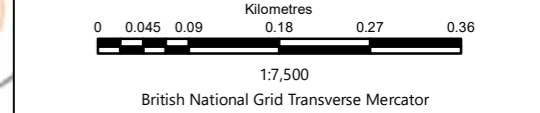
- the location assessed having no archaeological survival based on previous developmental impacts;
- existing ground conditions do not allow for trenching (e.g. road, woodland); and/or
- no construction impacts from Rampion 2 to deposits with archaeological interest, such as trenchless crossings and stringout areas.

System Identifier: 42285-WSPE-EX-ON-FG-OH-2253		Version: 1.0
Company: WSP	Drawn By: BRYAA	Chk/Prvrd: ATKIS
Drawn Date: 22/04/2024	Status: DRAFT	



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- Key**
- Proposed DCO Order Limits
 - Potential area for trial trenching
 - Existing National Grid Substation
 - Bolney Substation extension (GIS)
 - Bolney Substation extension (AIS)
 - Temporary construction compound
 - Onshore substation site
 - Trenchless Crossing (TC) compounds
 - Trenchless Crossing (TC) compound alternatives
 - Trenchless Crossing (TC) limits of deviation
- Proposed onshore cable construction corridor**
- Indicative trenchless section
 - Indicative open cut section
- Onshore cable route KM points**
- Onshore Substation connection
 - Onshore cable route
- Access from public highway**
- ◆ Construction
 - ◆ Construction & operational
 - ◆ Light construction
 - ◆ Light construction & operational
 - ◆ Operational



Rampion Extension Development

Rampion 2 Offshore Wind Farm

Figure 3 Potential areas of proposed archaeological trial trenching

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System Identifier:		Version:	
42285-WSP-EX-ON-FG-OH-2253		1.0	
Company:	Drawn By:	Chk/Prvd:	Drawn Date:
WSP	BRYAA	ATKIS	22/04/2024
Status:	DRAFT		

Note:

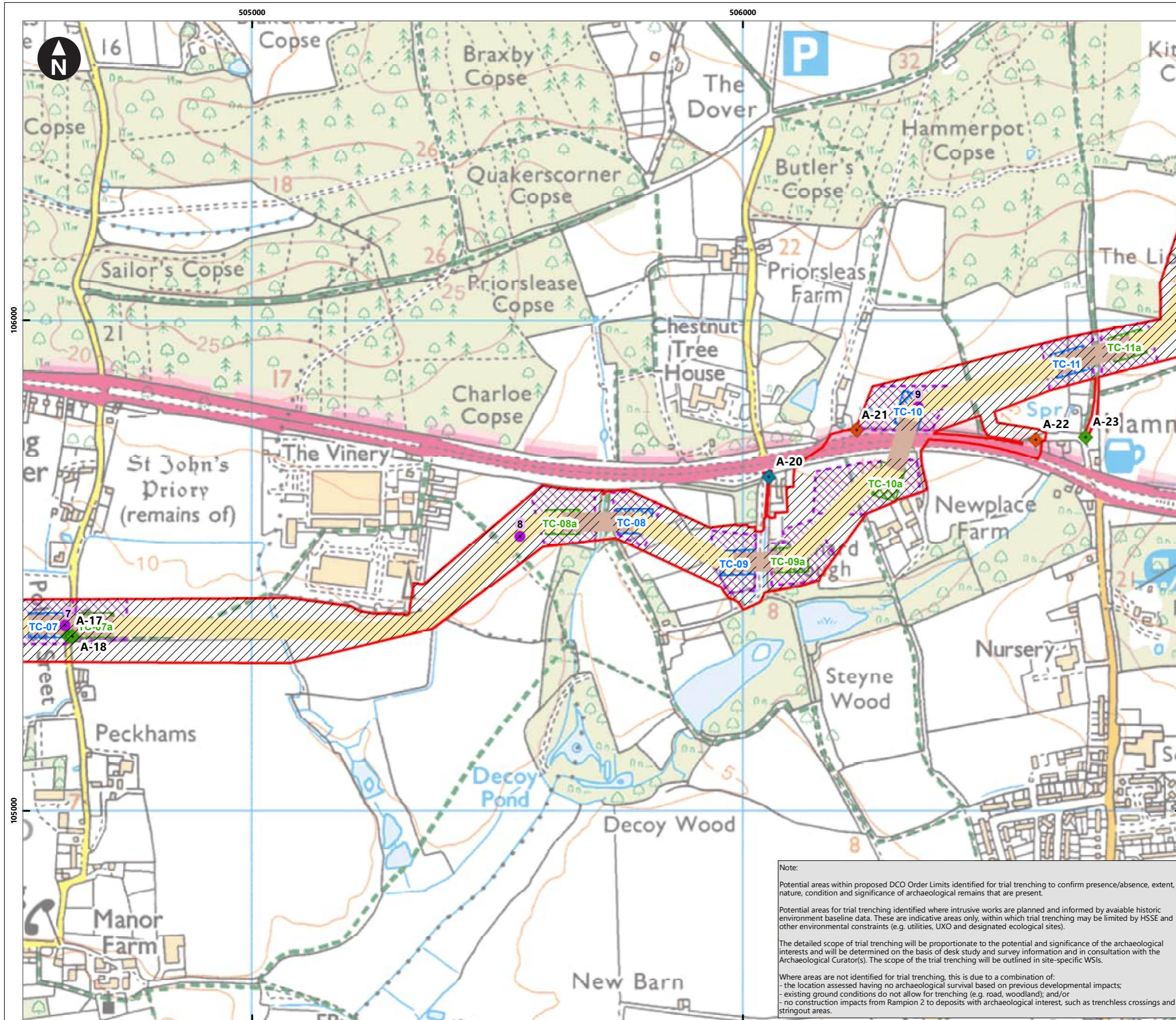
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 Ordnance Survey 0100031673

Key

- Proposed DCO Order Limits
- Potential area for trial trenching
- Existing National Grid Substation
- Bolney Substation extension (GIS)
- Bolney Substation extension (AIS)
- Temporary construction compound
- Onshore substation site
- Trenchless Crossing (TC) compounds
- Trenchless Crossing (TC) compound alternatives
- Trenchless Crossing (TC) limits of deviation

Proposed onshore cable construction corridor

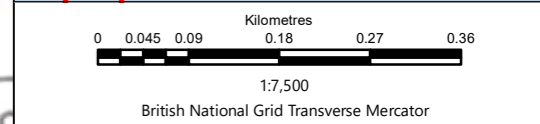
- Indicative trenchless section
- Indicative open cut section

Onshore cable route KM points

- Onshore Substation connection
- Onshore cable route

Access from public highway

- ◆ Construction
- ◆ Construction & operational
- ◆ Light construction
- ◆ Light construction & operational
- ◆ Operational



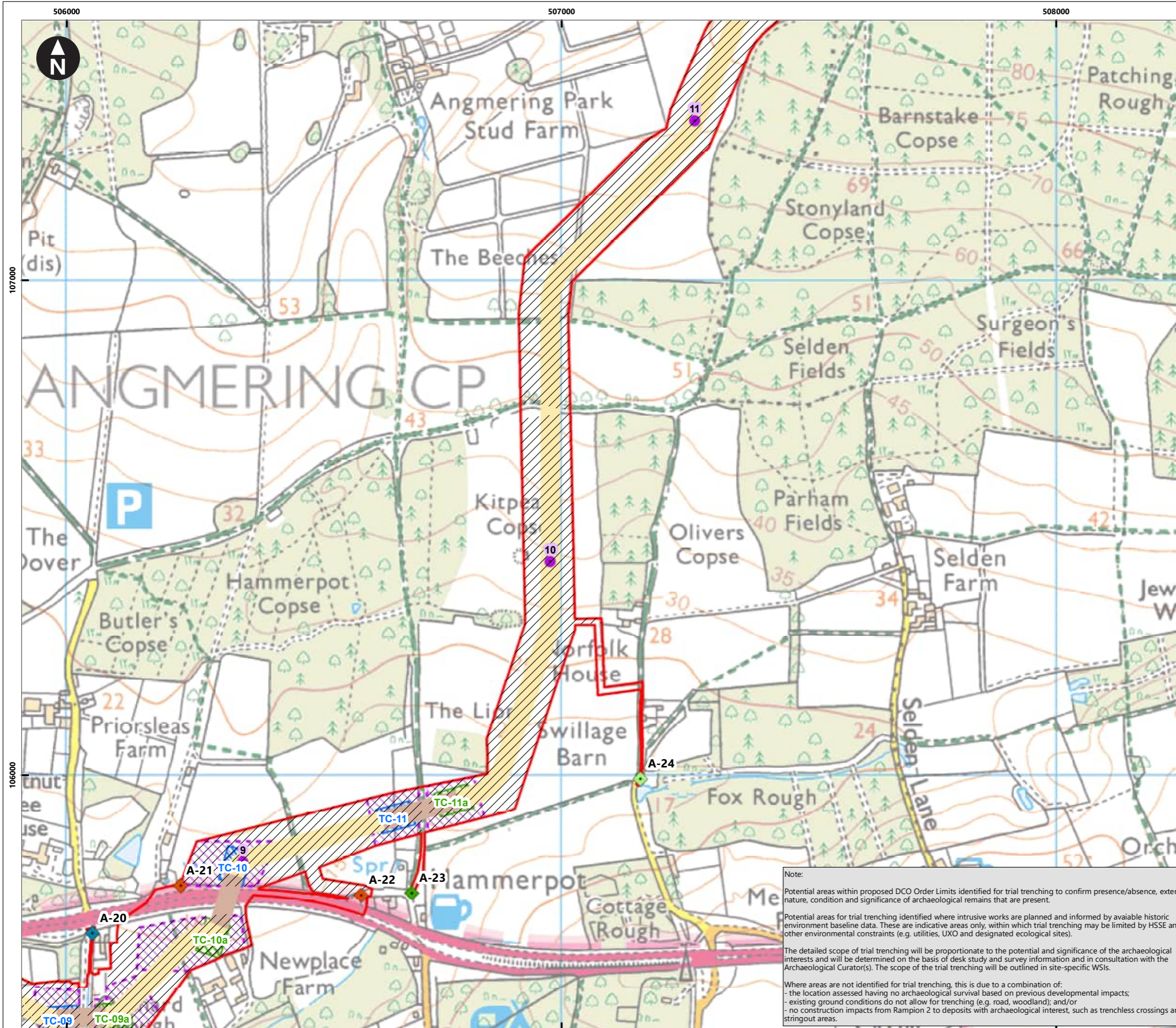
Rampion Extension Development

Rampion 2 Offshore Wind Farm

Figure 3 Potential areas of proposed archaeological trial trenching

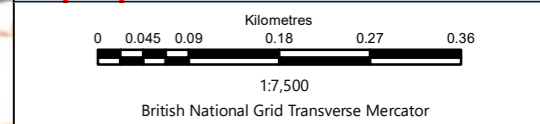
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- Onshore Substation connection
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- Access from public highway**
- ◆ Construction
 - ◆ Construction & operational
 - ◆ Light construction
 - ◆ Light construction & operational
 - ◆ Operational



Rampion Extension Development

Rampion 2 Offshore Wind Farm

Figure 3 Potential areas of proposed archaeological trial trenching

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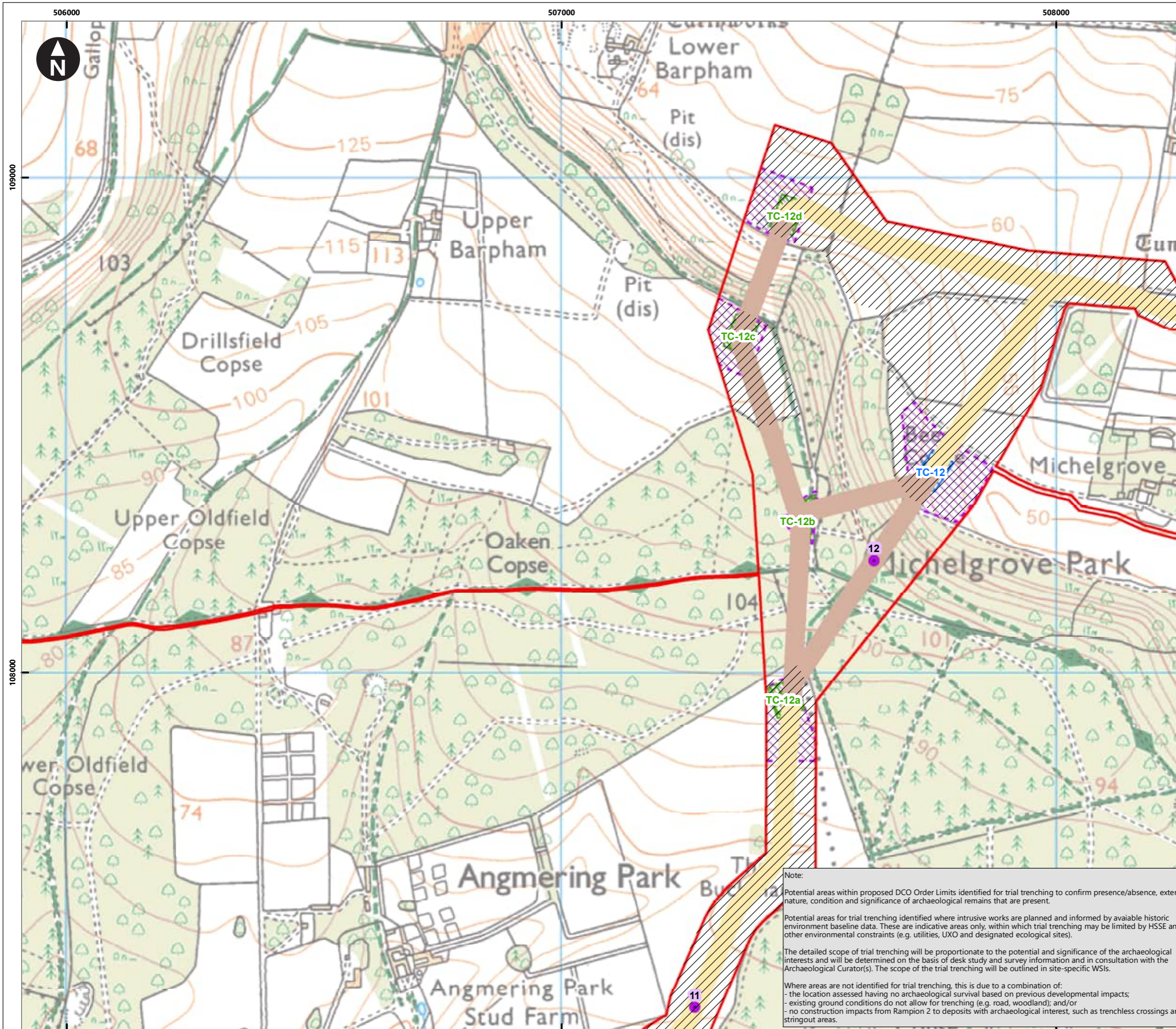
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Proposed onshore cable construction corridor

- Indicative trenchless section
- Indicative open cut section

Onshore cable route KM points

- Onshore Substation connection
- Onshore cable route

Access from public highway

- Construction
- Construction & operational
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Scale: 0 0.045 0.09 0.18 0.27 0.36 Kilometres
 1:7,500
 British National Grid Transverse Mercator

Rampion Extension Development

Rampion 2 WIND FARM

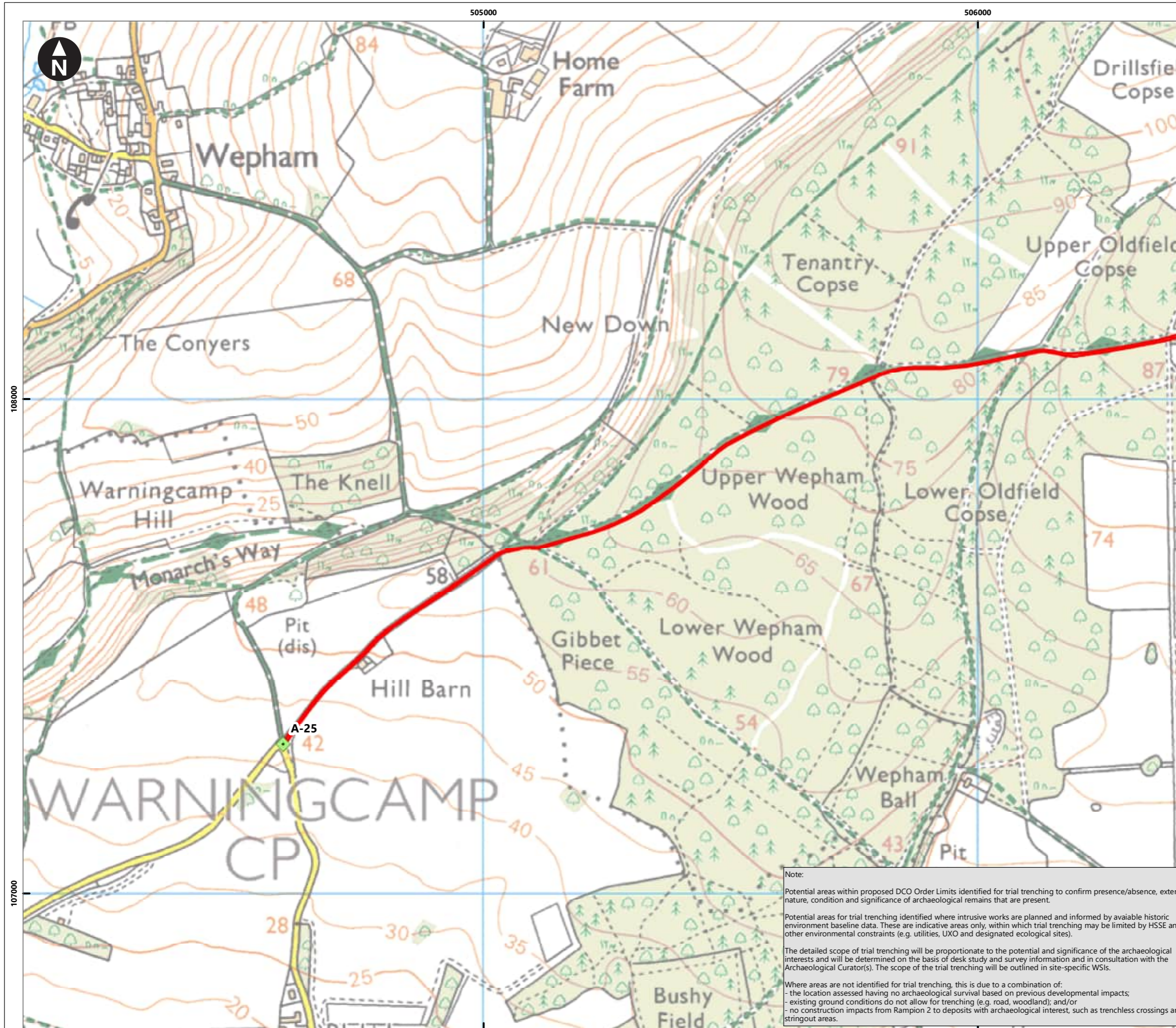
Rampion 2 Offshore Wind Farm

Figure 3 Potential areas of proposed archaeological trial trenching

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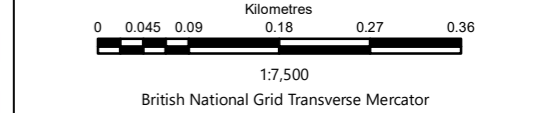
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 - ◆ Light construction
 - ◆ Light construction & operational
 - ◆ Operational



Rampion Extension Development

Rampion 2 Offshore Wind Farm

Figure 3 Potential areas of proposed archaeological trial trenching

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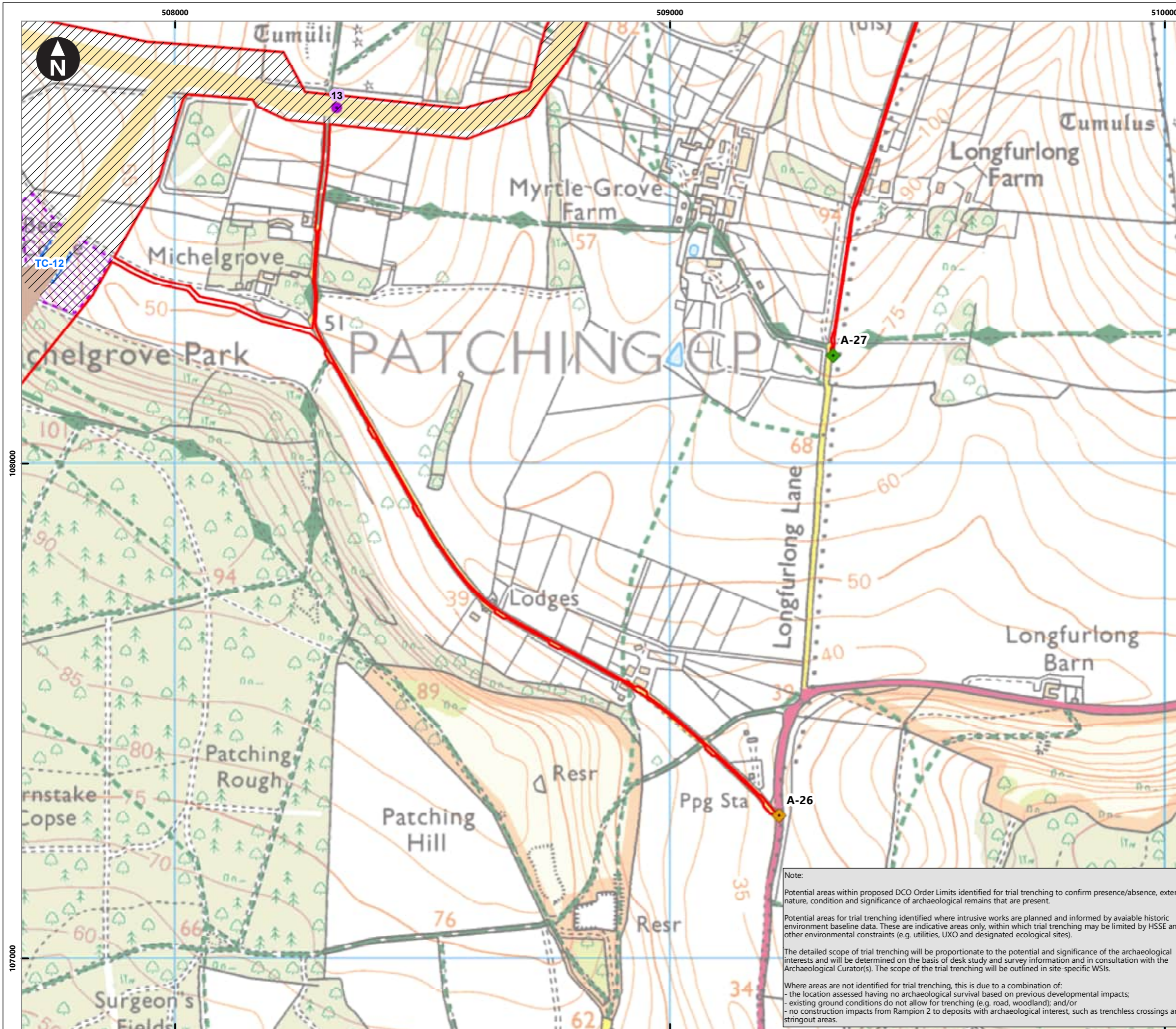
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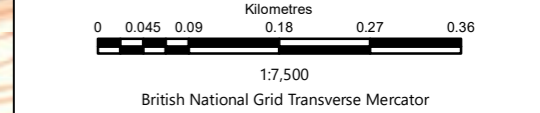
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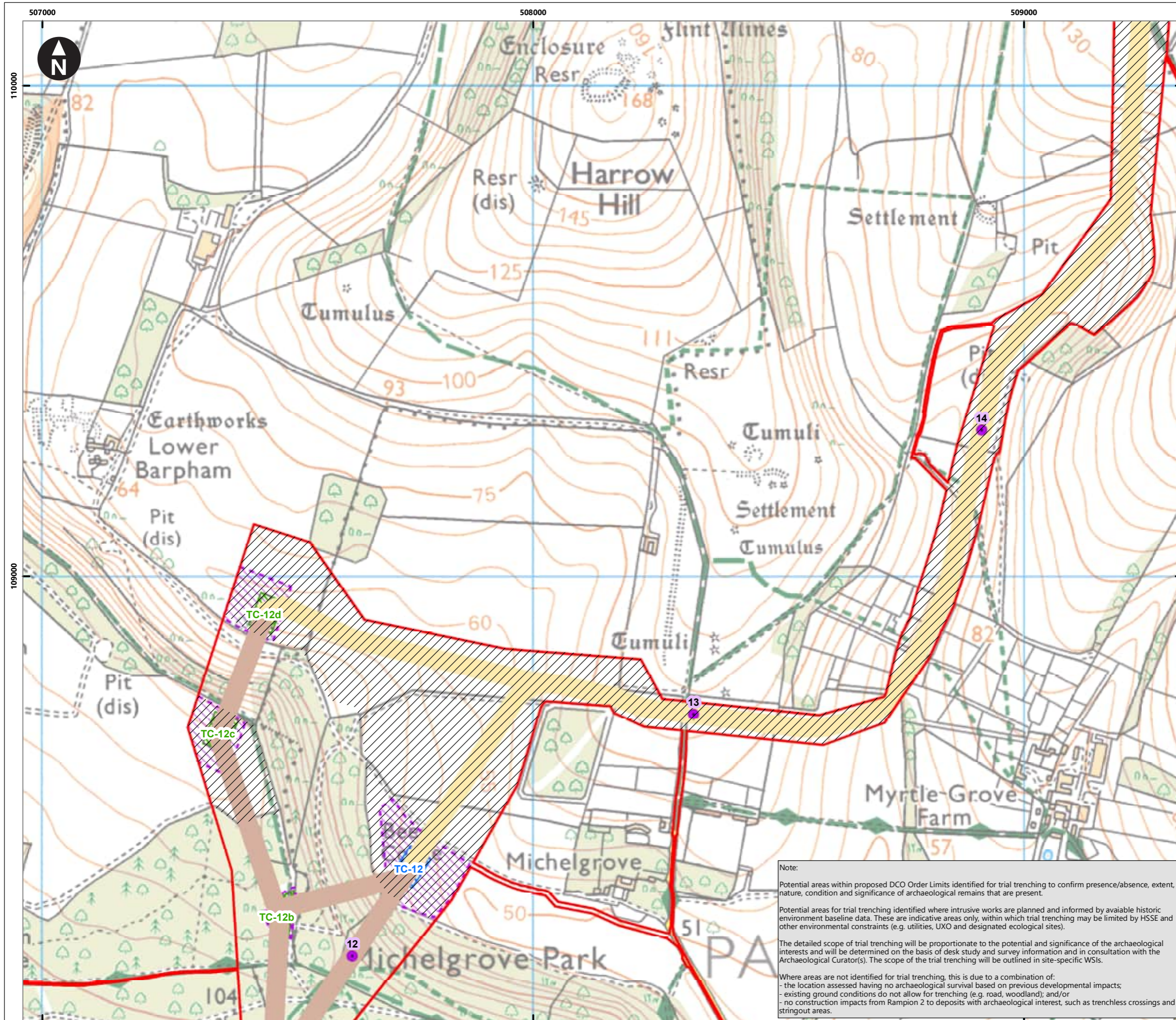
Rampion Extension Development

Rampion 2 Offshore Wind Farm
 Figure 3 Potential areas of proposed archaeological trial trenching

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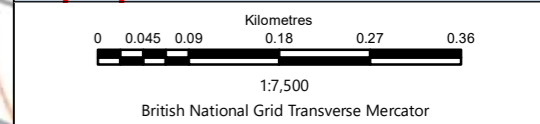
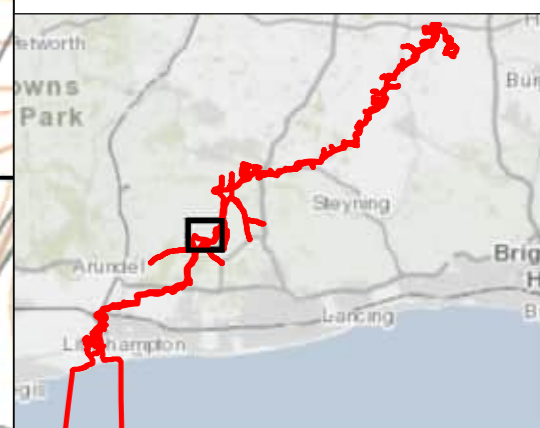
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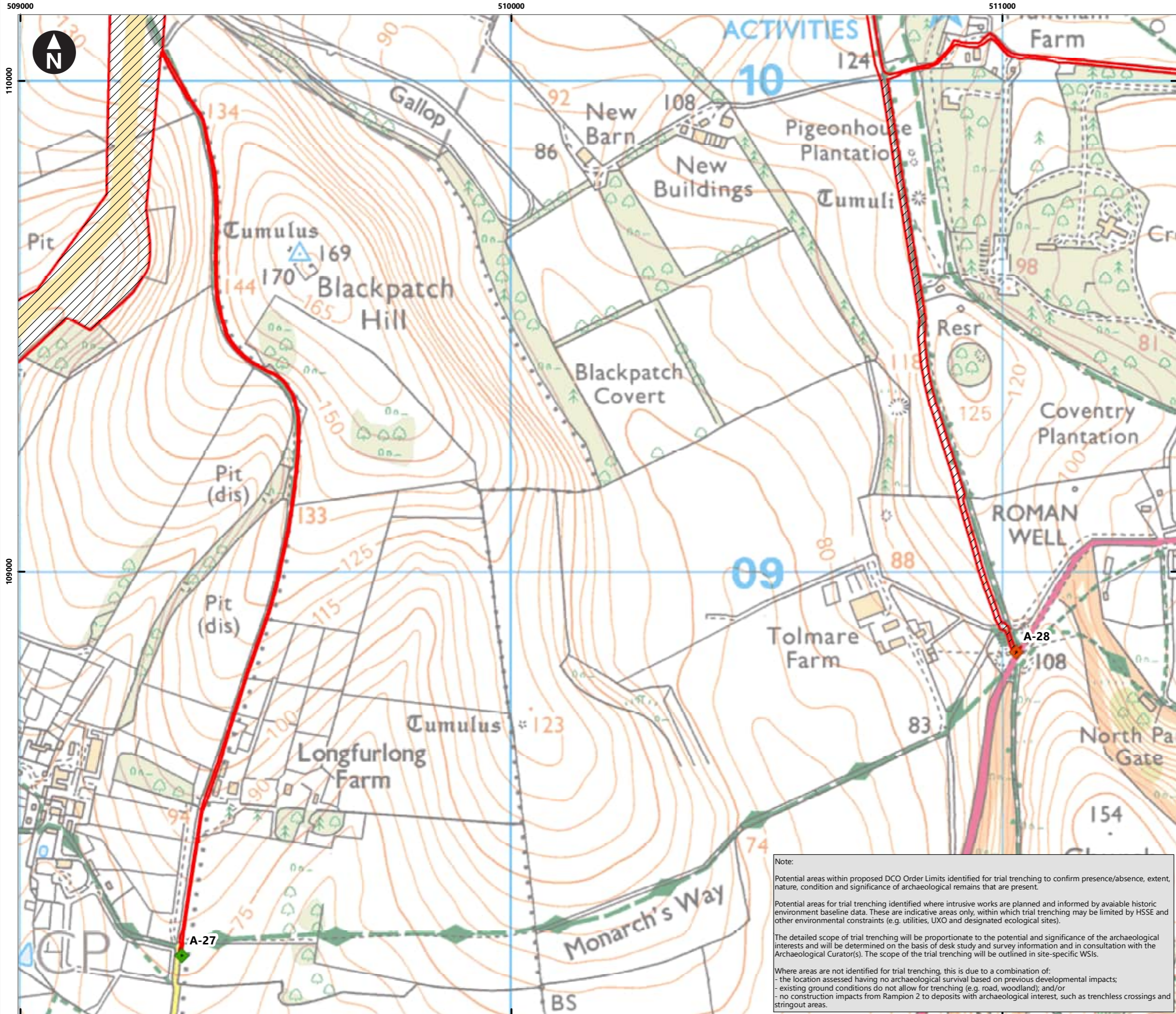
Rampion Extension Development

Rampion 2 Offshore Wind Farm

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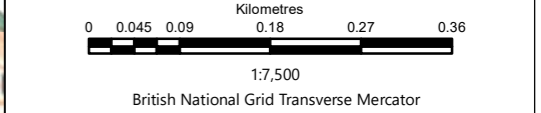
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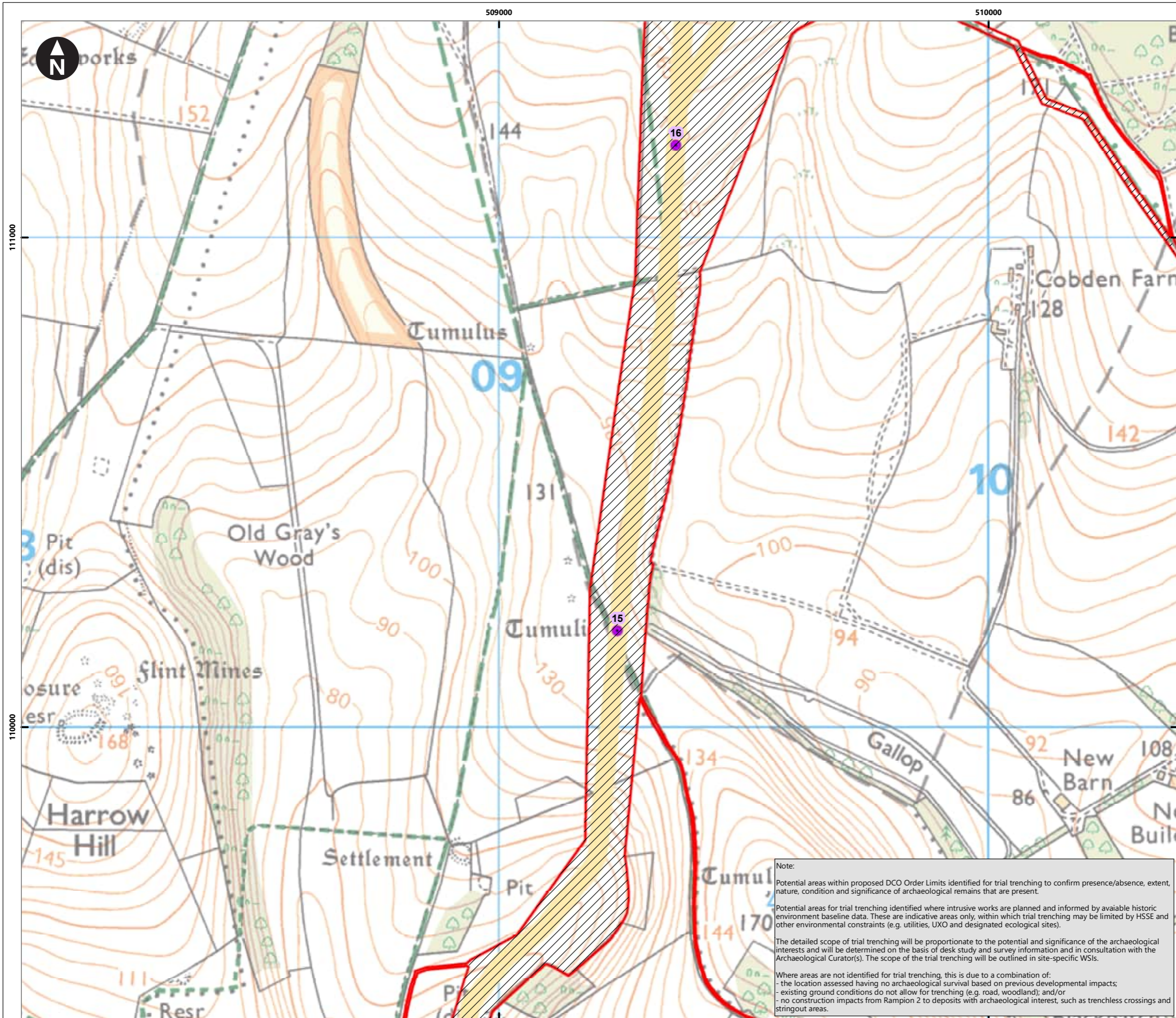
Rampion Extension Development

Rampion 2 Offshore Wind Farm
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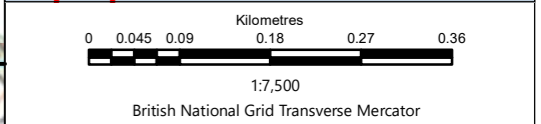
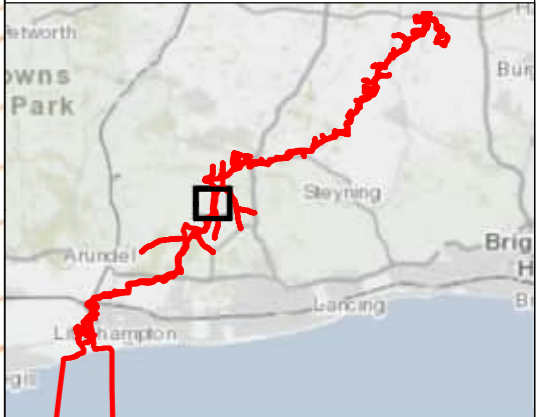
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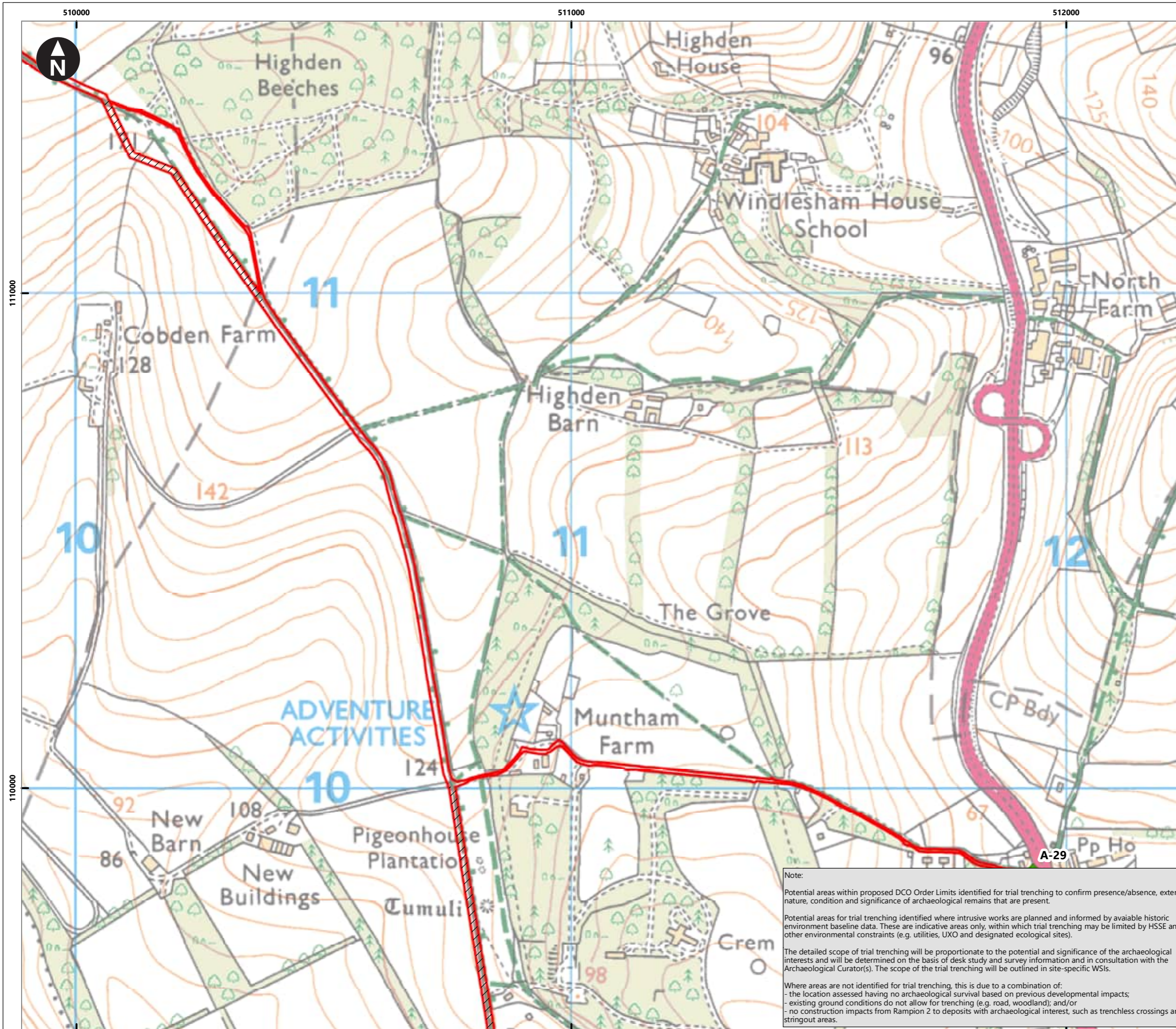
Figure 3 Potential areas of proposed archaeological trial trenching

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Rampion Extension Development

Rampion 2 WIND FARM

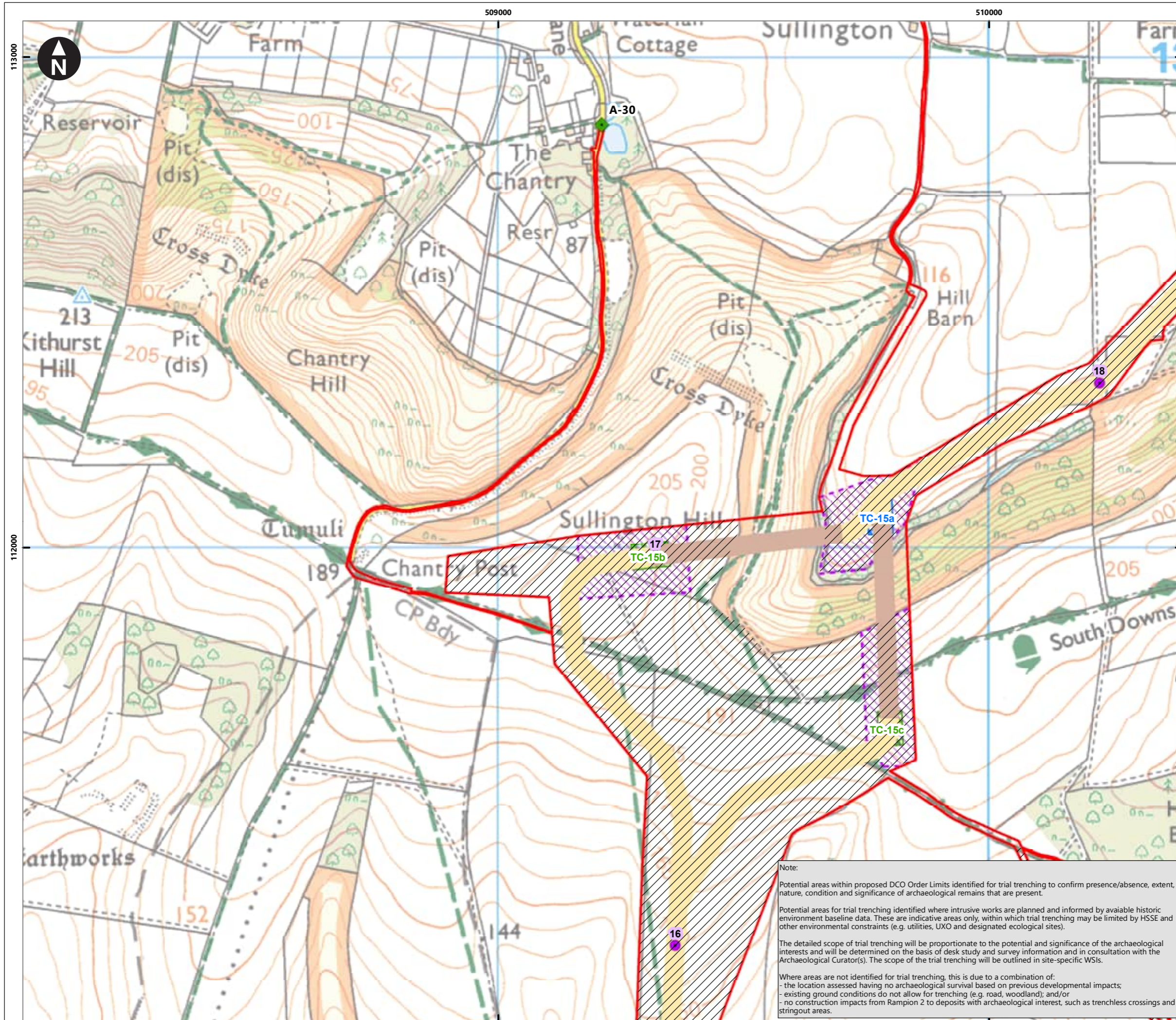
Rampion 2 Offshore Wind Farm

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System Identifier: 42285-WSPE-EX-ON-FG-OH-2253 Version: 1.0

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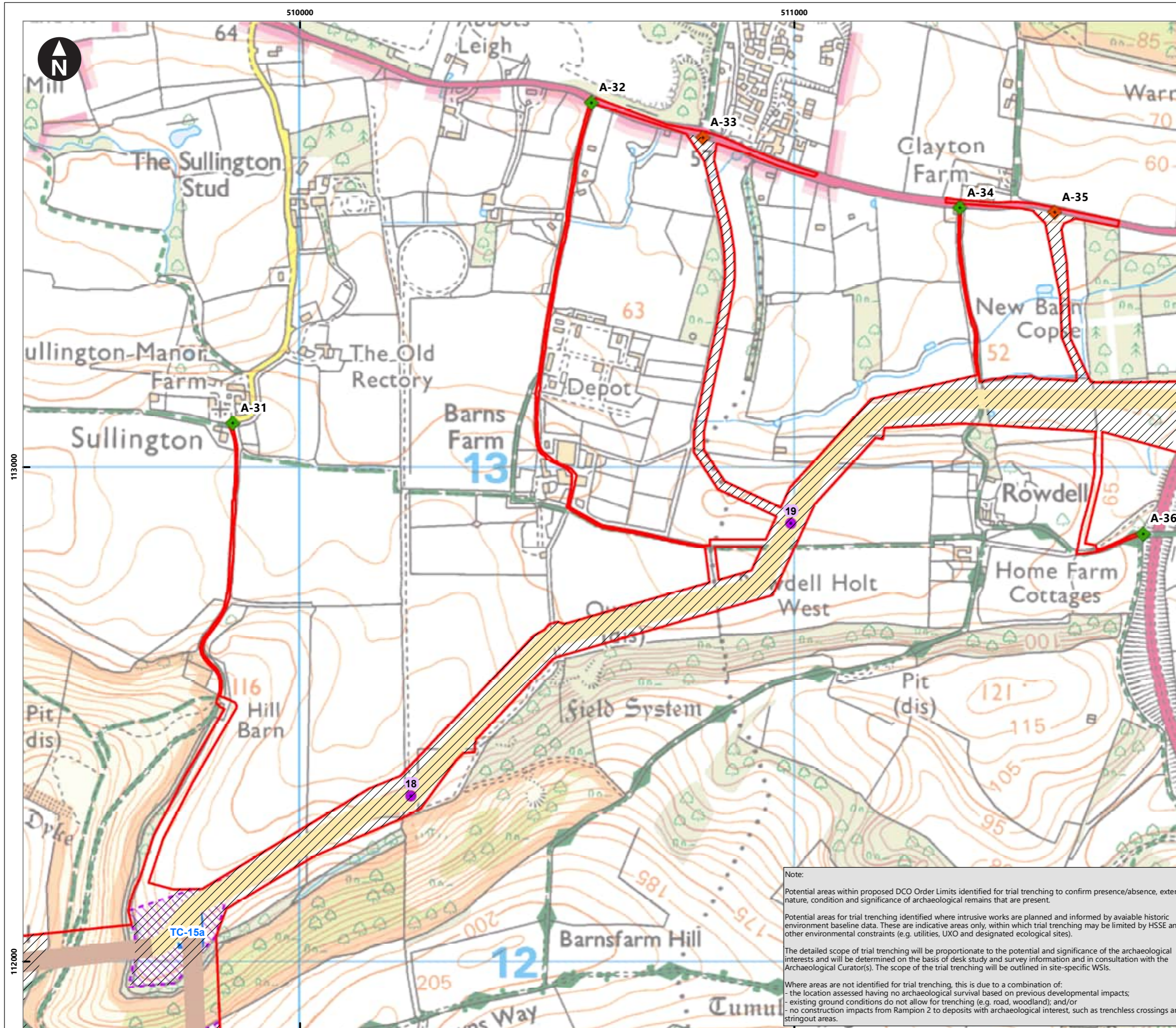
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System Identifier: 42285-WSPE-EX-ON-FG-OH-2253 Version: 1.0

Company: WSP Drawn By: BRYAA Chk/Prvrd: ATKIS Drawn Date: 22/04/2024 Status: DRAFT



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 Ordnance Survey 0100031673

Key

- Proposed DCO Order Limits
- Potential area for trial trenching
- Existing National Grid Substation
- Bolney Substation extension (GIS)
- Bolney Substation extension (AIS)
- Temporary construction compound
- Onshore substation site
- Trenchless Crossing (TC) compounds
- Trenchless Crossing (TC) compound alternatives
- Trenchless Crossing (TC) limits of deviation

Proposed onshore cable construction corridor

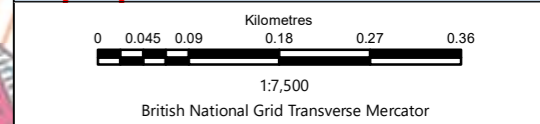
- Indicative trenchless section
- Indicative open cut section

Onshore cable route KM points

- Onshore Substation connection
- Onshore cable route

Access from public highway

- ◆ Construction
- ◆ Construction & operational
- ◆ Light construction
- ◆ Light construction & operational
- ◆ Operational



Rampion Extension Development

Rampion 2 Offshore Wind Farm

Figure 3 Potential areas of proposed archaeological trial trenching

Page 15 of 24

Note:

Potential areas within proposed DCO Order Limits identified for trial trenching to confirm presence/absence, extent, nature, condition and significance of archaeological remains that are present.

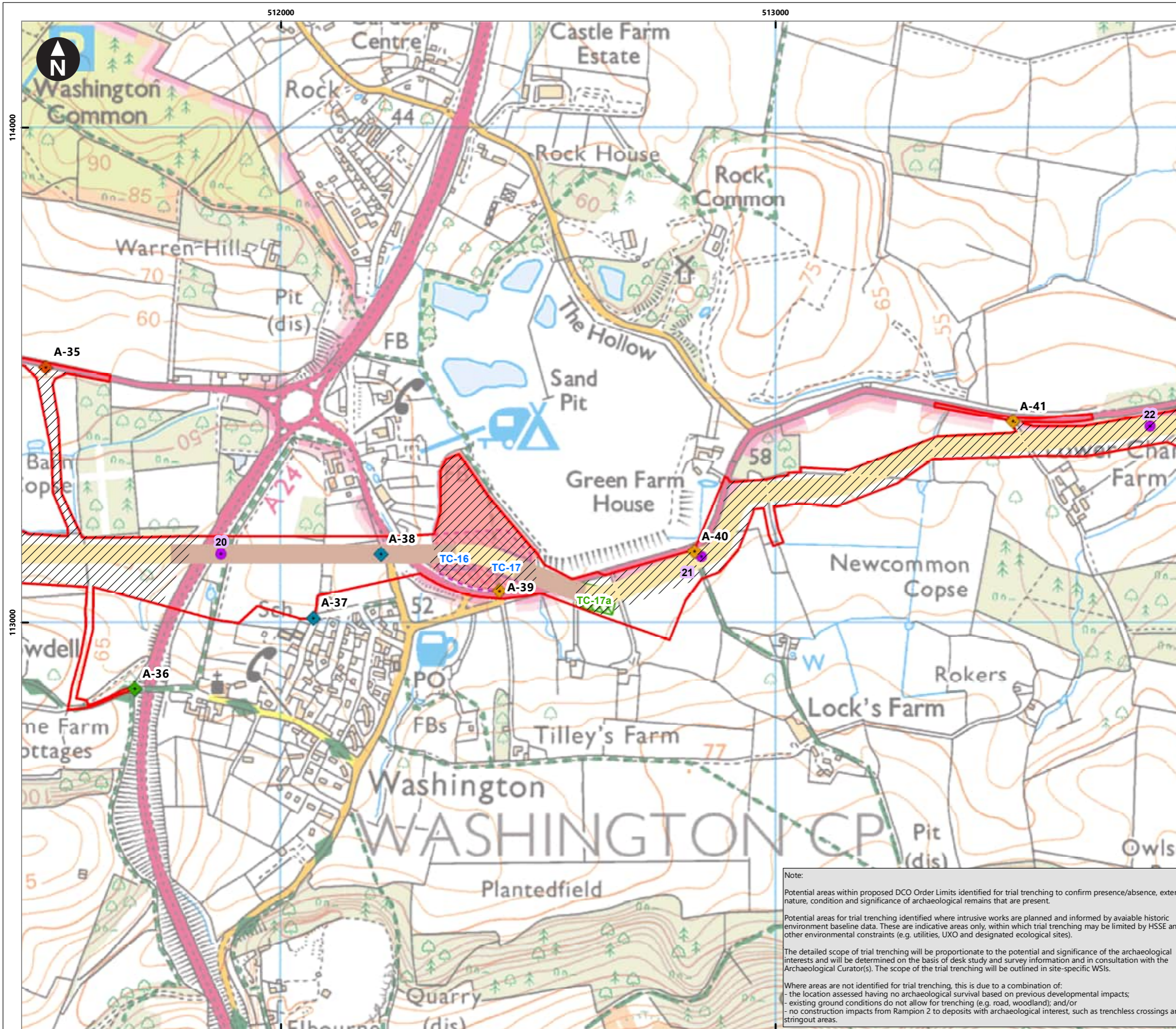
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System Identifier:		Version:	
42285-WSP-EX-ON-FG-OH-2253		1.0	
Company:	Drawn By:	Chk/Prvrd:	Drawn Date:
WSP	BRYAA	ATKIS	22/04/2024
Status:	DRAFT		



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- Trenchless Crossing (TC) limits of deviation

Proposed onshore cable construction corridor

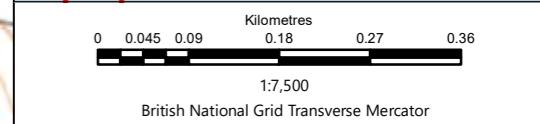
- Indicative trenchless section
- Indicative open cut section

Onshore cable route KM points

- Onshore Substation connection
- Onshore cable route

Access from public highway

- ◆ Construction
- ◆ Construction & operational
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- ◆ Light construction & operational
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Rampion Extension Development

Rampion 2 Offshore Wind Farm

Figure 3 Potential areas of proposed archaeological trial trenching

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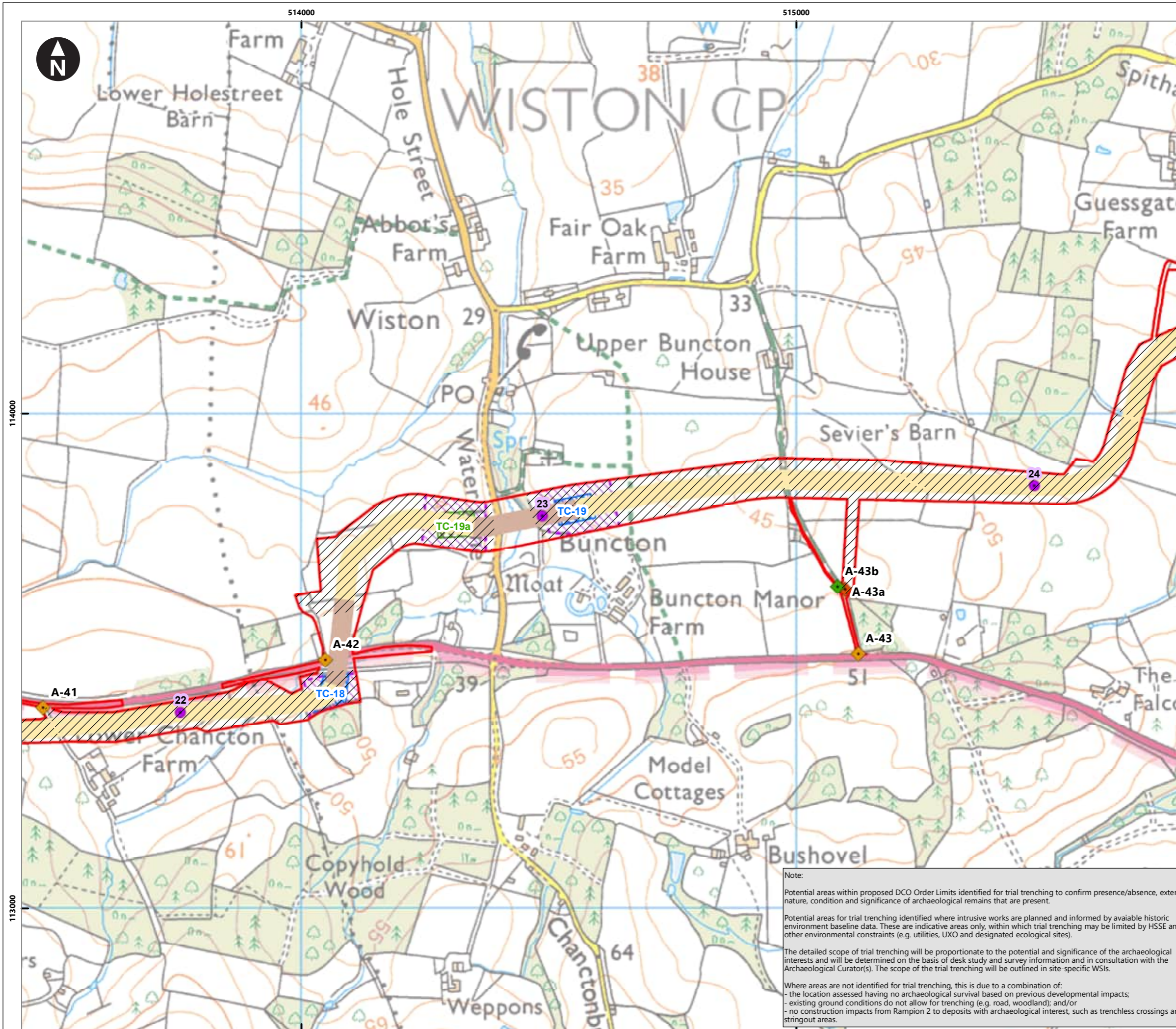
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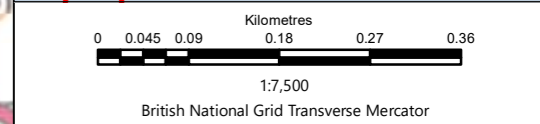
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WSP	BRYAA	ATKIS	22/04/2024
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- Key**
- Proposed DCO Order Limits
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 - ◆ Construction & operational
 - ◆ Light construction
 - ◆ Light construction & operational
 - ◆ Operational



Rampion Extension Development

Rampion 2 Offshore Wind Farm

Figure 3 Potential areas of proposed archaeological trial trenching

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System Identifier: 42285-WSP-EX-ON-FG-OH-2253		Version: 1.0
Company: WSP	Drawn By: BRYAA	Chk/Prvd: ATKIS
Drawn Date: 22/04/2024	Status: DRAFT	

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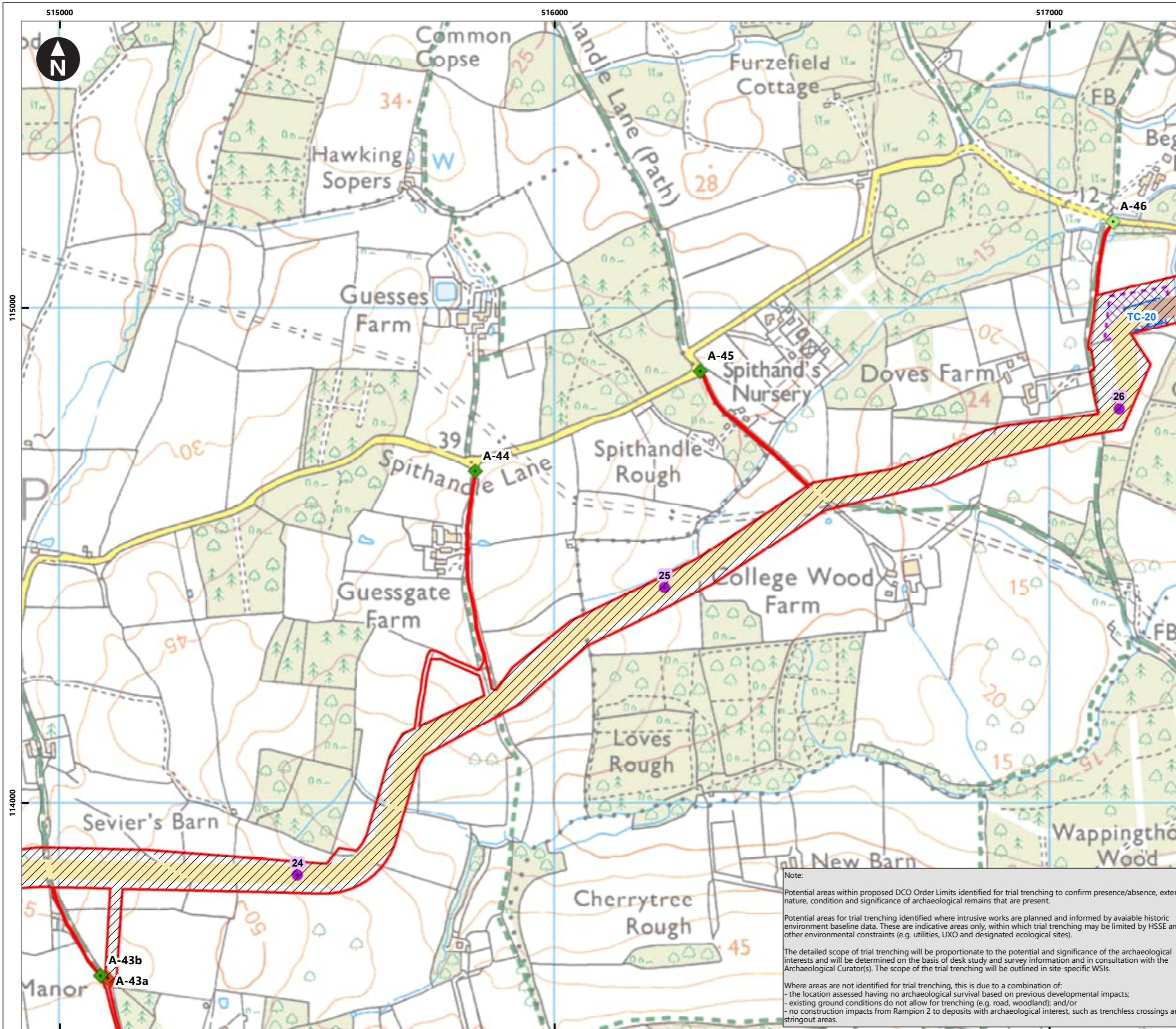
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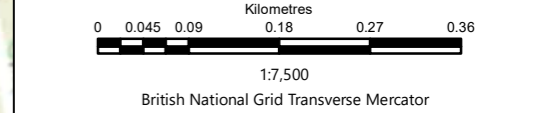
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 - Indicative open cut section
- Onshore cable route KM points**
- Onshore Substation connection
 - Onshore cable route
- Access from public highway**
- ◆ Construction
 - ◆ Construction & operational
 - ◆ Light construction
 - ◆ Light construction & operational
 - ◆ Operational



Rampion Extension Development

Rampion 2 Offshore Wind Farm

Figure 3 Potential areas of proposed archaeological trial trenching

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System Identifier: 42285-WSP-EX-ON-FG-OH-2253		Version: 1.0
Company: WSP	Drawn By: BRYAA	Chk/Prvrd: ATKIS
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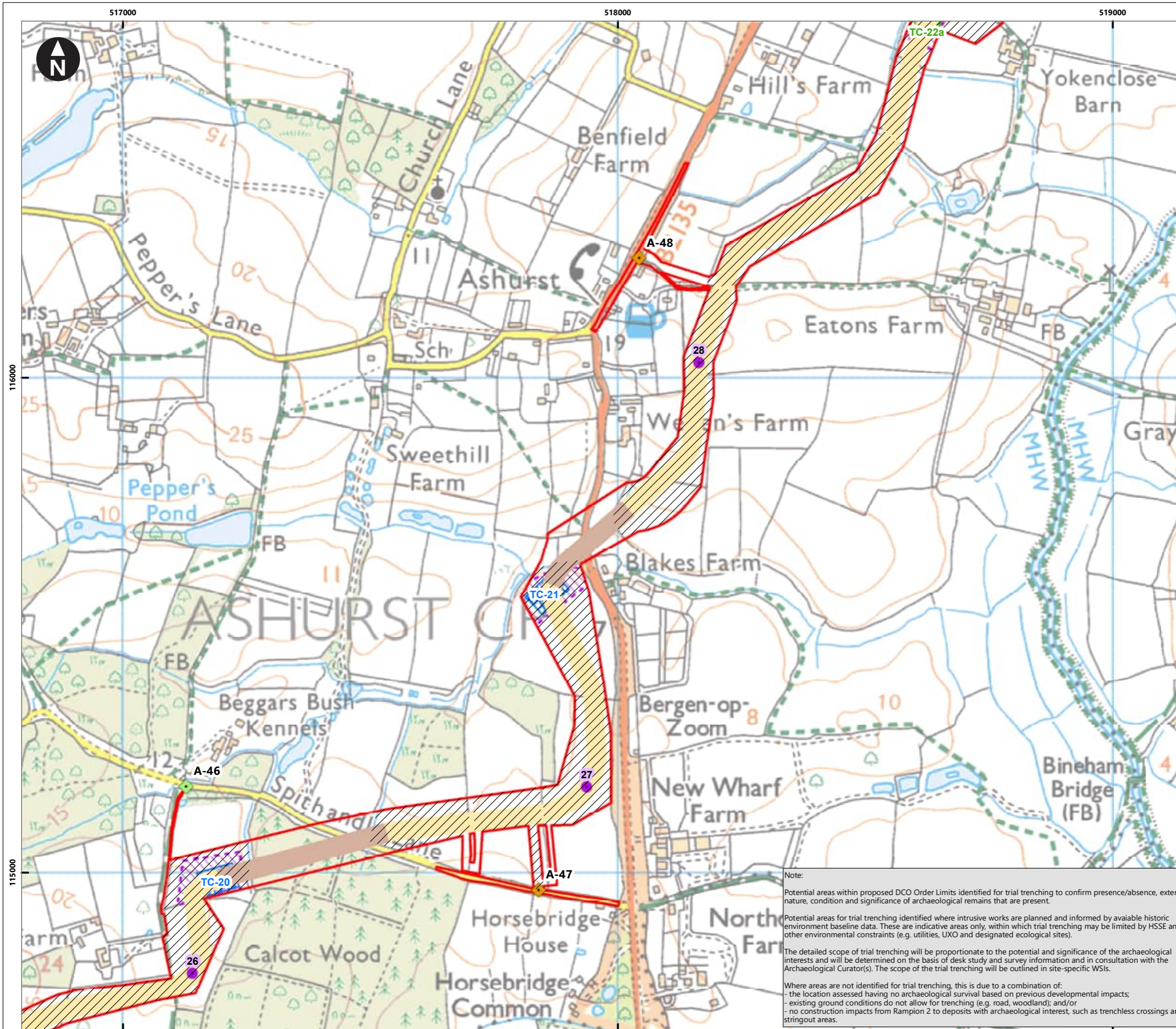
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Key

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- Trenchless Crossing (TC) limits of deviation

Proposed onshore cable construction corridor

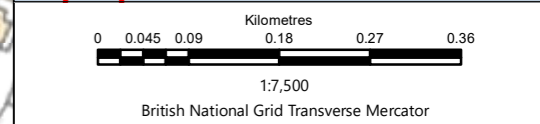
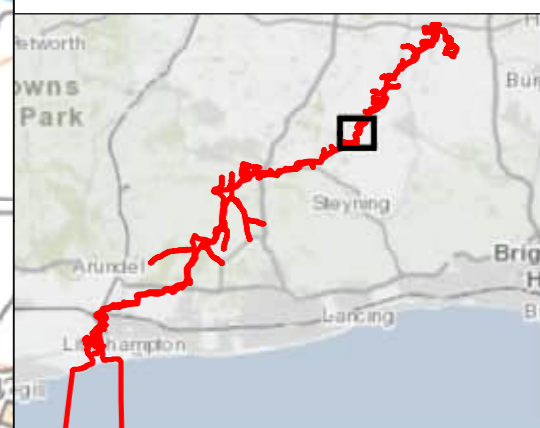
- Indicative trenchless section
- Indicative open cut section

Onshore cable route KM points

- Onshore Substation connection
- Onshore cable route

Access from public highway

- ◆ Construction
- ◆ Construction & operational
- ◆ Light construction
- ◆ Light construction & operational
- ◆ Operational



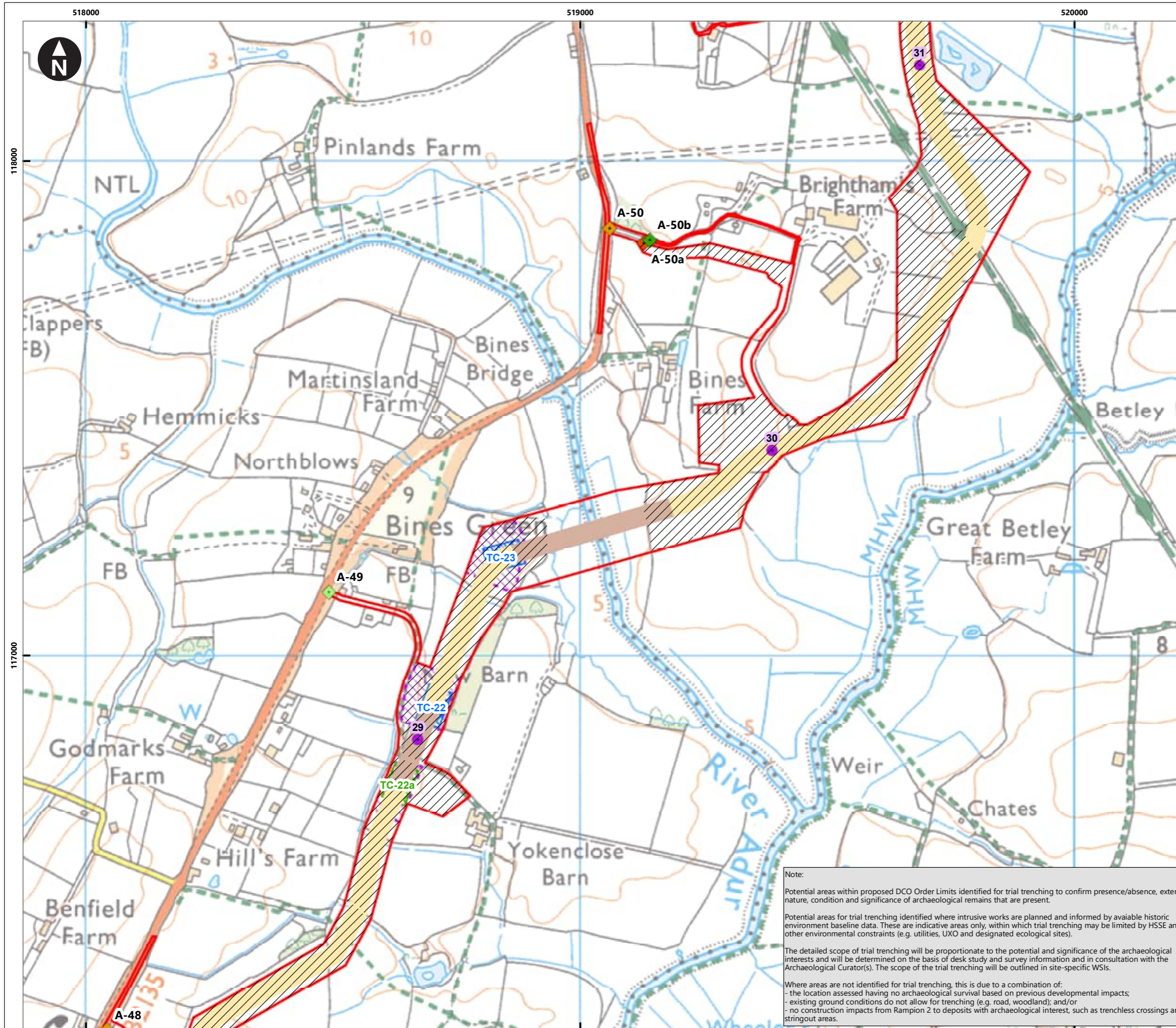
Rampion Extension Development

Rampion 2 Offshore Wind Farm
 Figure 3 Potential areas of proposed archaeological trial trenching

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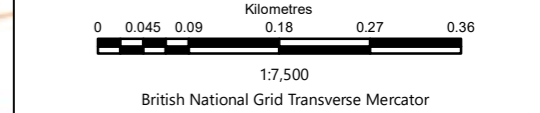
System Identifier: 42285-WSP-EX-ON-FG-OH-2253		Version: 1.0
Company: WSP	Drawn By: BRYAA	Chk/Prvrd: ATKIS
Drawn Date: 22/04/2024	Status: DRAFT	

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- Onshore cable route KM points**
- Onshore Substation connection
 - Onshore cable route
- Access from public highway**
- ◆ Construction
 - ◆ Construction & operational
 - ◆ Light construction
 - ◆ Light construction & operational
 - ◆ Operational



Rampion Extension Development

Rampion 2 Offshore Wind Farm

Figure 3 Potential areas of proposed archaeological trial trenching

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Note:

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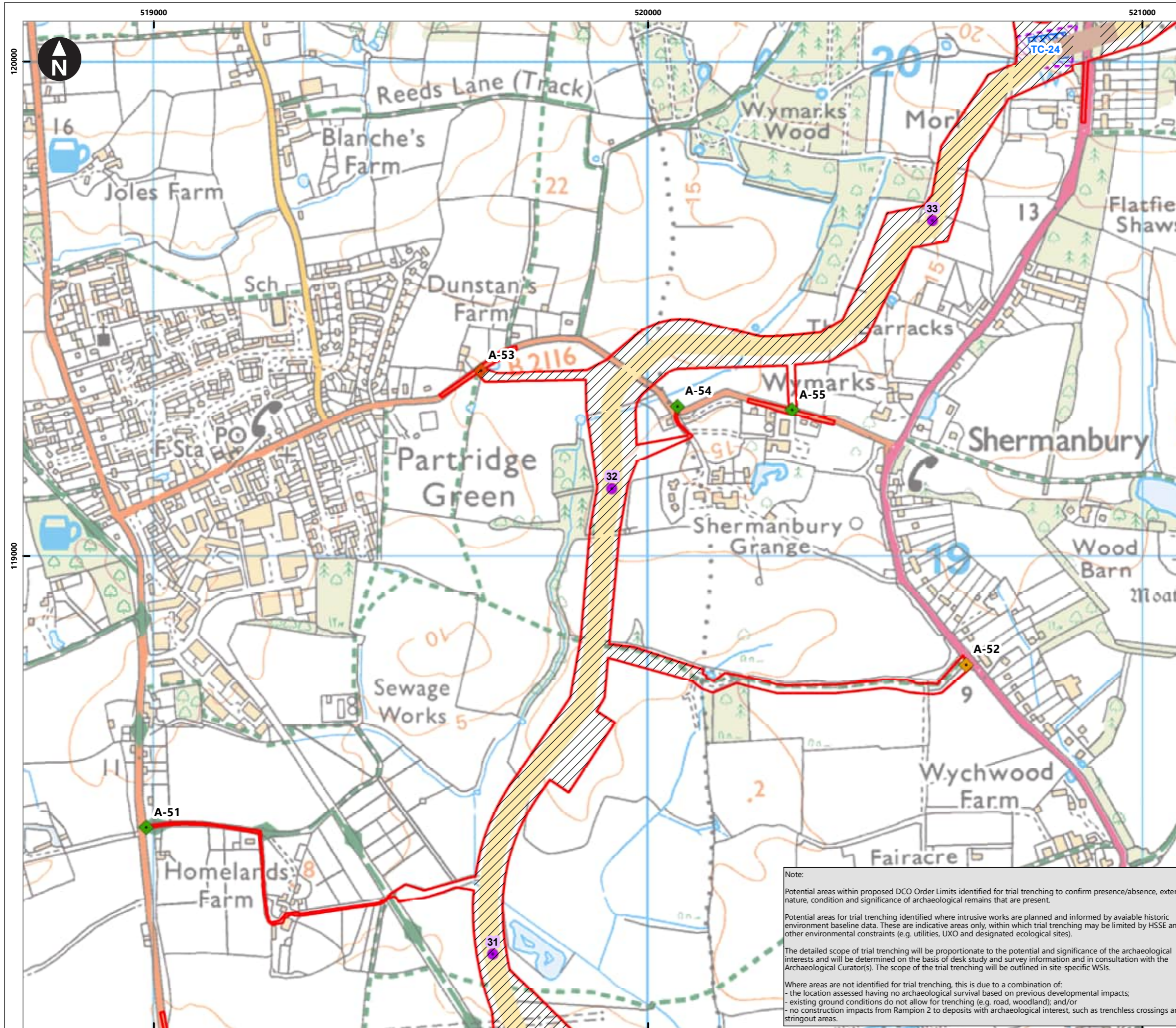
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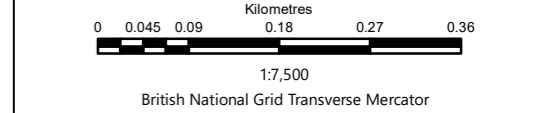
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Company: WSP	Drawn By: BRYAA	Chk/Prvrd: ATKIS
Drawn Date: 22/04/2024	Status: DRAFT	



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 - Onshore cable route
- Access from public highway**
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 - ◆ Construction & operational
 - ◆ Light construction
 - ◆ Light construction & operational
 - ◆ Operational



Rampion Extension Development

Rampion 2 Offshore Wind Farm
 Figure 3 Potential areas of proposed archaeological trial trenching

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System Identifier: 42285-WSP-EX-ON-FG-OH-2253		Version: 1.0
Company: WSP	Drawn By: BRYAA	Chk/Prvd: ATKIS
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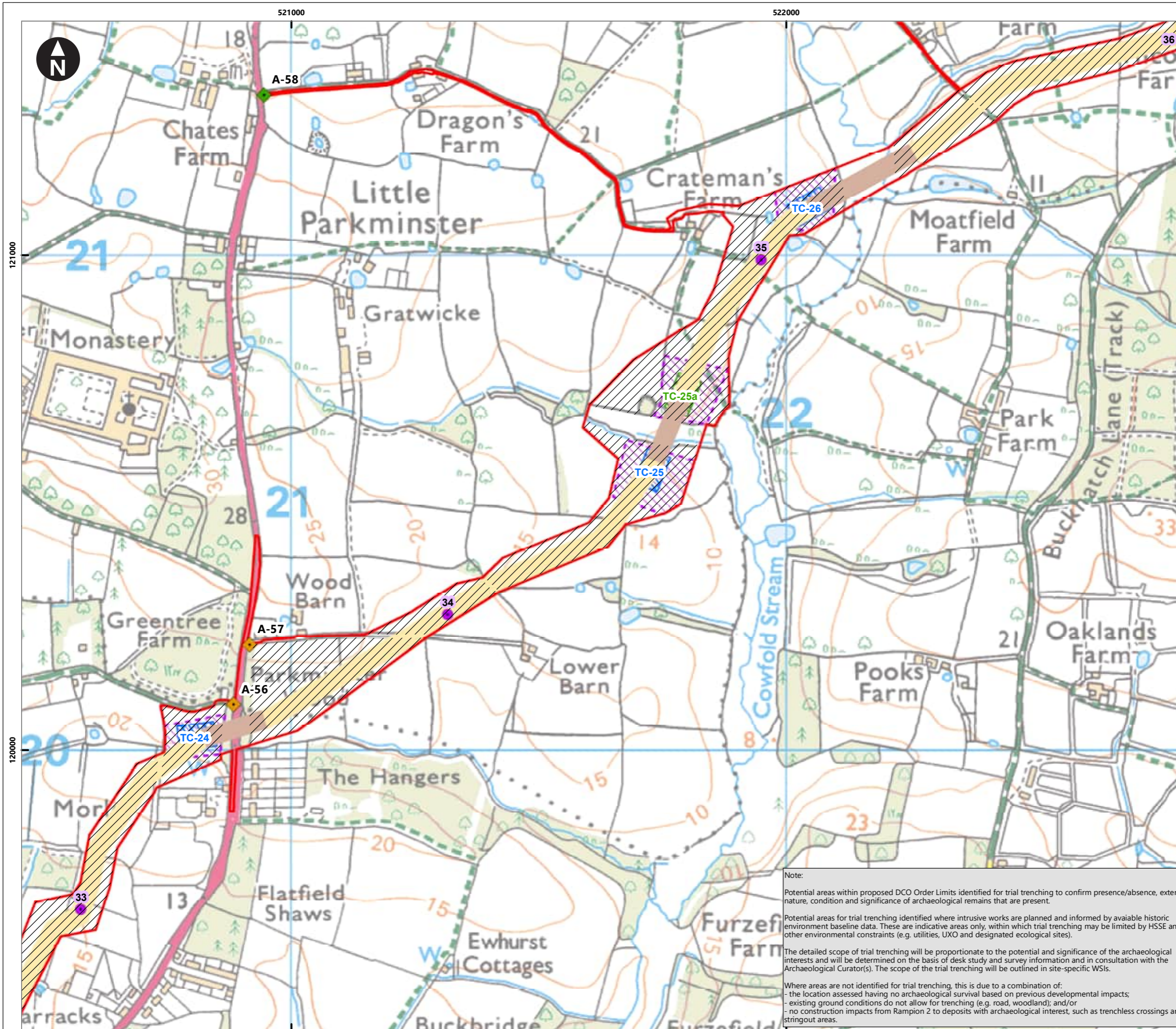
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Proposed onshore cable construction corridor

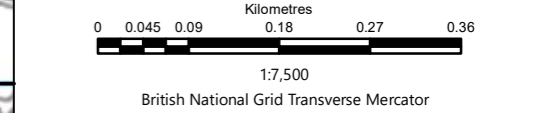
- Indicative trenchless section
- Indicative open cut section

Onshore cable route KM points

- Onshore Substation connection
- Onshore cable route

Access from public highway

- ◆ Construction
- ◆ Construction & operational
- ◆ Light construction
- ◆ Light construction & operational
- ◆ Operational



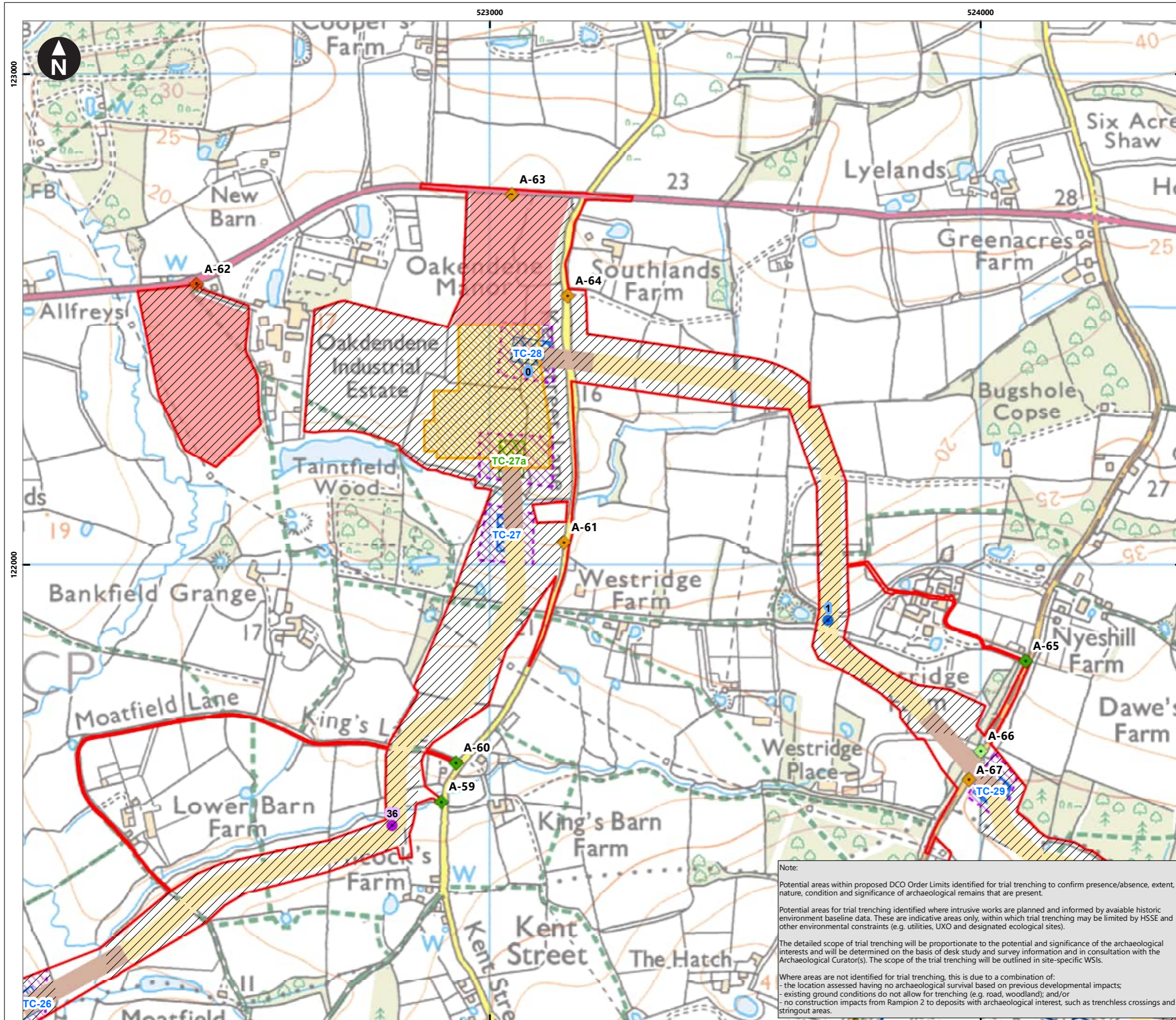
Rampion Extension Development

Rampion 2 Offshore Wind Farm
 Figure 3 Potential areas of proposed archaeological trial trenching

Page 22 of 24

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Proposed onshore cable construction corridor

- Indicative trenchless section
- Indicative open cut section

Onshore cable route KM points

- Onshore Substation connection
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Access from public highway

- Construction
- Construction & operational
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 1:7,500
 British National Grid Transverse Mercator

Rampion Extension Development

Rampion 2 WIND FARM

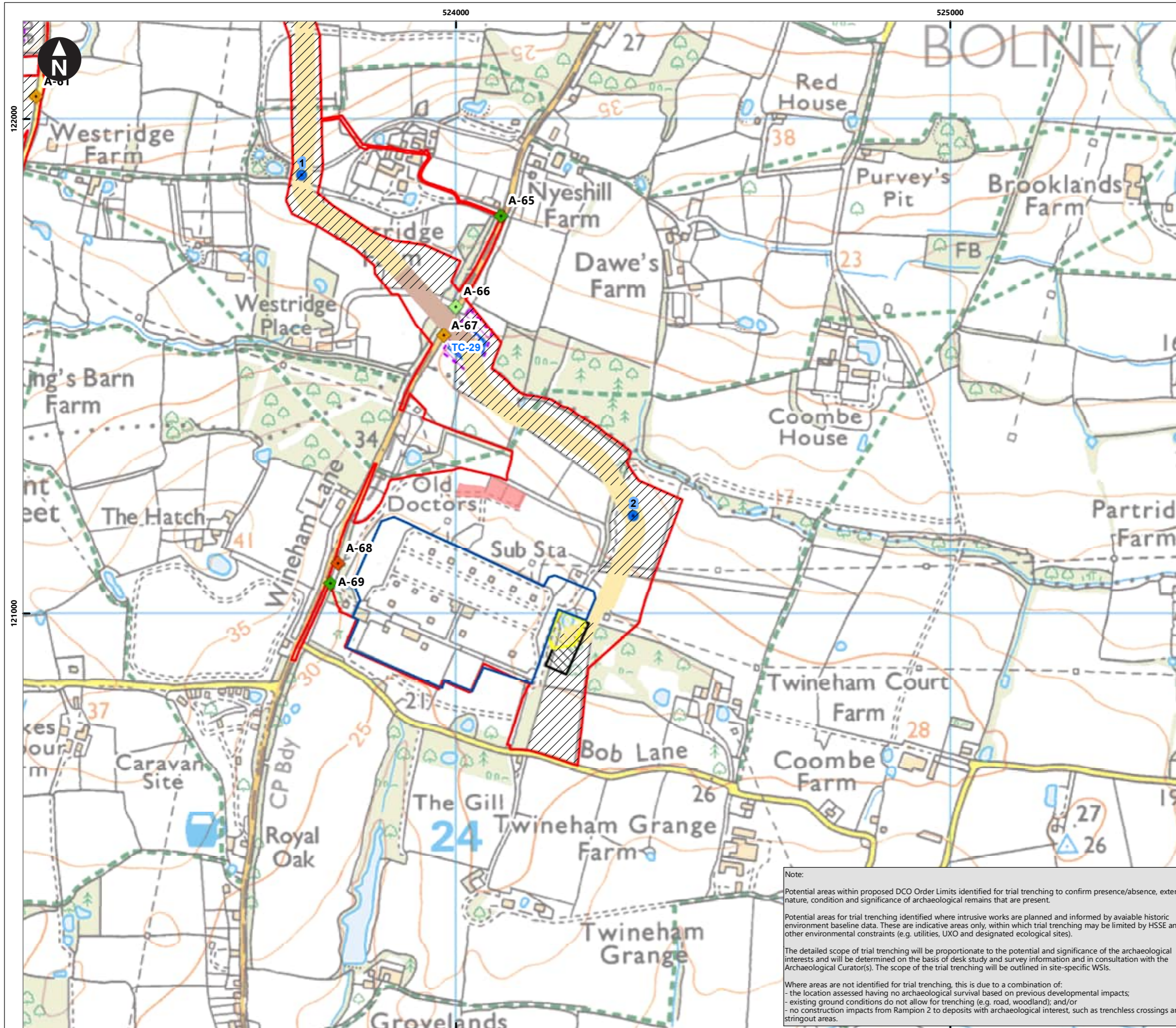
Rampion 2 Offshore Wind Farm

Figure 3 Potential areas of proposed archaeological trial trenching

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System Identifier: 42285-WSP-EX-ON-FG-OH-2253 Version: 1.0

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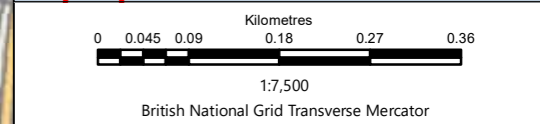
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Onshore cable route KM points

- Onshore Substation connection
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Access from public highway

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Rampion Extension Development

Rampion 2 Offshore Wind Farm

Figure 3 Potential areas of proposed archaeological trial trenching

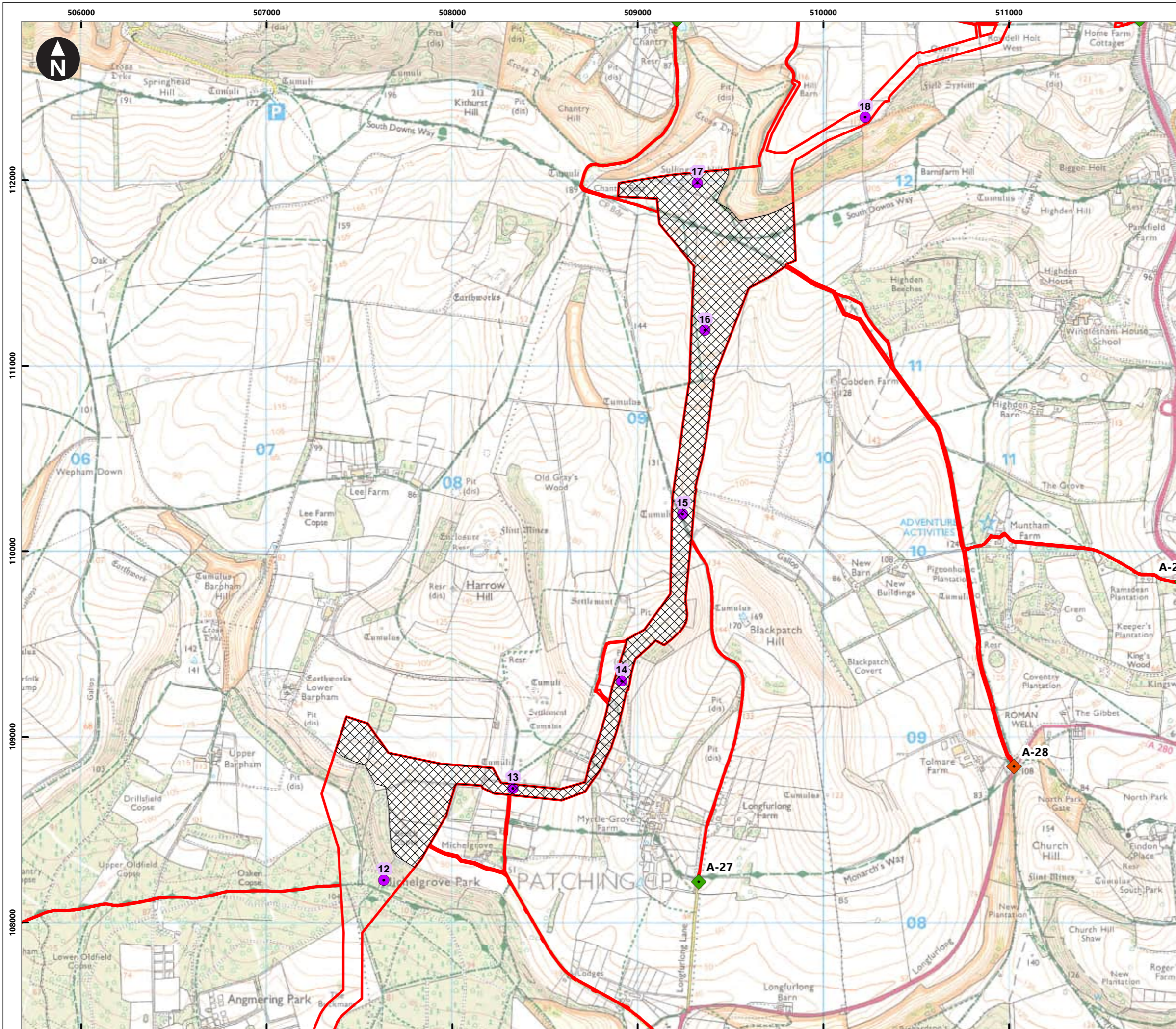
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Key

- Proposed DCO Order Limits
- Potential area for fieldwalking and/or test pitting
- Onshore cable route KM points
 - Onshore cable route
- Access from public highway
 - Construction
 - Construction & operational
 - Light construction
 - Light construction & operational
 - Operational

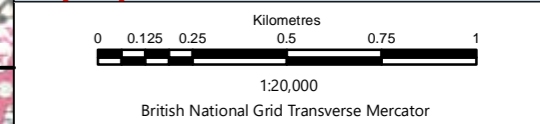
Rampion Extension Development

Rampion 2 Offshore Wind Farm

Figure 4 Potential areas of fieldwalking and test pitting

System Identifier: 42285-WSP-ES-ON-FG-OH-0020 Version: 1.0

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Appendix A

Summary of archaeological assessment

Table A-1, Table A-2 and Table A-3 provide a summary of known and potential archaeological remains, together with an assessment of heritage significance, according to location within the proposed Development Consent Order (DCO Order) Limits (south to north).

This summary is drawn from the following:

- **Appendix 25.2: Onshore historic environment desk study, Volume 4** (Document Reference: 6.4.25.2) of the Environmental Statement (ES) [**APP-200 and APP-201**];
- **Appendix 25.3: Onshore desk-based geoarchaeological and palaeoenvironmental assessment report, Volume 4** (Document Reference: 6.4.25.3) of the ES [**APP-202**];
- **Appendix 25.4: Onshore geophysical survey report, Volume 4** (Document Reference: 6.4.25.4) of the ES [**PEPD-031 and PEPD-113 to PEPD-119**];
- **Appendix 25.5: Oakendene parkland: historic landscape assessment, Volume 4** (Document Reference: 6.4.25.5) of the ES [**APP-211**]; and
- **Appendix 25.6: Archaeological trial trenching at Brook Barn Farm, Volume 4** (Document Reference: 6.4.25.6) of the ES [**APP-212**].

Relevant historic environment data is shown on **Figures 25.2 to 25.4, Appendix 3** of the ES (Document Reference: 6.3.25) [**APP-112 to APP-114**].



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Table A-1 Zone 1: South Coast Plain – Known and potential archaeological remains within the onshore part of the proposed DCO Order Limits

Location ⁷	Summary of archaeological remains ⁸	Period	Potential ⁹	Heritage Significance ¹⁰
Arun floodplain and coastal plain	<p>Palaeoenvironmental deposits.</p> <p>Potential dependant on geological context. River Terrace deposits have low potential, Raised Beach deposits have medium potential, and Alluvium has high potential.</p> <p>Valleys and rivers may represent attractive environments for hunter-gatherer groups.</p> <p>Deep alluvium deposits present within the floodplain have potential for environmental reconstruction of the Holocene.</p>	Prehistoric	Low to very high	Medium (River Terrace and Raised Beach deposits) and High (Alluvium)
Intertidal zone KM 00¹¹	<p>Remains associated with site of Cudlow Deserted Medieval Village (DMV) (MWS3384).</p> <p>HER record for Cudlow DMV (MWS3384) lies below MHWS but potential for remains to extend into the proposed DCO Order Limits. Reportedly lost to the sea by coastal erosion, with</p>	Medieval	High	Medium

⁷ Specific location provided for known heritage assets within proposed DCO Order Limits, whilst general area or landscape/geological context provided for predicted heritage assets.

⁸ Relevant record number and name provided for known heritage assets, whilst general asset type provided for predicted heritage assets.

⁹ Degree to which an asset is predicted to occur within onshore part of the proposed DCO Order Limits.

¹⁰ Assessed heritage significance of predicted heritage assets within the proposed DCO Order Limits.

¹¹ Kilometre post measured along the centreline of the proposed onshore cable from landfall to the onshore substation at Oakendene.

Location ⁷	Summary of archaeological remains ⁸	Period	Potential ⁹	Heritage Significance ¹⁰
Intertidal zone KM 00	<p>traces of the submerged village including house foundations and walls said to be visible at very low spring tides.</p> <p>If present, archaeological remains of the DMV may contribute to understanding of the local and regional medieval rural settlement pattern during this period.</p> <p>Remains associated with site of Atherington DMV (MWS3385).</p> <p>HER record for Atherington DMV (MWS3385) lies below MHWS but potential for remains to extend into the proposed DCO Order Limits. Remains of Atherington DMV are said to be visible at very low tides, including graves which are now buried by sand and shingle. Anticipated poor state of preservation.</p> <p>If present, archaeological remains of the DMV may contribute to understanding of the local and regional medieval rural settlement pattern.</p>	Medieval	High	Medium
Intertidal zone KM 00	<p>Buried/submerged prehistoric landscapes.</p> <p>Changing coastline means areas now submerged would have been dry land. Where exposed by weathering the survival condition may be poor. Examples of in situ sites are rare and would of regional importance, while weathered / rolled material would be of more limited significance.</p>	Prehistoric	Low to medium	Low to medium
General	Geophysical anomalies of unclear origin	Undated	Medium to High	Uncertain/

Location ⁷	Summary of archaeological remains ⁸	Period	Potential ⁹	Heritage Significance ¹⁰
	<p>Geophysical survey has recorded numerous anomalies within the proposed DCO Order Limits (Appendix 25.4: Onshore geophysical survey report, Volume 4 (Document Reference: 6.4.25.4)). These range from discrete or linear areas of enhanced magnetism or linear/curvilinear trends of unclear origin. Generally, these anomalies are magnetically weak, fractured or isolated and their context is difficult to ascertain. Whilst an archaeological origin is possible, an agricultural, geological or modern origin is also likely. Where relevant, the predicted archaeological potential and heritage significance of these anomalies have been discussed within the context of other evidence within this table. Of those anomalies not discussed elsewhere within this table, the heritage significance of such potential archaeological features, whilst uncertain, is not predicted to be of high heritage significance given their indicative form and extent, location and the available baseline evidence,</p>			Very low to medium
Climping beach KM 00	<p>WWII coastal defence features</p> <p>Anti-tank blocks (MWS5228 and MWS7544), anti-tank wall (MWS8294), anti-tank artillery site (MWS7130).</p> <p>Elements of these structures are extant, but carry little archaeological interest, aside from as a group where collectively they represent coastal defence during WWII.</p>	Modern/WWII	Low	Medium
Field behind Climping beach	<p>Former site of WW2 Anti-Aircraft Artillery (MWS7123).</p>	Modern/WWII	Low	Very Low

Location ⁷	Summary of archaeological remains ⁸	Period	Potential ⁹	Heritage Significance ¹⁰
KM 00	No extant remains observed during site walkover. Little to no archaeological interest. Historic interest relating to military defence of the coast in WWII.			
Field behind Climping beach KM 00	Site of former outfarm (MWS9869). Common Barn depicted on 19 th century OS mapping, no longer extant. Buried deposits may survive.	Post medieval	Medium to high	Low
Field behind Climping beach Temporary compound (TC) TC-01 KM 00	<p>Undated possible enclosure (4_1)</p> <p>Potential remains of an undated enclosure within a field behind Climping Beach (Field 004), evidenced by geophysical survey (Appendix 25.4: Onshore geophysical survey report, Volume 4 (Document Reference: 6.4.25.4) of the ES). Enclosure appears to have a well-defined southeast entrance and a pit-like feature in its northwest corner. No above ground traces of were observed during the site walkover. If the geophysical anomalies relate to a late prehistoric or Romano-British settlement and associated land-use features, they would be a regionally important heritage asset which holds medium significance for its archaeological interest.</p> <p>Where they may relate to medieval or post medieval land-use, this would be of local importance as a heritage asset holding low significance for its archaeological interest.</p>	Undated	High	Low to medium
Field behind Climping beach KM00	Undated possible enclosure (5_1) and other possible archaeological features	Undated	High	Low to medium

Location ⁷	Summary of archaeological remains ⁸	Period	Potential ⁹	Heritage Significance ¹⁰
TC-01a	<p>Potential remains of an undated enclosure (5_1) measuring approximately 60m by 50m within a field behind Climping Beach (Field 005), evidenced by geophysical survey (Appendix 25.4: Onshore geophysical survey report, Volume 4 of the ES [APP-203 to 210] which has been updated at the Procedural Deadline A submission). Other geophysical anomalies of possible archaeological origin, including possible pit (5_2) and ditches (5_4) also recorded within the same field.</p> <p>No above ground traces of were observed during the site walkover. Roman pottery has been recovered from the beach 200m to the south (MWS34459).</p> <p>If the geophysical anomalies relate to a late prehistoric or Romano-British settlement and associated land-use features, they would be a regionally important heritage asset which holds medium significance for its archaeological interest. Where they may relate to medieval or post medieval land-use, this would be of local importance as a heritage asset holding low significance for its archaeological interest.</p>	Undated	High	Low to medium
	<p>Potential remains of an undetermined nature within a field near landfall (Field 006), evidenced by geophysical survey (Appendix 25.4: Onshore geophysical survey report, Volume 4 (Document Reference: 6.4.25.4) of the ES). Uncertain nature but lies along a former field division depicted on 19th century OS mapping and identified as a LiDAR feature</p>			

Location ⁷	Summary of archaeological remains ⁸	Period	Potential ⁹	Heritage Significance ¹⁰
Operational access A-06	<p>(LDr_001) and could be associated with agricultural activity. No above ground traces of were observed during the site walkover.</p> <p>Based on the features form and extent and context within the available baseline, it is not predicted that this represents remains of high heritage significance.</p> <p>Medieval earthworks east and southeast of St Mary's Church (NHLE 1005828; MWS3371)</p>	Medieval	Very High	Low to high
Vicinity of KM02 to KM03 and Operational access A-10	<p>Bronze Age settlement deposits and features west of Courtwick Lane.</p> <p>Potential for archaeological remains within the proposed DCO Order Limits evidenced by recorded ditches, pit and finds at a site off Courtwick Lane (MWS9428) (ANA Arun 049) and trial trenching at Brook Barn Farm (Appendix 25.6: Archaeological trial trenching at Brook Barn Farm, Volume 4 (Document Reference: 6.4.25.6) of the ES which recovered multiple worked flints of probable Neolithic or Early Bronze Age date.</p> <p>Elsewhere within the proposed DCO Order Limits (between KM02 and KM03), very few geophysical anomalies were detected (Fields 021 to 023), none of which were ascribed a possible archaeological origin. A few weak trends and areas of magnetic enhancement of unclear origin in Field 021 are considered more likely to be due to natural variations or</p>	Bronze Age	Low to medium	Low to medium

Location ⁷	Summary of archaeological remains ⁸	Period	Potential ⁹	Heritage Significance ¹⁰
Vicinity of KM02 to KM03 and Operational access A-10	<p>agricultural activity but an archaeological origin could not be ruled out (Appendix 25.4: Onshore geophysical survey report, Volume 4 (Document Reference: 6.4.25.6) of the ES).</p> <p>Where archaeological remains may be present which are not detected by geophysical survey, these are anticipated to be very low density discrete features and finds (e.g. flints and pottery).</p>	Early medieval	Low to medium	Low to medium
	<p>Early medieval settlement deposits and features west of Courtwick Lane.</p> <p>Potential for archaeological remains within the proposed DCO Order Limits evidenced by recorded pits containing early medieval pottery and a sunken featured building and possible timber post building at a site off Courtwick Lane (MWS9428) (ANA Arun 049).</p>			
	<p>Trial trenching at Brook Barn Farm recorded no early medieval features or finds (Appendix 25.6: Archaeological trial trenching at Brook Barn Farm, Volume 4 (Document Reference: 6.4.25.6) of the ES).</p>			
	<p>Geophysical survey within the Site on land adjacent to the Courtwick Lane, recorded only a few anomalies, none of which were ascribed a possible archaeological origin (Appendix 25.4: Onshore geophysical survey report, Volume 4 (Document Reference: 6.4.25.4) of the ES).</p>			

Location ⁷	Summary of archaeological remains ⁸	Period	Potential ⁹	Heritage Significance ¹⁰
Vicinity of KM02, TC-03	Former section of the West Branch, Littlehampton Branch and Mid Sussex Line constructed and reroute in the 19th century (no HER ID).	Post medieval	Very High	Low
Brook Barn Farm, close to TC-04 KM03	<p>Iron Age and Roman settlement and land use.</p> <p>Archaeological evaluation by trial trenching within the proposed DCO Order Limits (Appendix 25.6: Archaeological trial trenching at Brook Barn Farm, Volume 4 (Document Reference: 6.4.25.6) of the ES) recorded a series of ditches and pits, many of which were previously identified through geophysical survey (Field 027) (Appendix 25.4: Onshore geophysical survey report, Volume 4 (Document Reference: 6.4.25.4) of the ES) and which relate to Middle Iron Age field system and driveway and settlement enclosure dating to the Late Iron Age and Roman periods.</p> <p>Other trenches in the east and north of evaluation area recorded either no archaeological features and/or modern disturbance (resulting from landfill and/or modern landscaping activity), which correlates with results of the geophysical survey. These results suggest a low potential for archaeological remains to be present where large amorphous anomalies of magnetic disturbance or blanks areas are evident in the geophysical survey results within this vicinity.</p> <p>Elsewhere, between KM02 and KM03, very few geophysical anomalies were detected (Field 021 to 023), none of which are ascribed a possible archaeological origin.</p>	Iron Age and Roman	Very High	Medium

Location ⁷	Summary of archaeological remains ⁸	Period	Potential ⁹	Heritage Significance ¹⁰
Vicinity of KM04, south of Lyminster	<p>Undated possible enclosures (34_1)</p> <p>Potential remains of an undated enclosure (34_1) within a field south of Lyminster village (Field 034), evidenced by geophysical survey (Appendix 25.4: Onshore geophysical survey report, Volume 4 of the ES [APP-203 to 210] which has been updated at the Procedural Deadline A submission). These features appear to extend northwards, beyond the DCO Order Limits.</p> <p>No above ground traces of were observed during the site walkover.</p> <p>As detailed in Appendix 25.2: Onshore historic environment desk study of the ES [APP-200]:</p> <ul style="list-style-type: none"> • evidence for late prehistoric and Romand activity has been recorded in the area; • a Priory of Benedictine Nuns was founded in the 10th or 11th century in Lyminster and dissolved c. 1414; • the nave and chancel of the Parish Church of St Mary Magdalene, around 180m north of the Site, is thought to be of a late 10th century date (MWS3068); and • Lyminster is recorded in the Domesday book of 1086. <p>Therefore, the possible enclosure may relate to late prehistoric or Roman activity, or be medieval in date, possibly associated with the former Benedictine Priory.</p>	Undated	High	Low to medium

Location ⁷	Summary of archaeological remains ⁸	Period	Potential ⁹	Heritage Significance ¹⁰
Vicinity of KM04, south of Lyminster	<p>Undated possible archaeological remains (34_2), (34_3) and (34_4)</p> <p>Geophysical survey (Appendix 25.4: Onshore geophysical survey report, Volume 4 of the ES [APP-203 to 210] which has been updated at the Procedural Deadline A submission) has detected a well-defined curving trend (34_2) which appears to enclose a series of well-defined discrete areas of enhanced magnetism (34_3) of possible archaeological origin. If archaeological in origin, these may relate to medieval and post medieval settlement or agricultural activity, given its proximity to Lyminster village. The pattern and form suggest a possible former orchard/wood or graveyard.</p>	Undated	High	Low to medium
Vicinity of KM06	<p>Undated possible enclosures or settlement (38_1, 38_2 and 38_3)</p> <p>Potential remains of undated enclosures or settlement within agricultural field west of Poling, as evidenced by geophysical survey (Appendix 25.4: Onshore geophysical survey report, Volume 4 of the ES [APP-203 to 210] which has been updated at the Procedural Deadline A submission). The complex of anomalies detected appear to continue to the east of the area surveyed, therefore likely to extend across the full width of the DCO Order Limits at this location and may also extend beyond.</p> <p>The anomalies do not correspond to any known HER, LiDAR, or AP features. The apparent layout and form of the anomalies</p>	Undated	High	Low to high

Location ⁷	Summary of archaeological remains ⁸	Period	Potential ⁹	Heritage Significance ¹⁰
	<p>suggest they could be of late prehistoric or Romano-British date.</p> <p>The projected route of a Roman road lies to the north along the A27 and Crossbush Road, with evidence of Roman settlement activity adjacent to the projected route within a field (MWS3541) approximately 850m north of the geophysical anomalies. The scheduled site of a Roman villa with traces of Iron Age occupation lies 1.5km to the east (NHLE 1015886). Earthwork remains of a deserted medieval village at Poling lies 550m east (MWS5761), whilst other medieval settlement is also known at Lyminster to the west and monastery to the northeast.</p> <p>The anomalies may indicate the presence of archaeological remains similar to those identified by geophysical survey and trial trenching at Brook Barn Farm (Appendix 25.4: Onshore geophysical survey report, Volume 4 of the ES [APP-203 to 210] which has been updated at the Procedural Deadline A submission and Appendix 25.6: Archaeological trial trenching at Brook Barn Farm, Volume 4 of the ES [APP066], which recorded multiple phases of field system and enclosures of Iron Age to Roman date surviving as a series of ditches.</p> <p>Archaeological survival of similar sites may contribute to our understanding the rural economy and spatial organisation of settlement and land.</p>			

Location ⁷	Summary of archaeological remains ⁸	Period	Potential ⁹	Heritage Significance ¹⁰
	<p>Archaeological survival of environmental and faunal remains may contribute to an understanding of local vegetation and resource exploitation.</p> <p>Where the geophysical remains relate to agricultural and settlement evidence of late prehistoric to Romano-British date, these are likely to be of low to medium heritage significance depending on the exact nature, extent and condition of the remains.</p> <p>As the geophysical anomalies detected appear to extend beyond the narrow area surveyed, interpretation is limited. Therefore, whilst the form suggests that they may be of medium heritage significance, the available evidence does not exclude the potential for remains of national importance to be present.</p>			
Immediately south of Vinery Industrial Estate, between KM07 and KM08	<p>Late Bronze Age settlement and medieval field system at The Vinery (MWS14193).</p> <p>Potential for remains associated with known excavated site of Bronze Age settlement and land-use activity (specialised crop farming and potential small-scale pottery production) at The Vinery immediately adjacent to the proposed DCO Order Limits (MWS14193). Remains relating to probable medieval ridge and furrow along with undated postholes also recorded during excavations.</p>	Bronze Age/ medieval	Low to medium	Medium

Location ⁷	Summary of archaeological remains ⁸	Period	Potential ⁹	Heritage Significance ¹⁰
KM 08	<p>Undated cropmarks (MWS3544 and MWS3545) within vicinity of the Vinery excavations could be associated.</p> <p>Geophysical survey has not identified any anomalies with possible archaeological origin within the fields (Fields 042 to 047) in this part of the proposed DCO Order Limited (Appendix 25.4: Onshore geophysical survey report, Volume 4 of the ES [APP-203 to 210] which has been updated at the Procedural Deadline A submission).</p> <p>Cropmarks south of A27 Arundel Road (MWS3544 and MWS3545)</p> <p>Ovoid cropmark identified on aerial photograph within proposed DCO Order Limits (MWS3544). Could represent former settlement or land use. Further cropmarks (MWS3545) representing linear features of unknown date are also observed on an aerial photograph within the same field (HER record lies adjacent to the proposed DCO Order Limits). No earthworks were identified on LiDAR imagery in this area.</p> <p>Potential for association with Bronze Age settlement activity or medieval field system recorded within the vicinity (MWS14193). The geophysical survey (Field 046) did not detect any anomalies which might relate to these cropmarks (Appendix 25.4: Onshore geophysical survey report, Volume 4 of the ES [APP-203 to 210] which has been updated at the Procedural Deadline A submission).</p>	Undated	Low to medium	Low to medium

Location ⁷	Summary of archaeological remains ⁸	Period	Potential ⁹	Heritage Significance ¹⁰
TC-09	<p>Possible site of post medieval brick kiln (MWS3543)</p> <p>“Kiln Field” identified on the Angmering Tithe map of 1838-9 within proposed DCO Order Limits, which may suggest presence of nearby brick kilns (MWS3543).</p> <p>The geophysical survey did not detect any anomalies within the field (Field 048) which might relate to the remains of a kiln (Appendix 25.4: Onshore geophysical survey report, Volume 4 of the ES [APP-203 to 210] which has been updated at the Procedural Deadline A submission).</p>	Post medieval	Low	Low
TC-10 and TC-10a, Light constructions accesses A-20, temporary construction accesses A-21 and A-22	<p>Roman road from Chichester to Brighton.</p> <p>Broadly projected along that of the A27. No extant features observed. Potential archaeological survival within undeveloped areas of the adjacent to projected route of Roman road. If present, remains likely to have been truncated by road construction/improvements and ploughing.</p> <p>The geophysical survey (Fields 049 and 050) did not detect any anomalies which might relate to the remains of a Roman road (Appendix 25.4: Onshore geophysical survey report, Volume 4 of the ES [APP-203 to 210] which has been updated at the Procedural Deadline A submission).</p>	Roman	Low to Medium	Low
General – Coastal Plain and Arun floodplain	<p>Palaeolithic flint artefacts.</p> <p>Single handaxe recovered from Climping beach (MWS3638).</p>	Palaeolithic	Low/uncertain to medium	Low to high

Location ⁷	Summary of archaeological remains ⁸	Period	Potential ⁹	Heritage Significance ¹⁰
	<p>Archaeological potential and heritage significance is dependent on context of recovery. Alluvium and Raised Beach deposits have lower potential compared with River Terrace deposits.</p> <p>Finds recovered from secondary contexts would be of low heritage significance compared with those recovered from primary contexts (Medium for Alluvium and River Terrace deposits and High for Raised Beach deposits)</p>			
General – Zone 1	<p>Mesolithic flint artefacts and scatters.</p> <p>Mesolithic flint scatter (MWS3463) found within 120m of the Site and other finds of Mesolithic flints within the Study Area.</p>	Mesolithic	Low	Low to high
General – Zone 1	<p>Neolithic flint artefacts, pottery sherds and artefact scatters.</p> <p>Trial trenching at Brook Barn Farm (Appendix 25.6: Archaeological trial trenching at Brook Barn Farm, Volume 4 (Document Reference: 6.4.25.6) of the ES) recovered multiple worked flints of probable Neolithic or Early Bronze Age date.</p> <p>A Neolithic flint scatter (MWS3118; EWS1125) recorded 20m east of the Site.</p> <p>Other findspots of flint and pottery sherds tentatively dated to Neolithic (MWS3396; MWS3895) within the Study Area.</p>	Neolithic	Medium to high	Low to medium

Location ⁷	Summary of archaeological remains ⁸	Period	Potential ⁹	Heritage Significance ¹⁰
General – Zone 1	<p>Bronze Age finds (isolated/residual).</p> <p>Trial trenching at Brook Barn Farm (Appendix 25.6: Archaeological trial trenching at Brook Barn Farm, Volume 4 (Document Reference: 6.4.25.6) of the ES) recovered multiple worked flints of probable Neolithic or Early Bronze Age date.</p> <p>Bronze Age activity evidenced within immediate vicinity of proposed DCO Order limits, indicating potential for residual Bronze Age finds elsewhere within Zone 1.</p>	Bronze Age	Medium to high	Low
General – Zone 1	<p>Iron Age and Roman finds and features.</p> <p>Iron Age and Roman activity evidence through trial trenching at Brook Barn Farm (Appendix 25.6: Archaeological trial trenching at Brook Barn Farm, Volume 4 (Document Reference: 6.4.25.6) of the ES) and elsewhere within Study Area, including remains recorded within the onshore part of the proposed DCO Order Limits. Remains of a Roman villa (NHLE 1015886) 800m south of the Site, (Appendix 25.4: Onshore geophysical survey report, Volume 4 (Document Reference: 6.4.25.4) of the ES), indicating potential for residual Iron Age and Roman finds.</p> <p>Buried features, if present, are likely to be related to agricultural activity and land division.</p>	Iron Age and Roman	Medium to High	Low to medium
General – Zone 1	Medieval agriculture/land division features and finds.	Medieval	Low to Medium	Low to medium

Location ⁷	Summary of archaeological remains ⁸	Period	Potential ⁹	Heritage Significance ¹⁰
	<p>Medieval activity within the study area is evidenced in the desk study (Appendix 25.2: Onshore historic environment desk study, Volume 4 (Document Reference: 6.4.25.2) of the ES), indicating potential for as-yet unknown remains of agriculture and land division within Zone 1.</p> <p>Fields between TC-01 and light construction access A-03 may contain remains of agricultural activity associated with site of Islesham Church (MWS3104) and DMV (MWS3100, ANA Arun 042) within 80m of the onshore part of the proposed DCO Order Limits. However, no features of this nature were identified by geophysical survey (Appendix 25.4: Onshore geophysical survey, Volume 4 (Document Reference: 6.4.25.4) of the ES).</p> <p>Occurrence of residual finds possible generally across Zone 1.</p>			
General – Zone 1	<p>Post medieval features and finds.</p> <p>Potential remains of post medieval agricultural and land division features evidenced by geophysical survey which recorded anomalies indicating traces of ridge and furrow ploughing and buried ditches which may form elements of former field systems (Fields 004, 006, 012 and 016). Geophysical anomalies in Field 006 may be related to linear banks identified as earthworks on LiDAR imagery (LDr_001 to 003), which corresponds with field boundaries shown on historic OS mapping (Figure 3.1, Appendix 25.4: Onshore</p>	Post medieval	High	Low

Location ⁷	Summary of archaeological remains ⁸	Period	Potential ⁹	Heritage Significance ¹⁰
	<p>geophysical survey report, Volume 4 (Document Reference: 6.4.25.4) of the ES).</p> <p>There is potential for further post medieval agriculture/land division features elsewhere within Zone 1.</p> <p>Occurrence of residual finds possible generally across Zone 1.</p>			

Table A-2 Zone 2: South Downs – Known and potential archaeological remains within the onshore part of the proposed DCO Order Limits

Location ¹²	Summary of archaeological remains ¹³	Period	Potential ¹⁴	Heritage Significance ¹⁵
General - downland dry valleys	<p>Palaeoenvironmental deposits.</p> <p>Medium potential within Head deposits as evidenced elsewhere in Southern England.</p> <p>Very low potential within clay-with-flints.</p> <p>See Section 4 and Section 6, Appendix 25.3: Onshore desk-based geoarchaeological and palaeoenvironmental assessment report, Volume 4 (Document Reference: 6.4.25.3) of the ES for discussion on palaeoenvironmental potential.</p>	Prehistoric	Very Low to Medium	Medium
General	<p>Palaeolithic and Mesolithic flint artefacts.</p> <p>No recorded Palaeolithic evidence within proposed DCO Order Limits, though Palaeolithic visitors on chalk upland theoretically possible, relating to activity recorded in the wider Sussex coastal plain.</p>	Prehistoric	Low	Low to medium

¹² Specific location provided for known heritage assets within proposed DCO Order Limits, whilst general area or landscape/geological context provided for predicted heritage assets.

¹³ Relevant record number and name provided for known heritage assets, whilst general asset type provided for predicted heritage assets.

¹⁴ Degree to which an asset is predicted to occur within onshore part of the proposed DCO Order Limits.

¹⁵ Assessed heritage significance of predicted heritage assets within the proposed DCO Order Limits.

Location ¹²	Summary of archaeological remains ¹³	Period	Potential ¹⁴	Heritage Significance ¹⁵
	<p>No recorded evidence within Zone 2, but evidence in Zone 3 reflects increased potential within the north of Zone 2, which lies adjacent to the Lower Green Sandstone, compared with elsewhere.</p> <p>See Section 4 and Section 6, Appendix 25.3: Onshore desk-based geoarchaeological and palaeoenvironmental assessment report, Volume 4 (Document Reference: 6.4.25.3) of the ES for discussion on geoarchaeological potential</p>			
General – chalk upland	<p>Neolithic flint artefacts</p> <p>Chance finds of worked flint have been recovered along the length of the Study Area in Zone 2 including stone axes or axe fragments at Blakehurst Farm (MWS2710 590m south of the Site), and west of Hallow Hill (MWS4613 700m east of the proposed DCO Order Limits). Flint mining activity evidence in the Study Area indicates potential for isolated finds of flint artefacts.</p>	Neolithic	Low to high	Low to medium
General	<p>Later prehistoric and Roman finds</p> <p>Potential for isolated and residual finds evidence by remains relating to these periods within the Site and Study Area in Zone 2.</p>	Bronze Age/Iron Age/Roman	Low to medium	Low

Location ¹²	Summary of archaeological remains ¹³	Period	Potential ¹⁴	Heritage Significance ¹⁵
General	<p>Early medieval settlement features and deposits</p> <p>Very limited evidence in Zone 2 (Section 4.7 and Table 5-2 in Appendix 25.2: Onshore historic environment desk study, Volume 4 (Document Reference: 6.4.25.2) of the ES).</p>	Early medieval	Very low	Medium to high
General	<p>Agricultural and land division features, routeways and extraction pits.</p> <p>There is a general potential for archaeological remains of this nature in the proposed DCO Order Limits within Zone 2, in addition the specified occurrences detail in this table. Likely to take the form of buried ditches and pits.</p>	Medieval and post medieval	Medium to High	Very low to low
General	<p>Geophysical anomalies of unclear origin</p> <p>Geophysical survey has recorded numerous anomalies within the proposed DCO Order Limits (Appendix 25.4: Onshore geophysical survey report, Volume 4 (Document Reference: 6.4.25.4) of the ES). These range from discrete or linear areas of enhanced magnetism or linear/curvilinear trends of unclear origin. Generally, these anomalies are magnetically weak, fractured or isolated and their context is difficult to ascertain. Whilst an archaeological origin is possible, an agricultural, geological or modern origin is also likely. Where relevant, the predicted archaeological potential and heritage significance of these anomalies have been discussed within the context of other</p>	Undated	Medium to High	Uncertain/ Very low to medium

Location ¹²	Summary of archaeological remains ¹³	Period	Potential ¹⁴	Heritage Significance ¹⁵
	<p>evidence within this table. Of those anomalies not discussed elsewhere within this table, the heritage significance of such potential archaeological features, whilst uncertain, is not predicted to be of high heritage significance given their indicative form and extent, location and the available baseline evidence,</p>			
<p>Vicinity of KM09, TC-10, temporary construction accesses A-21 and A-22</p>	<p>Roman road from Chichester to Brighton and roadside activity.</p> <p>Broadly projected along that of the A27. No extant features observed. Potential archaeological survival within undeveloped areas of the adjacent to projected route of Roman road. If present, remains likely to have been truncated by road construction/improvements and ploughing.</p> <p>The geophysical survey (Fields 049 and 050) did not detect any anomalies which might relate to the remains of a Roman road (Appendix 25.4: Onshore geophysical survey report, Volume 4 of the ES [APP-203 to 210] which has been updated at the Procedural Deadline A submission).</p>	Roman	Low to medium	Low
<p>North of A27, KM09 and TC-10</p>	<p>Site of a former brickyard in Hammer Pot Field (MWS5726)</p> <p>Depression identified on LiDAR imagery (LDr_022) may be related. Geophysical survey identified anomalies of possible archaeological origin (51_1) at the same location, which</p>	Post Medieval	Very high	Low

Location ¹²	Summary of archaeological remains ¹³	Period	Potential ¹⁴	Heritage Significance ¹⁵
Between TC-10 and TC-12c, KM09 to KM13	<p>may also be related to remains of the brickworks (Appendix 25.4: Onshore geophysical survey report, Volume 4 of the ES [APP203 to 210] which has been updated at the Procedural Deadline A submission).</p> <p>Probable extraction pits</p> <p>Numerous LiDAR features (LDr_024-025, LDr_027, LDr_087, LDr_090-091, LDr_093) interpreted as probable extraction pits are located within proposed DCO Order Limits.</p> <p>LDr_027 and LDr_087 are located in areas depicted as “Old Chalk Pit” on 19th century OS maps. LDr_027 also corresponds to an area of enhanced magnetism (55_4) in Field 055 (Appendix 25.4: Onshore geophysical survey report, Volume 4 (Document Reference: 6.4.25.4) of the ES). LDr_087 is located in woodland, therefore no geophysical survey data is available, as is the case for LDr_090.</p> <p>LDr_091 coincides with an area of enhanced magnetism (56_2 in Field 056, Section 4.4, Table 5-2 and Figure 3.8 and Figure 6.45 in Appendix 25.4: Onshore geophysical survey report, Volume 4 (Document Reference: 6.4.25.4) of the ES). LDr_093 correlates with only a few much smaller areas of enhanced magnetism (56_1) in the same field, which are thought likely to be due to natural variations in the geology.</p>	Undated	High	Very low

Location ¹²	Summary of archaeological remains ¹³	Period	Potential ¹⁴	Heritage Significance ¹⁵
	<p>LDr_087 and LDr_090 are located in woodland, therefore no geophysical survey data is available.</p> <p>LDr_024-025 correspond with two areas of strong geophysical response (53_1) and (53_2) identified by the geophysical survey (Field 053).</p> <p>Geophysical survey also identifies other areas of enhanced magnetism of unclear origin which may be indicative of extraction activity of unknown date in Field 081 (Table 5-1, Appendix 25.4: Onshore geophysical survey report, Volume 4 of the ES [APP203 to 210] which has been updated at the Procedural Deadline A submission).</p>			
Vicinity of KM10	<p>Undated possible enclosure (52_1) and other possible archaeological remains (52_2 and 52_3)</p> <p>A curving linear trend (52_1) of probable archaeological origin identified through geophysical survey (Figures 3.6-3.7 and Figures 6.37-6.40, Appendix 25.4: Onshore geophysical survey report, Volume 4 of the ES [APP203 to 210] which has been updated at the Procedural Deadline A submission (Field 052)). The geophysical survey report suggests it may be a ditch type feature forming part of an enclosure. Two anomalies (52_2) within 52_1 are also thought to have a possible archaeological origin. 52_3 to the south is on a similar alignment and may be related.</p>	Undated	Medium to high	Uncertain/Low to medium

Location ¹²	Summary of archaeological remains ¹³	Period	Potential ¹⁴	Heritage Significance ¹⁵
Vicinity of KM10.5 to KM18.8	<p>The discrete areas of enhance magnetism of unclear origin (52_5) to the south are considered likely to be natural or associated with post medieval and modern extraction activity, evidenced within the vicinity, such as 52_9 in the same field.</p> <p>South Downs Training Area (SDTA)</p> <p>Area extending across the South Downs used during WWII utilised for training purposes (Section 4.7, Plates 5 and 6, Appendix 25.2: Onshore historic environment desk study, Volume 4 (Document Reference: 6.4.25.2) of the ES) and subsequent EOC (explosive ordnance clearance) activity. Potential for related finds and features to be present within the proposed DCO Order Limits.</p> <p>Geophysical survey recorded numerous discrete, very strong ferrous anomalies of unclear origin in Fields 090 (90_1) and 091 (91_1), which may relate to WWII activities, including ordnance clearance.</p>	WWII	High	Low
Light construction and operational access A-25	<p>Possible former field boundaries (LDr_200-202)</p> <p>Identified as linear banks on LiDAR imagery indicated possible former field boundaries. Located outwith the proposed DCO Order Limits but potential to extend within.</p>	Undated	Low	Low
TC-12, construction and	Designed parkland/deer park at Michelgrove (MWS3065)	Post medieval	Medium to high	Low

Location ¹²	Summary of archaeological remains ¹³	Period	Potential ¹⁴	Heritage Significance ¹⁵
operational access A-26	Associated with grade II listed ruins of Michelgrove House (NHLE 1353888) with extent shown on historic mapping. Land is now agricultural fields but Potential for surviving parkland features within the proposed DCO Order Limits, likely in the form of tree clumps and plantation.			
Vicinity of KM12.7	<p>Undated barrow type feature (62_1)</p> <p>Geophysical survey has identified a very weak curving anomaly (62_1) of possible archaeological origin (Field 062) (Figure 3.8 and Figure 6.48, Appendix 25.4: Onshore geophysical survey report, Volume 4 (Document Reference: 6.4.25.4) of the ES). The form of the anomaly suggests it could be a barrow approximately 18m in diameter. However, no other available data indicates the presence of a barrow or any other feature type at this location. The heritage significance of this feature is uncertain, though given the indicative form and extent, the location and the available baseline evidence, this is not expected to be of high heritage significance.</p>	Undated	High	Low to medium
Vicinity of KM13 to KM15	<p>Bronze Age Settlement features and deposits.</p> <p>Scheduled remains of Itford style settlements known at New Barn Down (NHLE 1017446) adjacent to the Site and Cock Hill (NHLE 1015881) 80m west.</p> <p>Potential for associated archaeological remains within the onshore part of the proposed DCO Order Limits.</p>	Bronze Age	Medium to High	Medium to High

Location ¹²	Summary of archaeological remains ¹³	Period	Potential ¹⁴	Heritage Significance ¹⁵
	<p>Geophysical survey results within surrounding fields (062 to 073) records only a few anomalies of possible archaeological origin and others which are unclear (Appendix 25.4: Onshore geophysical survey report, Volume 4 (Document Reference: 6.4.25.4) of the ES). These features are fragmented and dispersed.</p> <p>Relict field boundaries surviving as upstanding and buried remains in this area are undated but could relate to Bronze Age activity. Examples within the proposed DCO Order Limits (LDr_092, LDr_194-195).</p> <p>Heritage significance is assumed to be high where well preserved in situ settlement features may be present and medium where more ephemeral and/or fragmented land division features could be recorded.</p> <p>Based on the available evidence anticipated features are more likely to represent elements of Bronze Age field systems of medium heritage significance.</p>			
Vicinity of KM13 to KM-17	<p>Neolithic flint mines and mortuary remains.</p> <p>No recorded remains within the onshore part of the proposed DCO Order Limits.</p> <p>Known scheduled flint mining sites within the Study Area (NHLE 1015880 adjacent to proposed DCO Order Limits, NHLE 1015237 35m south, NHLE 1015238 600m south and</p>	Neolithic	Medium to high	High

Location ¹²	Summary of archaeological remains ¹³	Period	Potential ¹⁴	Heritage Significance ¹⁵
	<p>NHLE 1015239 625m west). There is potential for as yet unknown archaeological remains of this nature to be present within the Site. Sites of flint mining largely confined to buried deposits comprising infilled shafts containing flint and pottery fragments, flint-knapping floors, hearths, traces of timber buildings, and human burials.</p> <p>Numerous undated pit-type anomalies recorded by geophysical survey within Fields 74 and 75, two interpreted as possible archaeology, others as unclear (Appendix 25.4: Onshore geophysical survey report, Volume 4 (Document Reference: 6.4.25.4) of the ES).</p>			
Vicinity of KM13 to KM-17	<p>Neolithic settlement features and deposits</p> <p>No recorded evidence specific to settlement activity within the onshore part of the proposed DCO Order Limits.</p> <p>Neolithic artefacts found within a pit within the scheduled Itford Hill style settlement at New Barn Down (NHLE 1017446). There is potential for remains settlement activity associated with recorded flint mining sites within the Study Area.</p>	Neolithic	Low to medium	High
Vicinity of KM13 to KM-16	<p>Relict field boundaries</p> <p>Numerous earthworks on LiDAR imagery (LDr_092, LDr_094 to 095, LDr_099, LDr_114, LDr_121) interpreted as probable former field boundaries.</p>	Undated	High	Uncertain/Low to medium

Location ¹²	Summary of archaeological remains ¹³	Period	Potential ¹⁴	Heritage Significance ¹⁵
	<p>LDr_092 and LDr_094 to 095 do not correlate with boundary patterns depicted on historic mapping, so could relate to divisions relating to medieval or earlier land use, with possible association with remains within the scheduled Itford Hill style settlement (NHLE 1017446) immediately north of the proposed DCO Order Limits. Some correlation between LDr_094 and 095 and geophysical anomalies in Field 065 (65_2 trend of unclear origin) and 66_1 (linear trend interpreted as possible archaeology) appears to extend from LDr_092, which lies immediately south of the proposed DCO Order Limits (Figure 3.8 and Figure 6.49-6.50, Appendix 25.4: Onshore geophysical survey report, Volume 4 (Document Reference: 6.4.25.4) of the ES).</p> <p>LDr_099 broadly correlates with a probable track depicted on 19th century OS maps but could have earlier origins, and survives an extant field boundary.</p> <p>LDr_114 and LDr_121 do not correlate with boundaries depicted on historic mapping nor has the geophysical survey detected any corresponding anomalies (Figure 3.10 and Figure 3.11, Appendix 25.4: Onshore geophysical survey report, Volume 4 (Document Reference: 6.4.25.4) of the ES).</p> <p>There are also two diffuse zones of elevated response (72_1) which have been mapped by geophysical survey in</p>			

Location ¹²	Summary of archaeological remains ¹³	Period	Potential ¹⁴	Heritage Significance ¹⁵
Vicinity of KM 13 to KM 18 and operational access A-27	<p>Field 072, one of which extends into the proposed DCO Order Limits. The origin of these is unclear, but they are most likely to be associated with former footpaths and a marsh area indicated on 19th century OS mapping.</p> <p>Early medieval mortuary remains.</p> <p>Potential in the form of barrows and inhumations.</p> <p>Known barrow examples within Site (MWS2804) and Study Area (Section 4.7 and Table 5-2 in Appendix 25.2: Onshore historic environment desk study, Volume 4 (Document Reference: 6.4.25.2) of the ES).</p> <p>Multiple LiDAR features suggestive of barrow sites located within and outside the Site (LDr_130, LDr_132-133, LDr_134 and LDr_136). If barrows, these could contain early medieval mortuary remains.</p>	Early medieval	High	Low to Medium
Vicinity of KM 13 to KM 18 and operational access A-27	<p>Bronze Age barrows</p> <p>A known barrow site (MWS6581) and a second possible barrow (MWS6581) within proposed DCO Order Limits. LiDAR features within the Site close to the scheduled area may represent further barrows (LDr_130, LDr_132-133, LDr_136, LDr_144), near KM15, TC-15b and KM 17.</p> <p>Other known barrows in the Study Area and across the South Downs.</p>	Bronze Age	High	Low to medium

Location ¹²	Summary of archaeological remains ¹³	Period	Potential ¹⁴	Heritage Significance ¹⁵
Vicinity of KM13.5 and KM14.5	<p>Undated possible pits</p> <p>The geophysical survey has identified multiple dispersed pit-type anomalies (Field 075) or discrete areas of enhanced magnetism with unclear origins (Field 073 and 074) within the onshore part of the proposed DCO Order Limits in the vicinity of known Neolithic flint mining sites (Section 4.3, Table 5-1, Appendix 25.4: Onshore geophysical survey report, Volume 4 (Document Reference: 6.4.25.4) of the ES).</p>	Uncertain	Medium to High	Uncertain
Between KM15 and KM16	<p>Ridge and furrow</p> <p>Traces of possible ridge and furrow surviving as buried deposits identified by geophysical survey (Appendix 25.4: Onshore geophysical survey report, Volume 4 (Document Reference: 6.4.25.4) of the ES) (Fields 078 and 082).</p>	Medieval to Post medieval	High	Very low
Vicinity of KM16 to 17 TC-15b	<p>Circular mound features at Sullington Hill</p> <p>Features identified as circular mounds on LiDAR imagery within or partially extending into the proposed DCO Order Limits (LDr_130, LDr_132, LDr_133, LDr_136, LDr_144). No evidence of these features were observed during the site walkover. A preliminary interpretation as potential barrows was based on known barrow examples in the vicinity, both within and without the proposed DCO Order Limits.</p>	Uncertain/ Prehistoric/early medieval	High	Low to Medium

Location ¹²	Summary of archaeological remains ¹³	Period	Potential ¹⁴	Heritage Significance ¹⁵
	<p>LDr_133, which partly falls within the proposed DCO Order Limits, lies 10m to the north of MWS6688, a known Bronze Age barrow with an early medieval burial recorded on the HER 10m from the proposed DCO Order Limits.</p> <p>LDr_132 aligns with location of MWS6690 and MWS6691, two known Bronze Age barrows, which the HER records as 10m and 4m from the proposed DCO Order Limits, respectively.</p> <p>LDr_132 and LDr_133 may therefore represent remains of previously excavated barrows, which partly extend into the proposed DCO Order Limits.</p> <p>The geophysical survey did not record any anomalies which clearly indicate possible barrows at these locations but LDr_130, LDr_132 and LDr_133 all appear to correspond with areas of enhanced magnetism of unclear origin (86_1) (Figure 3.11 and Figure 6.65, Appendix 25.4: Onshore geophysical survey report, Volume 4 (Document Reference: 6.4.25.4) of the ES), whilst LDr_144 lies within a linear area of enhanced magnetism extending along LDr_044 and corresponding linear trend (87_1). Such responses may be consistent with ground disturbance, which may be related to previous investigations and/or other activities (e.g. WW2 military training). However, it is not clear if the disturbance is masking response from possible barrows, the possible barrows have been re-used, or the</p>			

Location ¹²	Summary of archaeological remains ¹³	Period	Potential ¹⁴	Heritage Significance ¹⁵
	barrows have been misinterpreted (Table 5-1, Appendix 25.4: Onshore geophysical survey report, Volume 4 (Document Reference: 6.4.25.4) of the ES).			
Between KM 16 and 17, west of TC-15b	Defended locality on Sullington Hill within the proposed DCO Order Limits (MWS7566).	Modern/WWII	Uncertain/Low	Low
	No above ground remains observed during walkover, and the nature of any archaeological remains is unknown.			
KM 15 to KM 21 - downs scarp and chalk upland	<p>Probable post medieval and modern extraction pits.</p> <p>May relate to the production of lime for the improvement of agricultural soils or the production of building materials. Features possibly relating to these activities have been identified on LiDAR imagery (LDr_128, LDr_134, LDr_140) and by geophysical survey (anomalies identified as definite/probable archaeology (Fields 086, 087) and others as having an unclear origin (Field 081, 082, 086, 087, 090, 091)) within the proposed DCO Order Limits.</p>	Uncertain/Post medieval and modern	High	Very Low
Construction and operational access A-28	<p>Iron Age and Roman-British remains associated with Muntham Court scheduled site (NHLE 1005850, MWS5598).</p> <p>Scheduled remains of Iron Age defended settlement and Roman shrine on Muntham Hill, adjacent to construction and operational access A-28. Remains comprise buried features and deposits including ditches, pits and post holes,</p>	Iron Age to Romano-British	High	Medium to High

Location ¹²	Summary of archaeological remains ¹³	Period	Potential ¹⁴	Heritage Significance ¹⁵
Vicinity of KM17, between TC-15a and TC-15b	<p>along with associated small find assemblages. Potential for similar associated remains to be present within proposed DCO Order Limits.</p> <p>Relict field boundaries or trackways, some of which have been recorded as earthworks on LiDAR imagery within the proposed DCO Order Limits (LDr_131, LDr_135, LDr_137 to 139, LDr_145 to LDr_147, LDr_149 to LDr_150). Some of these correspond with existing tracks (LDr_135, LDr_145 to LDr_147</p> <p>LDr_131, LDr_135, LDr_137, LDr_139, LDr_145 and LDr_147 all appear to be trackways on the northern scarp of the South Downs, with some correlation with existing paths. LDr_146 is evident on satellite imagery.</p> <p>LDr_149 to LDr_150 intersect with Site of a World War II Military Firing Range (MWS11270) immediately adjacent to the proposed DCO Order Limits but any association is unclear. LDr_149 also correlates with a geophysical trend interpreted as natural variation in the subsoils within the proposed DCO Order Limits, and where it extends beyond, it aligns with weak linear trends on the geophysical data.</p>	Undated/Post medieval to modern	High	Low
KM18	<p>Ridge and furrow.</p> <p>Potential remains of ridge and furrow surviving within the proposed DCO Order Limits as buried deposits identified through recent geophysical survey (Appendix 25.4:</p>	Medieval to post medieval	High	Very low

Location ¹²	Summary of archaeological remains ¹³	Period	Potential ¹⁴	Heritage Significance ¹⁵
<p>Onshore geophysical survey report, Volume 4 (Document Reference: 6.4.25.4) of the ES) (Fields 095).</p>				
Operation access route A-31	<p>Hill Barn Historic Outfarm, Storrington and Sullington (MWS11506).</p> <p>Extant 19th century T-Plan regular courtyard outfarm or field barn partly within the proposed DCO Order Limits.</p> <p>Site also intersects existing farm track. Possible remains associated with historic farmstead.</p>	Post medieval	Low to medium	Low
Temporary construction and operation access route A-32	<p>Barns Farm Historic Farmstead, Storrington (MWS9337).</p> <p>19th century dispersed cluster farmstead suffered significant loss.</p> <p>Proposed DCO Order Limits intersects existing farm track. Possible remains associated with historic farmstead.</p>	Post medieval	Low to medium	Low
KM 19, temporary construction and operation access route A-32	<p>Site of a World War Two Army Camp at Barns Farm, Sullington (Site of a World War Two Army Camp at Barns Farm, Sullington) (MWS7547)</p> <p>The military camp which housed British and Canadian soldiers is situated to the north of Barns Farm visible on aerial photographs taken in 1946. Much has been demolished but some of the original buildings appear to have survived. No records are located within the proposed</p>	Modern/WW2	Very Low	Low

Location ¹²	Summary of archaeological remains ¹³	Period	Potential ¹⁴	Heritage Significance ¹⁵
Between KM 19 and KM 20	DCO Order Limits but there is potential for remains along the access route.	Post medieval	Medium to high	Low
	Rowdell park originally set around Rowdell House. A house at Rowdell was mentioned c. 1225 and in the 16th century but later demolished and replaced in the 19th century.			
	Extant pond feature identified on 1875 OS within proposed DCO Order Limits (MPi_006).			
	Potential for other surviving parkland features associated.			

Table A-3 Zone 3: Low Weald – Known and potential archaeological remains within the onshore part of the proposed DCO Order Limits

Location ¹⁶	Summary of archaeological remains ¹⁷	Period	Potential ¹⁸	Heritage Significance ¹⁹
General - outside of the Adur floodplain	<p>Palaeoenvironmental deposits.</p> <p>Medium potential for palaeoenvironmental remains preserved within or beneath the Head deposits, especially where they overlie the broad and gently sloping valley floors.</p> <p>Low potential that remains might also be preserved in fissures on some of the sandstone and limestone outcrops, though ideal conditions for the development of such fissures – steep valley side slopes - are rarely present.</p> <p>See Section 5 and Section 6, Appendix 25.3: Onshore desk-based geoarchaeological and palaeoenvironmental assessment report, Volume 4 (Document Reference: 6.4.25.3) of the ES for discussion on palaeoenvironmental potential.</p>	Prehistoric	Low to medium	Low to medium
General	Neolithic artefacts and scatters.	Neolithic	Low	Low

¹⁶ Specific location provided for known heritage assets within proposed DCO Order Limits, whilst general area or landscape/geological context provided for predicted heritage assets.

¹⁷ Relevant record number and name provided for known heritage assets, whilst general asset type provided for predicted heritage assets.

¹⁸ Degree to which an asset is predicted to occur within onshore part of the proposed DCO Order Limits.

¹⁹ Assessed heritage significance of predicted heritage assets within the proposed DCO Order Limits.

Location ¹⁶	Summary of archaeological remains ¹⁷	Period	Potential ¹⁸	Heritage Significance ¹⁹
	<p>No recorded evidence within the onshore part of the proposed DCO Order Limits and only few worked flints recorded within Study Area. Isolated/residual finds likely to be reworked and redeposited.</p> <p>Neolithic features are not anticipated.</p>			
General	<p>Bronze age features/deposits and finds</p> <p>Very limited evidence for Bronze Age activity within Zone 3 (Section 4.7 and Table 5-3 in Appendix 25.2: Onshore historic environment desk study, Volume 4 (Document Reference: 6.4.25.2) of the ES).</p>	Bronze age	Low	Low to high
General	<p>Early to middle Iron Age finds.</p> <p>No evidence recorded within the Site.</p> <p>A single Iron Age findspot is recorded within the Study Area, a coin, (MWS5644), 240m northwest of the Site.</p>	Early to middle Iron Age	Low	Low
General	<p>Agricultural and land division features and finds.</p> <p>General potential through Zone 3, in addition to those specific areas containing known recorded evidence referred to in this table.</p> <p>Isolated/residuals finds of different object types.</p>	Medieval or Post Medieval	High	Low

Location ¹⁶	Summary of archaeological remains ¹⁷	Period	Potential ¹⁸	Heritage Significance ¹⁹
General	<p>Geophysical anomalies of unclear origin</p> <p>Geophysical survey has recorded numerous anomalies within the proposed DCO Order Limits (Appendix 25.4: Onshore geophysical survey reports, Volume 4 (Document Reference: 6.4.25.4) of the ES). These range from discrete or linear areas of enhanced magnetism or linear/curvilinear and circular trends of unclear origin. Generally, these anomalies are magnetically weak, fractured or isolated and their context is difficult to ascertain. Whilst an archaeological origin is possible, an agricultural, geological or modern origin is more likely. Where relevant, the predicted archaeological potential and heritage significance of these anomalies have been discussed within the context of other evidence within this table. Of those anomalies not discussed elsewhere within this table, the heritage significance of such potential archaeological features, whilst uncertain, is not predicted to be of high heritage significance given their indicative form and extent, location and the available baseline evidence.</p>	Undated	Medium to High	Uncertain/ Very low to medium
Vicinity of KM 22 to KM 24 and KM 27 to KM 28 - Lower Greensand	<p>Mesolithic flint artefacts and scatters.</p> <p>No recorded finds within proposed DCO Order Limits, though numerous finds in Study Area (see Appendix 25.2: Onshore historic environment desk study, Volume 4 (Document Reference: 6.4.25.2) of the ES).</p> <p>There is low potential for elsewhere on the Weald Clay within the Zone 3.</p>	Mesolithic	Low to medium	Low to medium

Location ¹⁶	Summary of archaeological remains ¹⁷	Period	Potential ¹⁸	Heritage Significance ¹⁹
KM 23, TC-19a and construction and operational access A-43	<p>Location of potential estimated based on BGS mapped superficial deposits.</p> <p>See Section 5 and Section 6, Appendix 25.3: Onshore desk-based geoarchaeological and palaeoenvironmental assessment report, Volume 4 (Document Reference: 6.4.25.3) of the ES for discussion on geoarchaeological deposits.</p> <p>Hardham to Barcombe Mills Roman Road, the Greensand Way (ANA Horsham 078; Mid Sussex 044)</p> <p>This road connected with Stane Street and Brighton to London Road.</p> <p>Potential archaeological survival of the Roman road and roadside activity within undeveloped areas of the Site. Undated earthwork remains (MWS7031) within extent of ANA relating to Roman road.</p>	Roman	High	Low to medium
TC-19	<p>Potential archaeological features near Buncton (Field 136)</p> <p>Linear features of unknown date but possible archaeological origin surviving as buried deposits identified through geophysical survey (Appendix 25.4: Onshore geophysical survey report, Volume 4 (Document Reference: 6.4.25.4) of the ES) (Field 136). The geophysical survey interpreted these features as elements of possible former enclosures. No correlation with boundaries on historic mapping. Possibly also of</p>	Unknown	Medium	Low to medium

Location ¹⁶	Summary of archaeological remains ¹⁷	Period	Potential ¹⁸	Heritage Significance ¹⁹
KM 23, TC-19a	<p>prehistoric date (proximity to Hardham to Barcombe Mills Roman Road Horsham 078; Mid Sussex 044) and possibility of medieval/post medieval date as Field 136 lies between Buncton chapel and graveyard (MWS1183, 60m to the north) and Medieval Moated Site at Buncton Manor Farm (ANA Horsham 054, MWS9593). Similar features may be present within adjacent Field 137 where enhanced magnetism resulting from probable green waste may be masking weaker responses.</p> <p>Undated earthwork remains (MWS7031) near Buncton</p> <p>Located within the proposed DCO Order Limits and may be associated with nearby known medieval settlement remains at Buncton (ANA Horsham 054, MWS5639) or former Butchers Farm (MWS9616).</p> <p>Settlement recorded at Buncton in Domesday Book, near to existing site of Buncton Manor. Possibility for archaeological survival of early medieval occupation within the vicinity, though none currently recorded.</p> <p>Potential also for association with route of Hardham to Barcombe Mills Roman Road (Horsham 078; Mid Sussex 044).</p> <p>No geophysical survey data available for this location (Field 133), though geophysical anomalies nearby in Field 136 suggest remains of possible undated enclosures (Appendix 25.4: Onshore geophysical survey report, Volume 4 (Document Reference: 6.4.25.4) of the ES).</p>	Unknown	Very High	Low to medium

Location ¹⁶	Summary of archaeological remains ¹⁷	Period	Potential ¹⁸	Heritage Significance ¹⁹
Between KM 25 and KM 26	Relict field boundaries of unknown date within the proposed DCO Order Limits identified as earthworks on LiDAR imagery (LDr_156-158, LDr_160). These relate to boundaries depicted on 19 th century OS mapping which have since been removed.	Uncertain/post medieval	High	Low
Adur floodplain and tributaries	<p>Palaeoenvironmental deposits.</p> <p>Deep alluvium deposits present within the Adur floodplain have very high potential for environmental reconstruction of the Holocene.</p> <p>Low potential within Pleistocene River Terrace Deposits.</p> <p>Location of potential estimated based on BGS mapped superficial deposits.</p> <p>See Section 5 and Section 6, Appendix 25.3: Onshore desk-based geoarchaeological and palaeoenvironmental assessment report, Volume 4 (Document Reference: 6.4.25.3) of the ES for discussion on palaeoenvironmental potential.</p>	Prehistoric	Low to very high	High
KM 27 to 32 and 35 to 36				
Adur floodplain and tributaries	<p>Palaeolithic flint artefacts.</p> <p>Low potential within Alluvium and medium potential within River Terrace deposits.</p> <p>There is low potential for elsewhere within the Zone 3.</p>	Palaeolithic	Low to medium	Low to medium
KM 27 to 32 and 35 to 36				

Location ¹⁶	Summary of archaeological remains ¹⁷	Period	Potential ¹⁸	Heritage Significance ¹⁹
	<p>Location of potential estimated based on BGS mapped superficial deposits.</p> <p>See Section 5 and Section 6, Appendix 25.3: Onshore desk-based geoarchaeological and palaeoenvironmental assessment report, Volume 4 (Document Reference: 6.4.25.3) of the ES for discussion on geoarchaeological deposits.</p>			
<p>Between KM 27 and KM 28</p>	<p>Ridge and furrow</p> <p>Identified in the proposed DCO Order Limits on LiDAR (LDr_164, LDr_166).</p> <p>Located within land characterised as medieval to post medieval irregular piecemeal enclosure (HWS2120), immediately east of historic Wellen's Farm (MWS12613) and medieval hamlet of Ashurst (ANA Horsham 048).</p> <p>Traces of ridge and furrow are generally aligned with surrounding extant boundaries.</p>	<p>Medieval to post medieval</p>	<p>High</p>	<p>Low</p>
<p>Operational access A-48 and south of KM28</p>	<p>Blocques Farm Historic Farmstead (MWS9446).</p> <p>A 19th century double sided loose courtyard farmstead with detached farmhouse having suffered significant loss (more than 50% alteration).</p> <p>Onshore part of proposed DCO Order Limits occupies track adjacent to farmstead.</p>	<p>Post medieval to modern</p>	<p>Low to medium</p>	<p>Low</p>

Location ¹⁶	Summary of archaeological remains ¹⁷	Period	Potential ¹⁸	Heritage Significance ¹⁹
South of KM30	<p>Undated circular features (184_1 and 185_1)</p> <p>Geophysical survey has identified two well-defined circular anomalies within adjacent fields (Field 185 and 186) (Section 4.3, Table 5-1, Figure 3.19, Figure 6.112 and Figure 6.114, Appendix 25.4: Onshore geophysical survey report, Volume 4 (Document Reference: 6.4.25.4) of the ES). The nature and form of the responses suggest possible ring ditch type features though there are no known examples within the proposed DCO Order Limits or study area in Zone 3. Broad natural anomalies have been noted within this area and it is possible that the postulated ring ditches are natural in origin indicating possible ox-bow type feature associated with palaeochannels. Other curving responses of enhanced magnetism of unclear origin are also recorded within the same field.</p> <p>The heritage significance of these features is uncertain, though given their indicative form and extent, their location and the available baseline evidence, these are not expected to represent features of high heritage significance.</p>	Undated	Medium to High	Uncertain/ Low to Medium
Vicinity of KM30	<p>Ridge and furrow</p> <p>Identified on LiDAR (LDr_169) and are aligned with surrounding extant boundaries. Located within land characterised as medieval cohesive assart (HWS3498).</p>	Medieval to post medieval	High	Low
Temporary construction	Brightham's Farm Historic Farmstead (MWS9503).	Medieval to modern	Low to medium	Low

Location ¹⁶	Summary of archaeological remains ¹⁷	Period	Potential ¹⁸	Heritage Significance ¹⁹
and operation access A-50b	<p>A U-plan regular courtyard farmstead with additional detached elements. Partial loss has occurred (less than 50%); demolished elements may survive as archaeological remains.</p> <p>HER polygon only extends slightly into the proposed DCO Order Limits. The farmhouse, and the cart shed are grade II listed buildings (NHLE 1354245; NHLE1181633).</p>			
Operational access A-51	<p>Homelands Historic Farmstead (MWS11752).</p> <p>Operational access intersects a track through farmstead. Homelands is a 19th century 4-sided loose courtyard farmstead with additional detached elements. Partial loss has occurred (less than 50%); demolished elements may survive as archaeological remains.</p>	Post medieval to modern	Low to medium	Low
Between KM 30 and KM 31, Operational Access A-51	<p>Shoreham to Horsham Railway (MWS5508).</p> <p>The route of the 19th century dismantled railway crosses the onshore part of the proposed DCO Order Limits on a northwest-southeast alignment. It was opened in 1860 and closed 100 years later. Today it is maintained as a footpath.</p>	Post medieval	Low to medium	Low
KM 32	<p>Potential for remains of former field boundaries in former agricultural fields prior to the emparkment of Shermanbury Grange recorded on West Grinstead tithe map of 1847 (MPi_008).</p>	Low	Low	Low

Location ¹⁶	Summary of archaeological remains ¹⁷	Period	Potential ¹⁸	Heritage Significance ¹⁹
Between KM 32 and KM 33	<p>Relict field system.</p> <p>Identified on LiDAR imagery (LDr_180 to 182). Located north of Home Farm Historic Farmstead (MWS11733). Possible association with tree lines representing former boundaries on 19th century Ordnance Survey maps.</p>	Medieval or Post Medieval	High	Low
KM 34	<p>Circular depression identified on LiDAR imagery (LDr_186).</p> <p>Indicating possible extraction activity, which may survive as archaeological remains.</p> <p>May relate to various industries operating across the Weald, including post medieval glass/brick making and lime production.</p>	Undated	High	Very Low
KM 35, operational access route A-58	<p>Crateman's Farm Historic Farmstead (MWS9939, ANA Horsham 144).</p> <p>A 17th century 3-sided L-Plan loose courtyard farmstead with additional detached elements to the main plan. The farmstead has suffered partial loss (less than 50%); demolished elements may survive as archaeological remains.</p> <p>Onshore part of proposed DCO Order Limits occupies western part of farmstead (and associated ANA) where former buildings are shown on historic mapping (MPi_012-013).</p> <p>Farmhouse is grade II listed (NHLE 1354155), lies within 20m of the operational access.</p>	Post medieval	Medium	Low

Location ¹⁶	Summary of archaeological remains ¹⁷	Period	Potential ¹⁸	Heritage Significance ¹⁹
KM 35, operational access route A-58	<p>Dragons Farm Historic Farmstead (MWS10096).</p> <p>A 19th century 3- sided L-Plan loose courtyard farmstead with additional detached elements. The farmstead has suffered partial loss (less than 50%); demolished elements may survive as archaeological remains.</p> <p>Onshore part of proposed DCO Order Limits occupies access track adjacent to existing farmstead, where former building is identified on historic mapping (MPi_016).</p>	Post medieval to modern	Low to medium	Low
KM 035 to KM 036	<p>Ridge and furrow</p> <p>Potential for buried remains identified through recent geophysical survey (Appendix 25.4: Onshore geophysical survey report, Volume 4 (Document Reference: 6.4.25.4) of the ES) (Fields 220, 223 and 224).</p>	Medieval to Post medieval	High	Low
TC27	<p>Buried linear features of probable archaeological origin identified through recent geophysical survey (Appendix 25.4: Onshore geophysical survey report, Volume 4 (Document Reference: 6.4.25.4) of the ES) (Field 228). The geophysical survey interpreted these features as possible elements of a rectilinear enclosure.</p> <p>No correlation with HER, LiDAR features or boundaries on historic mapping.</p>	Unknown	High	Low to medium

Location ¹⁶	Summary of archaeological remains ¹⁷	Period	Potential ¹⁸	Heritage Significance ¹⁹
KM 0 (400kv)²⁰, Oakendene Substation	<p>Oakendene historic parkland (MWS96, HWS2285)</p> <p>Landscaped grounds of Oakendene Manor (MWS96, HWS2285), the former extent of which is depicted on 19th century Ordnance Survey mapping. The surviving manor house is grade II listed (NHLE 1027074).</p> <p>Earthwork remains of former field boundaries identified on LiDAR imagery (LDr_195 to 197) with corresponding geophysical anomalies (230_2, 230_1 and 233_1 respectively, Figure 3.23 and Figures 6.138 to 6.139, Appendix 25.4: Onshore geophysical survey report, Volume 4 (Document Reference: 6.4.25.4) of the ES) within former parkland associated with Oakendene (formerly Oakendean) (HWS2285). These largely correlate with boundaries and tree lines depicted on 19th century OS maps.</p> <p>Geophysical survey also detected an amorphous area of enhanced magnetism (232_4 in Field 232), which broadly corresponds to an area previously defined as a separate field on the 1896 OS, 1912 OS and 1956 OS. There may have been landscaping or infilling at this location. Other geophysical anomalies were identified which do not correspond with any historic map feature or field observation (Fields 230, 231, 232, 233, 234 and 235). These include some linear features which appear to relate to land division, ploughing or other modern agricultural activity, and a couple of comparable weak circular</p>	Post medieval	High	Low

²⁰ Kilometre post as measured along the 400kV onshore cable from onshore substation at Oakendene to the Bolney substation extension

Location ¹⁶	Summary of archaeological remains ¹⁷	Period	Potential ¹⁸	Heritage Significance ¹⁹
	<p>anomalies of unclear origin with no known association with the former parkland.</p> <p>See Appendix 25.5: Oakendene historic parkscape assessment, Volume 4 (Document Reference: 6.4.25.5) of the ES.</p> <p>ANA Horsham 139 for Oakendene Medieval Manor Farmstead lies adjacent to the proposed DCO Order Limits.</p>			
KM 0 to KM 1 (400kv)	<p>Ridge and furrow</p> <p>Earthworks located within extant field boundaries identified on LiDAR imagery (LDr_189 to 190, LDr_193).</p> <p>Located within land characterised as medieval cohesive assart (HWS2296).</p> <p>Some linear trends may correspond in Field 240 may correspond to LDr_193 but this is not clear (Appendix 25.4: Onshore geophysical survey report, Volume 4 (Document Reference: 6.4.25.4) of the ES).</p>	Medieval to post medieval	High	Low
KM0 (400Kv)	<p>Rectangular field system, Bolney Substation (MWS15278).</p> <p>Excavations prior to the construction of Bolney substation recorded a series of intercutting ditches which together delineate a rectangular field system oriented on a north-south/east-west axis. Dating evidence suggested a late Iron Age</p>	Iron Age to Roman	Very High	Low to medium

Location ¹⁶	Summary of archaeological remains ¹⁷	Period	Potential ¹⁸	Heritage Significance ¹⁹
Bolney Substation extension and KM02+ (400Kv)	<p>or Romano-British date for these features. Recent geophysical survey has recorded two linear anomalies of unclear origin within the proposed DCO Order Limits which could be related to the known features (248_1 and 249_1 in Fields 248 and 249 respectively (Figure 3.24 and Figures 6.144 to 6.145, Appendix 25.4: Onshore geophysical survey report, Volume 4 (Document Reference: 6.4.25.4) of the ES). Within the same fields, the geophysical survey recorded a very high level of isolated ferrous/fired responses due to modern debris in the topsoil which may be a result of green waste (Table 5-1, Appendix 25.4: Onshore geophysical survey report, Volume 4 (Document Reference: 6.4.25.4) of the ES). This level of background response limits the ability to discern the presence of more subtle anomalies which might result from potential archaeological features. This is particularly evident where Field 247, which lies adjacent but outside of the proposed DCO Order Limits, where there is an absence of high level background noise and where a series of trends and areas of enhanced magnetism of unclear origin which have the potential to represent a series of enclosures (Table 5-1, Figure 3.24 and Figures 5.144 to 5.145, Appendix 25.4: Onshore geophysical survey report, Volume 4 (Document Reference: 6.4.25.4) of the ES).</p> <p>Twineham Court historic parkland (HWS6298).</p> <p>400Kv cable corridor intersects an area of surviving informal parkland (HWS6298) associated with Twineham Court historic farmstead (MWS12965) and Bolney substation extension</p>	Medieval and post medieval	High	Low

Location ¹⁶	Summary of archaeological remains ¹⁷	Period	Potential ¹⁸	Heritage Significance ¹⁹
	<p>overlaps with historic extent of the parkland as shown in historic OS mapping.</p> <p>Potential buried remains of ridge and furrow recorded by geophysical survey (Appendix 25.4: Onshore geophysical survey report, Volume 4 (Document Reference: 6.4.25.4) of the ES) in adjacent field (Field 250), within location for the existing National Grid Bolney substation extension.</p> <p>Former construction works at Bolney, relating to the existing National Grid Bolney substation and Rampion 1 are evidenced in Plates 5 to 8, Annex B of Appendix 25.2: Onshore historic environment desk study, Volume 4 (Document Reference: 6.4.25.2) of the ES), which will have impacted below ground deposits within the footprint of these works.</p> <p>There is existing hard standing where the temporary construction compound for the existing National Grid Bolney substation extension is proposed.</p>			

Appendix B Protocol for the discovery of archaeological remains

This protocol relates to the discovery of archaeological remains during the course of planned pre-construction field evaluation, as set out in the Outline Onshore WSI and/or subsequent site specific WSI.²¹ The protocol has been established in line with relevant embedded environmental measures which provide for a hierarchy of mitigation of impacts to archaeological remains, which prioritises avoidance and minimising of impacts by avoidance through appropriate design response, and where this is not possible or appropriate, to preserve by investigation and recording.

The approach for preservation of archaeological remains should be in accordance with relevant guidance in the following documents:

- Historic England (2016a) Preserving Archaeological Remains
- ClfA (2023c and 2023d) Standard and universal guidance for archaeological field evaluation

The relevant roles and responsibilities for actions taken under the relevant stages of this protocol are described in the Outline Onshore WSI.

²¹ Measures responding to archaeological remains observed during planned mitigation, e.g. during archaeological monitoring and recording, will be set out in the relevant site specific WSI for that phase of works.

Discovery

- Archaeological remains identified during planned field evaluation to be reported in accordance with measures set out in the agreed Outline WSI and site-specific WSI.

Assessment

- Assessment of condition and heritage significance of archaeological remains discovered and potential construction impacts.
- Relevant survey report/s to support this assessment will be prepared by the appointed Archaeological Contractor and approved by the Archaeological Curator/s, in accordance with the Outline WSI and relevant site-specific WSI.
- Further investigation work may be required to inform the assessment.
- Results of the assessment will inform the need and scope of mitigation measures, to be determined in consultation with the Archaeological Curator/s, with technical input from Historic England where appropriate.

Avoidance

- Where archaeological remains of high heritage significance are identified, engineering and/or design solutions will be explored to conserve remains which contribute to significance in their current location. Where the archaeological remains *"are demonstrated to be of equivalent significance as a Scheduled Monument"* (NPS EN-1 2023), this will include consideration of additional trenchless crossings.
- As per C-225, example solutions may include, but are not excluded to, narrowing of the construction corridor, diverting the cable route within DCO Order Limits, re-siting stockpiles, installing the cable above deep remains.
- As per C-278, where trenchless crossings are employed, these would be designed to ensure a minimum depth of 5m is maintained when passing beneath them to reduce the risk of damage.
- Plans detailing engineering proposals for mitigation by avoidance will be provided by the Principal Contractor.
- Preservation assessments, where required, should apply to those materials and deposits which contribute to the site's significance and should be undertaken by appropriately qualified specialists. In accordance with the NPPF the level of detail of these preservation assessments should be no more than is necessary to reach an informed decision and be proportionate to the significance of the site affected and the potential impact on that significance.
- The suitability and scope of avoidance measures will be determined in consultation with the Archaeological Curator/s, with technical input from Historic England where appropriate.

Mitigation by record

- Where avoidance through design of archaeological remains is not feasible or proportionate, mitigation by recording will be set out within a site-specific WSI, in line with the Outline WSI. The site-specific WSI will be prepared by the Archaeological Contractor and approved by the Archaeological Curator/s.

Appendix C Sussex Archaeological Standards (2019)

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SUSSEX
ARCHAEOLOGICAL
STANDARDS
2019





Recommended practice and procedures for undertaking archaeological investigations in connection with the planning and development management process in East and West Sussex including Brighton and Hove. The wording contained in the standard clauses set out below (and covered in more depth in the appendices and annexes) should be used as the basis for preparing archaeological specifications or written schemes of investigation (WSIs) where fieldwork is undertaken to inform the planning process or required as a condition of planning consent.

Foreword: These 'Standards' are principally intended to cover archaeological fieldwork and recording generated by the National Planning Policy Framework (NPPF) and Local Plan policy but may be applicable to all archaeological fieldwork projects carried out in East and West Sussex, including Brighton and Hove as 'best practice' in project management. These standards should be used in conjunction with the relevant codes and by-laws of the Chartered Institute for Archaeologists (CIfA).

The local Historic Environment Record (HER) is the starting point in checking whether a proposal will have an impact on designated or known heritage assets (NPPF 194) but many heritage assets remain unknown to the HER and areas which appear to be 'blank' may only indicate that there has been no archaeological investigation hitherto. However, the effect of a planning application on the significance of a non-designated heritage asset (which could include below-ground archaeological remains) should be taken into account when determining the application (NPPF 195) and Local Authorities should make use of their archaeological advisers in order that the impact upon heritage assets can be assessed using appropriate expertise (NPPF 195).

The default technique used in assessing the archaeological potential of a development site (the field evaluation referred to in NPPF 194) is trial trenching. Complementary survey methods such as surface artefact collection and remote sensing techniques (geophysical survey) can also be used to help determine a strategy for trial trenching. Trial trenching remains the most cost-effective single evaluation technique and as a 'rule of thumb' it will be expected that the trench sample size will be not less than 5% of the development site. This reflects experience gained from trial trenching exercises in the 1990s where trench sample sizes as low as 2% or 3% had proved unreliable in terms of quantifying the nature of the potential archaeological resource. (For discussion of sample size and techniques see "Evaluation of Archaeological Decision-making Processes and Sampling Strategies" Hey and Lacey, Oxford Archaeological Unit (OAU),2001).

There may be circumstances where variations to these Standards, and to the Appendices and Annexes are necessary; any such variations or additions will be set out in the site-specific Written Scheme of Investigation (WSI) prepared by the Archaeological Contractor carrying out the fieldwork to be approved in writing by the Local Planning Authority after consultation with their Archaeological Adviser.

These Standards have been prepared by the Local Planning Authority Archaeological Advisers in Sussex in consultation with Archaeological Organisations and Archaeologists working in the County.

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1.0 Professional Requirements

- 1.1 All archaeological fieldwork (and desk-based assessment) will be carried out by archaeologists acceptable to the relevant Local Planning Authorities, with recognised experience and expertise in the specified type of assessment or survey to be carried out. Registration with, or Membership of the Chartered Institute for Archaeologists (CIfA), will be expected of any professional Archaeological Organisation working in Sussex. Professional archaeological organisations are encouraged to register with CIfA, or their project managers and senior site staff should be members of CIfA at a level appropriate to their level of responsibility.
- 1.2 During the course of fieldwork the Archaeologist (also referred to as the 'Archaeological Organisation' carrying out the work shall be on-site or represented on-site at all reasonable times by a suitably qualified archaeologist who shall be responsible on their behalf for the conduct of the on-site work. The names of the relevant member(s) of staff will be communicated to the Local Authority Archaeological Adviser, in advance of commencement of on-site works.
- 1.3 In initiating or tendering for archaeological work, the Archaeological Organisation must seek to ensure that all parties (including those commissioning the work) understand their full responsibility not only for the acquisition of data in the field but also for the processing and analysis of data and finds, appropriate scientific analysis, synthesis, appropriate dissemination of the results, long-term security of the archive and conservation and storage of the finds, together with the appropriate financial provision for all aspects of the work.

2.0 Pre-fieldwork requirements

- 2.1 Prior to commencement of on-site works the Developer or the Archaeological Organisation on their behalf shall inform the Local Authority Archaeological Adviser(s), of the proposed team assigned by the Archaeological Contractor to undertake such works and provide (if required) CVs of staff and specialists to be involved with the project. Project managers should be Members of the Institute for Archaeologists (CIFA). Projects should be planned with regard to relevant national standards and guidance including English Heritage Management of Archaeological Projects (MAP2) and Management of Research projects in the Historic Environment (MoRPHE) and CIfA Codes, Standards and Guidelines: <http://www.archaeologists.net/codes/CIfA>
- 2.2 Prior to commencement of archaeological works on the Site, the Archaeological Organisation shall have:
 - 2.2.1 consulted the relevant Historic Environment Record held by East Sussex County Council, West Sussex County Council and (for development within Chichester District) the Chichester District Council;
 - 2.2.2 ascertained the anticipated solid and superficial geology of the site, from British Geological Survey or Geological Survey of Great Britain maps;
 - 2.2.3 examined, and interpreted from an archaeological point of view (as far as is possible), any readily available geotechnical site investigation records (e.g., borehole or test pit logs);

- 2.2.4 examined and noted details of published secondary documentary sources relevant to the site, e.g. the relevant volume of the Victoria County History of Sussex (where published);
- 2.2.5 examined and noted details (e.g. Landscape, archaeological, historical features, quarries, field names and plot numbers located in and around the development site) of relevant historical maps in the East Sussex and West Sussex Record Offices which may be of archaeological or historical significance - maps to be examined must include the relevant parish Tithe and or Enclosure Map and associated Apportionments, Ordnance Survey maps from first edition to present, eighteenth and nineteenth century maps of Sussex or Southern Sussex and, where appropriate, estate or land development maps held in private archives;
- 2.2.6 sought and obtained a provisional Accession number for the Site Archive from the recommended recipient museum (except where the museum prefers to issue an accession number following completion of fieldwork), the box charge to be applied and any guidelines from the recipient museum regarding deposition of the Site Archive;
- 2.2.7 obtained information derived from Statutory Undertakers on services (gas, electricity, water, sewerage, telecommunications) on the Site, ascertained the alignments of Rights of Way and any environmental constraints; such information to be considered in carrying out fieldwork, so as to avoid those services or assets;
- 2.2.8 written and submitted a Written Scheme of Investigation or Method Statement to the Local Authority Archaeological Adviser;
- 2.2.9 obtained (or submitted) full copies of the Written Scheme of Investigation and issued copies to the field officer responsible for carrying out the work on site prior to the commencement of fieldwork – these and any other relevant documents such as Archaeological Desk-Based Assessments must be retained on site during the investigation, so that the field officer is aware of all potential requirements for the project;
- 2.2.10 ascertained the Developer's requirements in respect of communications with the media and public relations regarding the fieldwork;
- 2.2.11 There is not currently a requirement to upload archives and reports to OASIS, but in light of the HIAS Project, this may be reviewed once HERALD is operational.
- 2.2.12 contacted the Local Authority Archaeological Advisor to inform the anticipated start date.

3.0 Fieldwork requirements

Soil stripping, cleaning and identifying

- 3.1 All archaeological features, structures and deposits exposed during fieldwork must be cleaned, planned, and recorded. In general terms the amount of each archaeological feature to be excavated shall be proportional to its significance and sufficient to obtain a good indication of the date and function of that feature, subject to the requirements of adequate palaeo-environmental assessment and sampling - see below.
- 3.2 Excavation of discrete features should generally be carried out using small hand tools; single horizontal layers and deposits, large discrete features and ditches may be excavated where appropriate by mattock or pick and shovel as well as hand tools.
- 3.3 Deeper archaeological features and deposits should be characterised by excavation to full depth. Sampling of deeper features below achievable safety levels or development formation levels should be discussed with the archaeological advisor to the planning authority.

Planning, mapping, surveying

- 3.3 Archaeological structures, features and deposits exposed or excavated will be planned by the Archaeologist in relation to the excavated area within which they lie, and the plan outlines of the excavated areas planned on to a copy of an Ordnance Survey base map of not smaller than 1:2500 scale.
- 3.4 Archaeological structures, features or deposits must be surveyed by the Archaeologist in relation to Ordnance Survey levels, either by use of Geographic Positioning System (GPS) survey or by use of an Ordnance Survey (OS) benchmark.

Human remains

- 3.5 Any human remains revealed during the fieldwork should initially be left by the Archaeologist *in situ*, covered and protected, and reported by the Archaeologist with dispatch to the Coroner, the Ministry of Justice and to the Local Authority Archaeological Adviser(s). Where their removal has been agreed by the Ministry of Justice, a licence for their removal may be required and if so, must have been obtained by the Developer or Archaeological Organisation, and the relevant Ministry of Justice and environmental health regulations should be complied with.

Treasure

- 3.6 Any finds believed by the Archaeologist to fall potentially within the statutory definition of Treasure, as defined by the Treasure Act 1996 and further defined by the Treasure (Designation) Order 2002, shall be reported with dispatch to the Coroner or to the relevant local reporting museum, the Portable Antiquities Scheme Finds Liaison Officer (c.o. Sussex Archaeological Society), to the landowner and to the Local Authority Archaeological Adviser(s). A record shall be provided by the Archaeologist to the Coroner and to the Local Authority Archaeological Officer, of the date and circumstances of discovery, the identity of the finder, and the exact location of the find(s) (OS map reference to within 1 metre, and find spot(s) marked on map).

Health and Safety

- 3.7 In respect of the carrying out of any archaeological fieldwork attention is drawn to the Construction (Design and Management) Regulations 2015 (CDM 2015) and those elements of the Construction (Health, Safety & Welfare) Regulations 1996 which were incorporated when the 1996 regulations were revoked.

Use of Metal Detectors

- 3.8 In order to mitigate the loss of metal artefacts from topsoil or plough soil which would be removed as part of a development project or field evaluation, a metal detecting survey of the site may be required before any such soil stripping. Consideration should be given to working with local metal detectorists for archaeologically managed metal detecting of topsoil or plough soil where appropriate. A log should be kept of the metal detector use. Finds must be recorded accurately in three dimensions using appropriate surveying methods and subject to careful handling, bagging, conservation and reporting as set out in the relevant sections of these Standards. Further detail is provided in Annex G.
- 3.9 In order to facilitate the recovery of small artefacts a metal detector should be used by the Archaeologist to survey excavated spoil, the surfaces of all exposed archaeological features, and any additional parts of the site directed by the Local Authority Archaeological Officer.

Treatment of finds

- 3.10 All artefacts (e.g. pottery, glass, metalwork, clay pipes, objects in worked flint and stone, wood, bone, horn and leather, brick and tile, slag) and ecofacts (organic finds such as bones, preserved ancient plant remains, seeds, pollen and charcoal, soil samples) recovered during the fieldwork will be made available by the landowner to the Archaeologist pending completion of the written report on the work.
- 3.11 Artefacts and ecofacts recovered during fieldwork will be bagged or put in trays on site and then stored during the course of the fieldwork at the Archaeologist's secure offices or usual place of secure storage of archaeological finds. The Archaeologist shall not leave any artefacts or ecofacts unearthed from the fieldwork on site overnight or on days other than working days.
- 3.12 Normally all artefacts recovered during fieldwork will be washed and identified and those to be retained will be marked by the Archaeologist with the Site Code and Context (where the size, condition and material type of the artefacts allows). All artefacts and ecofacts will be bagged and boxed by the Archaeologist, in accordance with current United Kingdom Institute for Conservation and RESCUE publication First Aid for Finds (3rd. ed. 1998). Bags and boxes should be marked with the Museum Accession Number. All "small finds and registered finds" (unless too small or of a material not to be marked) will be marked with the Museum Accession Number (where small, the Accession Number is to be preferred to the Site Code) and will be boxed together, separate from bulk finds.
- 3.13 All artefacts recovered during fieldwork, which require laboratory conservation will initially be stabilised by the Archaeologist prior to their deposition at the recipient museum, using passive conservation measures, in accordance with the guidelines set out in First Aid for Finds, referred to above.

- 3.14 Artefacts which require prompt active conservation measures to prevent deterioration must be identified at the time of excavation and a written conservation method statement prepared at an early stage during post-excavation work. Where initial fieldwork, or initial desk-based assessment, results in preservation of archaeological remains by record, all artefacts of this sort, recovered during development-related fieldwork from the relevant site, should have been cleaned and, subject to discussion with the receiving museum, stabilised or laboratory-conserved prior to their deposition in the museum. Full records of any treatment should accompany the artefacts.
- 3.15 Before deposition of artefacts or ecofacts at the receiving museum the Archaeological Contractor must confirm in writing (to the museum) that the written permission of the landowner to donate the finds to the museum has been obtained; and, where relevant, that the laws relating to Treasure have been complied with.

Palaeo-environmental sampling and other archaeological science techniques

- 3.16 On all sites involving archaeological excavation - evaluation, full excavation or recording under archaeological monitoring (watching brief) conditions - a structured programme of environmental sampling appropriate to the aims of the field work will be implemented. The strategy and methodology for the sampling, recording, processing, assessment, analysis and reporting of deposits with environmental archaeology potential will be in accordance with English Heritage Centre for Archaeology Guidelines "Environmental Archaeology – A guide to the theory and practice of methods, from sampling and recovery to post-excavation" (English Heritage, 2011). Any variation to this guidance will be agreed in advance with both the Local Authority Archaeologist and the English Heritage Science Advisor (South East) - Jane Corcoran: jane.corcoran@english-heritage.org.uk. Particular note will be taken of the following requirements, which are applicable to most sites:
- 3.17 High priority deposits for palaeo-environmental sampling are: primary fills of pits, wells, ditches and cesspits, layers of middens, occupation surfaces and other discrete activity areas, contents of hearths, kilns and ovens, storage areas or containers. Discrete burnt or charcoal areas are of the greatest interest and should always be sampled, but sampling should not be limited to areas of visibly burnt remains, for even charred plant remains are not necessarily visible within deposits, and many other types of material, including small finds, can be retrieved from the bulk samples. For some contexts and features (e.g. ditches, middens, occupation layers) multiple samples might be needed, from different locations; and for floors sampling should target areas where preservation is likely to be best (e.g. corners). On dry sites, pit and ditch fills where concentrations of bones and pottery are visible will yield the richest bulk samples.

Geoarchaeological sampling and recording

- 3.18 The geoarchaeological potential of a site should be investigated to inform an understanding of site formation processes. The strategy and methodology for the recording, sampling, processing, assessment, analysis and reporting of deposits will be in accordance with English Heritage Centre for Archaeology Guidelines "Geoarchaeology: Using earth sciences to understand the archaeological record" (English Heritage, 2007).

As a minimum all bedrock, superficial deposits and soils, exposed during fieldwork, will be described and interpreted in relationship to any recorded archaeological features and deposits. See also Annex E for consideration of the geological context for lithic artefact scatters.

Access

- 3.19 Existing access to adjacent land shall be maintained, where possible, by the Archaeological Contractor at all times during the course of fieldwork. Access to the Site during the course of fieldwork shall be in accordance with those points specifically designated for that purpose. Arrangements for access to the site should be notified to the Archaeologist by the Developer prior to commencement of the investigation. The Archaeologist should not commence works on site until all pre-commencement works (e.g. ecological mitigation measures) and arrangements for access to the Site have been notified and agreed.
- 3.20 All existing public and private highways including accesses shall be kept free of mud from site vehicles used to transport the Archaeological Organisation's staff to the Site to carry out the fieldwork. Public Rights of Way must not be obstructed by the Archaeological Organisation's site vehicles, spoil, equipment, or other items associated with the fieldwork.
- 3.21 The Archaeological Organisation should ascertain any requirements on the Developer's part in respect of communications with the media and public relations regarding the fieldwork and communicate those requirements to visiting Local Authority Archaeologists in advance of their first visit. In cases where a Local Authority is commissioning directly or through an agent an Archaeological Organisation to carry out fieldwork or Desk-Based Assessment, or is acting directly for the commissioning body, any approaches to the Archaeological Organisation from the media or the press shall be referred to the Local Authority's Press Officer or public relations section.

Summary report or update bulletins

- 3.22 Unless otherwise agreed in writing, a brief written summary of the findings of the fieldwork, with plans showing the locations and outlines of excavations and archaeological features and deposits, relevant standing structures and surface collections of finds, shall be completed within 10 working days of completion of fieldwork in each separate phase or sub phase of site work, and copies of these reports submitted, when requested, to the Local Authority Archaeological Officer, and where requested direct to the Local Planning Authority.
- 3.23 Where appropriate, subject to consultation with the Local Authority Archaeological Officer, the WSI may call for a weekly bulletin of key results supported by an updated site plan. These are particularly valuable in circumstances where the scale or complexity of the site and development require fieldwork to be split into successive phases and or where the Local Authority Archaeological Officer is asked to 'sign off' a phase of recording against partial discharge of the planning condition relating to archaeology.

4.0 Fieldwork report

- 4.1 A full report on the fieldwork shall be completed by the Archaeological Contractor within six weeks of completion of all fieldwork on the site, unless agreed in writing

with the Local Planning Authority and Archaeological Officer. A digital copy of this report in Archive Portable Document Format (PDF/A) shall be submitted to the Local Planning Authority, the Local Planning Authority's Archaeological Adviser, and the relevant Historic Environment Record. A hard copy of the final report must be included with the project archive. In West Sussex and Chichester a hard copy of the report must also be sent to the HER and the West Sussex Record Office.

- 4.2 The Developer and Archaeological Contractor should assume that reports lodged with the respective Historic Environment Records will become available for public inspection; and that information from the report may be authorised to be used by the Local Authority, with due acknowledgement to the Developer and Archaeological Contractor.
- 4.3 The principal functions of the report are to set down an accurate record of the sampled archaeological features to enable the nature and significance of the site to be understood and potentially re-assessed given that the recording process is destructive in itself (normally a one-off process and there is unlikely to be a second opportunity to re-visit and investigate archaeologically). Where applicable it will also enable the Local Authority Planning Committee to determine a planning application (and its impact upon heritage assets) from a position of knowledge. In this process the expertise of the Local Authority's archaeological adviser will be called upon to consider the options available and recommend suitable mitigation measures, if appropriate.
- 4.4 The report shall normally contain reproduced photographic illustrations (which are now likely to be digital in origin) showing, as a minimum, the overall extent of the area investigated and images of significant standing structures or contexts, with, in the case of trial trenches, an illustration(s) clearly showing the depth of the trench(es) and including ranging rod or scale, feature or context number and north arrow.

5.0 Site Archive

- 5.1 The Site Archive, which comprises a hard copy of the final report as well as records of the archaeological investigation and any materials recovered, including written elements, plans and drawings, photographic prints, digital images and transparencies (where appropriate) and other primary data recovered during the investigation, in written, drawn or electronic media, must be quantified, ordered, indexed, digitised (where appropriate), and made internally consistent. Treatment of materials, records, site matrix and summaries must be completed in accordance with Appendix 3 (site archive specification) of *Management of Archaeological Projects* (English Heritage, 1991) (MAP 2), *Management of Research Projects in the Historic Environment* (MoRPHE: English Heritage 2006) and with reference to 'Archaeological Archives: A guide to best practice in creation, compilation, transfer and curation' (AAF, author Duncan Brown, 2007).
- 5.2 Work on the Site Archive shall be completed within six calendar months of completion of the archaeological investigation. Exceptions: (i) where the application of specialist scientific and analytical techniques render this time scale impractical, an extended time scale for completion of the site archive will be agreed in writing between the Archaeological Organisation and the Local Authority Archaeological Officer, prior to commencement of post-excavation works. (ii) where long periods separate each stage or phase of archaeological work (e.g. in some mineral workings), it may be appropriate for work on Site

Archives to take place in phases, with separate Post-Excavation Assessments. Upon completion of the Site Archive the Archaeological Organisation shall notify the Local Authority Archaeological Officer, in order that the latter may, if they wish inspect the Site Archive prior to its deposition in an appropriate museum.

- 5.3 It is recommended either that Copyright of the written, drawn and photographic elements of the Site Archive (electronic or manual) shall be vested jointly in the Archaeological Organisation and in the recipient museum; or that before deposition of the Site Archive in the recipient museum, the recipient museum should be given permission in writing by the Copyright holder to make reproductions of specified categories of material from the Site Archive for educational or research purposes, with due acknowledgement to the Copyright holder. In either event, the disposition of Copyright must be made plain in the Written Scheme of Investigation for the project and in writing to the recipient museum before archive deposition.
- 5.4 Cost estimates for archiving (including long-term storage costs) should be ascertained by the Archaeological Contractor in preparing quotations for undertaking the investigation. Within six months of completion of fieldwork, the Archaeological Contractor shall inform the Local Authority Archaeological Officer of arrangements reached with the recipient archive store and the National Monuments Record Centre (NMRC) for the submission of a security copy of the archive.
- 5.5 Subject to the agreement of the landowner (and in line with National Planning Policy) with regard to deposition of artefacts and ecofacts recovered during fieldwork, the site archive should be deposited by the Archaeological Contractor with the recipient museum or archive depository within five years from the date of completion of the investigation. NB. The Archaeologist should ensure that sufficient funding for the long term storage of the archive can be paid to the museum or archive depository.
- 5.6 Subject to the terms of the Treasure Act 1996, it is recommended that all artefacts and ecofacts unearthed from the investigation and all other elements of the Site Archive (as defined in MAP2) should be deposited by the Archaeologist in an appropriate public museum registered or provisionally registered by Resource (The Council for Museums, Archives & Libraries) and acceptable to the Local Planning Authority (to be discussed with their Adviser(s)).
- 5.7 Prior to deposition of finds in the recipient museum the Archaeologist should agree with that museum the sample or quantity of bulk finds (pottery, animal and (if appropriate) human bone, other ecofactual material, building material, burnt flint, worked flint and stone) to be deposited.
- 5.8 All excavated artefacts and ecofacts and all other elements of the Site Archive should be delivered by the Archaeological Contractor to the recipient museum as one deposit. Where this arrangement is not practicable lists will be submitted by the Contractor to the recipient museum of objects not deposited, together with

information as to the quantity involved and their current location, reasons why items have not been deposited and a timetable for their ultimate deposition.

- 5.9 Artefacts and ecofacts deposited by the Archaeological Contractor in the recipient museum must be accompanied by the original drawn, written and photographic Site Archive or by a complete duplicate record thereof.
- 5.10 In carrying out post-excavation work and analysis, the Archaeological Contractor will liaise with the Local Authority Archaeological Officer and the Sussex Archaeological Society Research Officer – research@sussexpast.co.uk , with a view to ensuring a concordance between type descriptions of artefacts from this site and those employed on other recently excavated sites in the area and those commonly employed elsewhere in Sussex. The reason for such liaison is to ensure against a proliferation of different systems of artefact type descriptions and nomenclature in the area of the relevant site. NB. The Archaeologist must ascertain whether there will be a charge for other archaeologists' time in undertaking such liaison, and if so to take this charge into account in cost estimates for carrying out the investigation.
- 5.11 In cases where the results of field work are considered suitable for publication, consideration will be given first to publication in the Sussex Archaeological Collections. The Written Scheme of Investigation should state that this may be the case and allowance made for the costs of publication. Publication in specialist journals may also be required where the results of the work are considered by the Archaeological Contractor and Local Authority Archaeological Adviser(s) to warrant it.

6.0 Compliance Monitoring

- 6.1 On behalf of the Local Planning Authority the Local Planning Authority's Archaeological Adviser(s) will normally be responsible for
- reporting to the Local Planning Authority the progress and standards of on- site fieldwork,
 - for validating the reporting and findings of such fieldwork, and
 - for warranting the conformity of working practices with these Standards and with the Written Scheme of Investigation on behalf of the Local Planning Authority.
- 6.2 A minimum of 5 days' notice before commencement of fieldwork should be given by the Archaeologist to the Local Authority Archaeological Adviser(s).

Appendix 1. Format of the Archaeological Report

- 1 The report must include, except where otherwise stated in the *Brief*:
 - planning history, in brief, including nature of proposed development, relevant Local Planning Authority, applicant, and planning application reference number (where applicable)
 - function of the report
 - location of site by OS map reference (5 figures easting, 5 figures northing)
 - a location plan of the site, with boundary clearly marked, on an OS base map of not less than 1:2500 scale (smaller scale for large sites only), showing Grid North, and tied in to the OS Grid (Grid lines to be numbered)
 - plans showing the outlines of trenches or excavated areas in relation to the site boundary
 - plans of trenches and or excavated areas showing archaeological contexts recorded therein, at a scale suitable for distinguishing clearly the outlines of recorded contexts, and changes in slope indicated by hachures
 - those parts of archaeological contexts which have been excavated
 - for deeper or stratified sites, drawn sections of each trench elevation, with OD levels
 - levels above or below OD at top and bottom of trenches or excavated areas, at each end or corner of the trench or excavated area
 - site geology
 - archaeological and historical background
 - reproduced extracts of relevant historical maps, with site boundary superimposed and clearly shown (where photocopies cannot be taken, good quality traced extracts should be made)
 - dates of fieldwork - beginning and end
 - fieldwork methodology, archaeological and paleo-environmental sampling strategies
 - site Code
 - staff Structure - Project Manager, Site Supervisor(s)
 - name of developer, person or body commissioning the archaeological contractor
 - an abstract of the background and findings of the report of about 100-200 words
 - principal author and (at the head of each specialist report) names of contributors to the report
 - stratigraphic report, by excavated area and context
 - finds reports by recognised specialist
 - identification of finds requiring active conservation
 - present location of finds, intended repository of the finds, museum accession number, quantification of archive table
 - Palaeo-environmental report - results of palaeo-environmental processing and assessment by recognised specialist
 - a list of contexts excavated, arranged numerically, with brief description, nature of artefactual or ecofactual contents, and provisional or final dating
 - a list of palaeo-environmental samples taken
 - discussion and conclusions
 - references
 - Historic Environment Record summary form

- 2 The copies of the report approved by the Local Planning Authority must be in PDF A format and on a CD accompanied by a selection of illustrative images

which shall be submitted to the HER within six weeks of completion of trial investigation works on site. These images are intended both for record purposes and for dissemination of information to the Local Planning Authorities and to the public (e.g. through presentations and talks). See also hard copy requirements for West Sussex and Chichester in 4.1 above.

- 3 In the case of complex sites or significant archaeological or architectural features, illustrations in the report and images submitted to the HER will include scenes of excavation works in progress (including close-up pictures of archaeological feature(s) under excavation); more important archaeological features or site sections (in Site terms) both excavated (with scale) and, where appropriate, under excavation, and important archaeological finds, both under excavation (where appropriate) and cleaned (with scale).

Appendix 2. Palaeo-environmental and Archaeological Science techniques:

Palaeo-environmental sampling and other archaeological science techniques (detailed requirements)

- 1 Where moderate to abundant archaeological deposits and features are revealed, sampling for a number of categories of environmental remains, including plants, animal bones, fish bones, molluscs and invertebrates will be essential. The potential of the material has to be ascertained through the taking of bulk ('whole earth') samples, each 40 to 60 litres, from a representative cross-section of features and layers of all periods; these should be well dated or datable and well-sealed (not mixed). The selection of these samples will therefore take into account the presence or absence of datable artefacts and the degree of residuality and intrusiveness (e.g. of finds, recent or modern material etc.) within the deposits.
- 2 All bulk environmental samples will be processed in their entirety during or immediately following excavation, with circa 5 litres retained from samples that might repay other forms of processing at a later stage of the project (e.g. for insect analysis). Each sample will be floated, with the flot collected in a mesh of 250 microns, and the residue (heavy fraction) in a 500-micron or 1mm mesh. After drying, the sub-sample flot and residue will be assessed by a specialist to ascertain the degree of preservation, amount, diversity of environmental remains and the potential to address research questions. This will be done using a binocular microscope (no less than x10 magnification) and good lighting. All samples should be removed from the excavation to a secure storage (this could be on site) within 48 hours.
- 3 In addition to standard bulk samples, certain types of deposit can repay other environmental sampling techniques:
 - where good conditions for the preservation of bone have been identified, all large bones will be collected by hand and sieving of bulk samples up to 100 litres will be undertaken from key contexts, as appropriate.
 - in suitable deposits (colluvium, alluvium, ditch fills etc), mollusc samples of 2 litres each will be taken vertically from appropriate sections to investigate the changes of environment and in particular vegetation through time.
 - where waterlogged deposits occur, bulk samples of 10 to 20 litres will be taken vertically from appropriate sections (or 100% of the fill of the feature or deposit, if less than that capacity). Sub-samples of these waterlogged samples must be assessed by suitable specialists for the presence of plants, insects, and other biological indicators.
 - where deposits are likely to have accumulated by natural processes (for example, some ditch and pond fills or alluvial sequences) or otherwise appear to be wet, waterlogged or peaty, monoliths will be taken from cleaned vertical surfaces for the retrieval of pollen, diatoms, ostracods, foraminifera and for tests such as magnetic susceptibility and loss on ignition. Wherever possible such samples should be taken by a geoarchaeologist or the environmental archaeologist, so that the sequence of deposits can be examined and interpreted on-site and the most appropriate location and number of samples identified.
- 4 All processed samples will be assessed and reported on as part of the fieldwork

report. The assessment will estimate the presence of cereal grains, chaff and weed seeds as well as that of fish and small mammal bones and charcoal (including size ranges), with a quantification of each on a five-point scale and a note of the preservation on a similar point scale (very good to very poor). Results of this assessment will be included in the fieldwork report, together with a description of methodology.

- 5 The Archaeological Contractor will make appropriate provision for the application of scientific dating techniques such as radiocarbon, dendrochronology, archaeomagnetic dating, Optically-Stimulated Luminescence (OSL) and thermoluminescence dating. Provision for other scientific techniques involving specialist advice and or site visit might also be necessary if remains of ancient metalworking and other industrial activities, waterlogged remains and burials are revealed. The advice of the English Heritage Science Advisor will be sought in advance of the application of these techniques and a specialist visit to the site to examine the remains *in situ* and take samples will be arranged, where appropriate.
- 6 The Local Authority Archaeological Adviser, in consultation with English Heritage's Science Advisers, wishes to encourage a more systematic approach to palaeo-environmental and other scientific sampling in undertaking archaeological fieldwork of all kinds. The archaeological organisation undertaking the investigation will:

Prior to undertaking fieldwork:

- appoint a suitably qualified and experienced environmental archaeologist to advise on palaeo-environmental aspects of the project and to devise and supervise the implementation of the environmental sampling strategy;
- include within the Method Statement or WSI a description of the proposed method of palaeo-environmental sampling, processing and assessment, prepared in consultation with the palaeo-environmental specialist or environmental archaeologist
- address in the Method Statement or WSI the proposed sampling methods for the types of feature that might be anticipated on the specific site in question and the type of environmental remains that might be targeted. This should not be an exhaustive list but a realistic proposal having considered the background to the site (section 2 of the standards), research objectives and the approach to excavation (section 3), taking into account known or anticipated site soil conditions and conditions of preservation;
- state clearly in the Method Statement or WSI which samples will be taken on site by specialists rather than excavation staff and under what circumstances specialists in archaeological science might be asked to visit the site to advise and take samples. Again this should not be a generic statement including every eventuality, but should be orientated towards features that might be anticipated on this specific site. (For example, consideration might be given to dating techniques, soils and sediments, burials and grave goods, industrial sites or processes, living or working floors, waterlogged wood and artefacts);
- state clearly in the Method Statement or WSI the processing and proposed post-fieldwork sample assessment strategy and methodology;
- ensure that site staff are aware of the standard bulk (whole earth) sample size of 40-60 litres or 100% of smaller features;
- ensure that processing staff are aware that all bulk samples should be processed in their entirety (unless a small amount, c 5 litres, is retained for later processing by different techniques, such as paraffin flotation for

insects), Ensure suitable equipment is available for the flots to be collected on a sieve with mesh size of 250-300 microns, residues to be collected on sieve size of 500 microns - 1mm;

- arrange with the environmental archaeologist to visit the site during investigation, if archaeological features or deposits are found and arrange how often this will be needed in order to keep track of features exposed;
- notify the English Heritage Science Adviser for the SE region, (Jane Corcoran, of the date of commencement of investigation (E-mail: jane.corcoran@english-heritage.org.uk) and offer her an opportunity to visit the site during fieldwork, preferably together with the environmental archaeologist;

During fieldwork:

- manage and organise site visits from the environmental archaeologist and other specialists to advise and collect samples (where applicable);
- agree and implement on site the sampling strategies;

After fieldwork:

- update the post-fieldwork strategy and assessment as necessary (this may involve additional resources – See Annex G);
- agree with the Local Authority Archaeological Adviser any necessary delay in completion of the reporting of the field work to enable results of environmental and other scientific assessments to be included;
- implement the retention and discard policy recommended by the Sussex Museums Group, with respect to the various categories of environmental remains recovered. [Recommended standards for recording, sampling and retention of specific artefact and ecofact types will follow in 2015].

- 7 Where applicable the guidance in the following English Heritage papers, relating to archaeological science (which can be downloaded from the weblinks below) will be followed:

ARTEFACTS, MATERIALS AND CONSERVATION

Waterlogged organic artefacts: guidelines on their recovery, analysis and conservation 2012

(<https://content.historicengland.org.uk/images-books/publications/waterlogged-organic-artefacts/woa-guidelines.pdf/>)

Guidelines on the recording, sampling, conservation, and curation of waterlogged wood 2010

(<https://content.historicengland.org.uk/images-books/publications/waterlogged-wood/waterlogged-wood.pdf/>)

Archaeometallurgy : Guidelines for Best Practice 2015

(<https://historicengland.org.uk/images-books/publications/archaeometallurgy-guidelines-best-practice/>)

Archaeological Evidence for Glassworking Guidelines for Best Practice 2011

(<https://historicengland.org.uk/images-books/publications/glassworkingguidelines/>)

Science for Historic Industries: guidelines for the investigation of 17th- to 19th-century industries 2006

(<https://historicengland.org.uk/images->

[books/publications/science-for-historic-industries/](#))

Guidelines on the X-radiography of archaeological metalwork 2006
(<https://content.historicengland.org.uk/images-books/publications/x-radiography-of-archaeological-metalwork/xradiography.pdf/>)

Investigative Conservation:

(<https://content.historicengland.org.uk/images-books/publications/investigative-conservation/investigative-conservation.pdf/>)

DATING TECHNIQUES

Dendrochronology – guidelines on producing and interpreting dendrochronological dates 1998
(<https://content.historicengland.org.uk/images-books/publications/dendrochronology-guidelines/dendrochronology.pdf/>)

Archaeomagnetic Dating: Guidelines on producing and interpreting archaeomagnetic dates 2006
(<https://content.historicengland.org.uk/images-books/publications/archaeomagnetic-dating-guidelines/archaeomagnetic-dating-guidelines.pdf/>)

Luminescence Dating : Guidelines on using luminescence dating in archaeology 2008
(<https://content.historicengland.org.uk/images-books/publications/luminescence-dating/luminescencedating.pdf/>)

ENVIRONMENTAL TECHNIQUES

Environmental Archaeology: A guide to the theory and practice of methods, from sampling and recovery to post-excavation 2011

Guidelines for the curation of macroscopic plant and invertebrate remains 2008
(<https://content.historicengland.org.uk/images-books/publications/curation-of-waterlogged-macroscopic-plant-and-invertebrate-remains/waterloggedremains.pdf/>)

Human bones from Archaeological Sites: Guidelines for Producing Assessment Documents and Analytical Reports 2004
(<https://content.historicengland.org.uk/images-books/publications/human-bones-from-archaeological-sites/humanbones2004.pdf/>)

Guidance for Best Practice for Treatment of Human Remains Excavated from Christian Burial Grounds in England (second edition) 2017

Science and the Dead: a guideline for the destructive sampling of archaeological human remains for scientific analysis 2013

Geoarchaeology: using earth sciences to understand the archaeological record 2007

(<https://content.historicengland.org.uk/images-books/publications/geoarchaeology-earth-sciences-to-understand-archaeological-record/heag067-geoarchaeology.pdf/>)

Animal bones and archaeology: guidelines for best practice 2014

(<https://content.historicengland.org.uk/images-books/publications/animal-bones-and-archaeology/animal-bones-and-archaeology.pdf/>)

OTHER

Piling and Archaeology: An English Heritage Guidance Note (revised 2015)

(<https://content.historicengland.org.uk/images-books/publications/piling-and-archaeology/heag031-piling-and-archaeology.pdf/>)

Geophysical survey in archaeological field evaluation 2008

(<http://content.historicengland.org.uk/images-books/publications/geophysical-survey-in-archaeological-field-evaluation/geophysics-guidelines.pdf>)

LiDAR: The light fantastic: Using airborne laser scanning in archaeological survey 2010

(<https://content.historicengland.org.uk/images-books/publications/light-fantastic/light-fantastic.pdf/>)

3D Laser Scanning for Heritage: advice and guidance to users on laser scanning in archaeology and architecture 2011

([http://content.historicengland.org.uk/images-books/publications/3d-laser-scanning-heritage2/3D Laser Scanning final low-res.pdf/](http://content.historicengland.org.uk/images-books/publications/3d-laser-scanning-heritage2/3D%20Laser%20Scanning%20final%20low-res.pdf))

Moats, Ponds and Ornamental Lakes in the Historic Environment 2011

(<https://content.historicengland.org.uk/images-books/publications/moats-ponds-ornamental-lakes-historic-environ/moats-ponds-ornamental-lakes-historic-environment.pdf/>)

ANNEX A: Desk-based assessments (DBA)

1. Desk-based assessments (DBAs) will include the pre-fieldwork requirements set out in the Standards above, Sections 2.2.1 to 2.2.12.
2. The DBA should be undertaken in accordance with Chartered Institute for Archaeologists (CIfA) guidance and based on up-to-date HER data, sourced directly from the relevant HER. Heritage Gateway cannot be used as the source for core data used in a DBA.
3. Geotechnical site investigation information should normally be included within the DBA report. This might be tabulated, but is better shown as a simple series of cross sections drawn across the site, showing the distribution and thickness of natural, potentially archaeological and modern made ground deposits. This is applicable to all sites but in particular can be useful in floodplains and wetland areas where archaeology might lie within a deep alluvial sequence; in areas of deep urban stratigraphy; and in areas of Palaeolithic potential, where archaeological remains are likely to lie within a sequence of natural Quaternary deposits. In these cases, it can often be informative to include a more elaborate geo-archaeological deposit model as part of a desk based assessment, to identify areas of a site where archaeology might most likely be found (see Annex E).
4. The DBA will include reference to national planning guidance or legislation, Local Plan policies relevant to archaeological issues and to the development site, and the planning history of the development site to date.
5. The DBA will include a map regression exercise, reproducing copies of extracts of relevant historical maps at similar scales, showing clearly the site boundaries, and setting the maps out, clearly labelled, in chronological order from past to present.
6. Areas of archaeological potential on the site should be assessed including the type, likely depth, nature and depth of remains, variations in their estimated quantity and quality across the site. The topography of the site should be described and shown on plan. The academic and research potential of the remains should also be assessed in both the local and national context, and their local, regional or national importance.
7. The DBA will include an assessment of the degree of disturbance or destruction caused by erection of previous buildings, structures, or recorded ground excavations. Such disturbance may include basements, foundations, inspection pits, slab thickness, services, quarrying, etc..
8. Estimated boundaries of areas of potential archaeological survival and areas considered to have been destroyed on the site should be indicated on an OS plan of an appropriate scale.
9. The impact of development proposals should be assessed, with reference to architects', engineers' and planning application or project proposal drawings, as appropriate. Areas of proposed ground disturbance should be clearly indicated in plan and in section, where known.
10. Proposals and recommendations for further assessment or fieldwork, including where appropriate archaeological intervention, should be shown on a scaled plan

in order to assess the survival, condition and nature of any monument or remains which are considered to survive on the site or in its immediate vicinity.

11. Where detailed information is available on the character and quality of archaeological remains on the site, the DBA should include suggestions as to how development proposals could be designed to minimise disturbance to surviving archaeological remains, e.g., through minimally-intrusive foundations designed to cause minimal damage to a surviving monument or archaeological remains, and not damage their integrity.
12. Areas where preservation *in situ* is to be achieved should be clearly marked. This should be accompanied by a method statement outlining details of safeguarding and preservation.
13. Draft versions of the DBA will be discussed with the Local Authority Archaeological Adviser(s) and before the DBA is submitted with a planning application to ensure there is sufficient and correct information to inform a planning decision.

ANNEX B : Written Schemes of Investigation Requirements

A written scheme of investigation (WSI) is a commitment between the developer and the local planning authority (LPA) to carry out a programme of archaeological work required to fulfil either a planning condition or assess a site or building prior to an application being made. They are also important documents informing the onsite archaeologist of the site's archaeological interest, as well as the recording and sampling strategy agreed.

Should an investigation identify archaeological interest meriting preservation or further investigation and recording, then a further WSI or addendum to the existing WSI will be required.

A WSI is a method statement that is intended to ensure suitable industry standards. Approval of a WSI that does not meet these standards will not be recommended. As a minimum the WSI should include:

FRONT COVER and FIRST PAGE

To include:

- Correct site name, grid reference, site code, and (where relevant) planning reference number
- Author and company name and address
- Date and version number

INTRODUCTION

To include:

- Site location, grid reference
- Site description, geology topography
- Planning background or project background, with planning consent reference (when relevant) and condition reference the archaeological work relates to.
- Confirmation a brief or guidance was issued by the LPA archaeological advisor
- Confirmation all work will adhere to national and local archaeological standards.
- Confirmation of project time table, project manager, site supervisor, post excavation manager.

ARCHAEOLOGICAL BACKGROUND

To include:

- The results of an up to date Historic Environment Record search, or summary of the results of an up to date desk based assessment; relating specifically to the site, but when relevant providing a summary of the wider archaeological interest of the area.
- Summary of any recent archaeological research or investigation within the site, or when relevant work within close proximity
- When relevant, a range of historic maps and documentary sources

AIMS AND OBJECTIVES

To include:

- Commitment to sample and record any remains to the required archaeological standard and publication route
- Site specific archaeological potential and research agenda
- Potential for informing wider archaeological research frameworks e.g. South East Research Framework.
- Opportunities consider for community engagement

METHODOLOGY

To confirm the methodology for excavation, sampling and recording in line with industry standards and Section 3 of Sussex Archaeological Standards. However, the methodology should be specific to the research aims and proposed impact of the development

To include:

- For a watching brief or building recording - Description of all groundworks (including a location plan) and internal building works that will be monitored
- For evaluation and open area excavation – Description and plan of location and extent, including confirmation of contingency to expand these areas following discussion with the LPA archaeological advisor
- Confirmation of methodology for ground reduction to be used for excavation e.g. tracked mechanical excavator fitted with a toothless ditching bucket under the direct supervision of an archaeologist
- Confirmation of health and safety strategy for excavating i.e. all depths, including shallower ones, are to be assessed for stability, trenches will be suitably fenced off when staff are not on site.
- Confirmation of sampling strategy (including environmental) as per Sussex Archaeological Standards and national industry standards, including site specific requirements identified in aims and objectives.
- A Selection Strategy (see CiFA : The Selection Toolkit for Archaeological Archives) must be outlined in the WSI to include treatment of post 1900 artefacts. The Strategy must include confirmation of contingency to expand

sampling of features following discussion with the LPA archaeological advisor

- Confirmation of surveying methodology
- Statements regarding human remains and treasure
- If appropriate, provision for the preparation of frequent (period as agreed) bulletins of key results supported by up – to – date site plans and spot dating.
- Confirmation of liaison with LPA archaeological advisor regarding all the above and timetable for monitoring inspections or site sign off
- outline the requirement for an addendum to an evaluation WSI detailing further archaeological excavation (e.g. Strip Map and Sample) should further phase of site investigation prove necessary (following evaluation)

RECORDING AND ANALYSIS

To confirm the recording methodology in line with industry standards and Section 3, Annexes B, C, D, E, F and G of Sussex Archaeological Standards

To include:

- Confirmation of provision for scientific analysis and dating
- Confirmation of provision for assessment of conservation needs and appropriate conservation of significant metal and other finds

POST-EXCAVATION METHODOLOGY AND REPORTING

The completion of site work shall be confirmed in writing to the Local Planning Authority Archaeologist within 10 working days (or period as agreed) along with a brief written summary of the findings of the fieldwork, together with plans showing the site location, any revealed archaeological features and, or relevant standing structures.

To confirm analysis in line with industry standards and Annex H of Sussex Archaeological Standards. To confirm report formatting in line with Management of Research Projects in the Historic Environment (Historic England 2015) and Section 4 and Appendix 1 of Sussex Archaeological Standards

To include:

- Confirmation of cleaning, labelling, sorting and analysis of finds in line with industry standards
- Confirmation of provision for conservation of finds, including consultation with the recipient museum
- Confirmation of specialists to be used

- Confirmation of reporting time frame and publication route, including agreement with LPA archaeological advisor on publication of significant finds

ARCHIVE

- Confirmation of collecting museum or archive that has agreed to store the archive, including accession number; or if museum not available confirmation that the archive will be signed over to and stored by the archaeological contractor until a suitable store is identified. Including where possible a time frame for deposition of the archive.
- Confirmation of dissemination of report, including submission to HER as per Annex I of Sussex Archaeological Standards, including Geographic Information System (GIS) shapefiles when required. If the archaeological contractor is required, contractually, to only submit reports directly to the developer or their agent, the archaeological contractor must inform the LPA Archaeological Officer in writing that they have completed the report and to whom it has been forwarded to. The archaeological contractor must ensure that the developer is made aware of the need to submit the report to the LPA to request discharge of the archaeological condition.

HEALTH AND SAFETY and INSURANCE

We would expect all fieldwork to satisfy health and safety regulations and appropriate insurance.

REFERENCE SECTION

Detailing all relevant source material and industry guidelines

ILLUSTRATIONS

To include:

- Legible site location map
- Legible scale plan of proposed development
- Legible scale plan showing services or utilities (when relevant), or other constraint e.g. Tree Protection Orders (TPOs)

Legible scale plan showing areas of proposed archaeological investigation i.e. watching brief area, trench location, or internal targets for historic building recording

ANNEX C: Trial archaeological evaluation excavation (principally undertaken prior to the determination of a planning application – these criteria and standard requirements may also apply to Stage 1 recording post determination of a planning application)

1. Initial excavation will, unless otherwise specified, be carried out by mechanical excavator. For this purpose a mechanical excavator equipped with a wide (e.g. 1.8m metre) toothless ditching bucket will be used. Trenches should be excavated to a full width of 1.8m unless otherwise agreed with the Local Authority Archaeological Adviser.
2. Mechanical excavation will be carried down in all trenches to the surface of geological solid or superficial deposits, or to the top of surviving archaeological deposits (whichever shall be uppermost). Any cut features (e.g. ditches or pits) or structures encountered should be recorded in plan and manually excavated before proceeding with further excavation. If some trenches need to be excavated throughout to a depth at which the sides of the trench are considered unstable, to reach the natural subsoil or archaeological deposits, the sides of trenches must first be either shored, battered or “stepped back” to allow safe working.
3. All relevant trench sections drawn must be drawn where archaeological deposits and features have been identified and recorded, with levels related to the Ordnance Datum. For trenches with only a topsoil or subsoil profile and no archaeological features a representative section should be recorded with a record of the height of each key horizon at either end of the trench as well as the ground surface and maximum depths of the trench and these converted to Ordnance Datum (OD) heights.
4. In trenches where worked flint artefacts are recorded, hand cleaning and excavation will be undertaken to determine the context for the flints and the presence of any associated material (for details see Annex E: Standards for excavation and recording of lithics scatters).
5. Trenches should not be backfilled until the Local Authority Archaeological Adviser has given their direct written or verbal approval. Exceptions for reasons of health and safety or similar requirements should be communicated immediately to them.
6. A proportion of archaeological features, structures and deposits exposed within the trial trenches shall be partially excavated by the Archaeological Contractor by hand. Partial excavation will be defined as follows:
 - All linear features will be sampled, using a minimum 1-metre wide section
 - Sampling of linear features to be at 10-metre intervals or totalling 10% of the length of the linear cut feature (whichever is the greater)
 - All discrete features will be half sectioned until sufficiently characterised. Once this has been achieved a lower sample of cut features may be considered appropriate subject to agreement with the Archaeological Adviser. Undated features should be rapidly fully excavated for finds retrieval
 - Where three or fewer pits or probable pits, whether or not evidently datable or ancient (excepting evidently modern features), occur in any trench, all those features will be sampled

- Priority is to be given to features with more charcoal-rich fills or anticipated dating evidence
- Should five or fewer archaeological features of any kind, discrete or linear, be revealed within any one trench, all those features will be sampled
- Where two or fewer buried pottery vessels are present, buried upright or inverted, both should be lifted and removed from site;
- If such vessels are believed to be human cremation burials (e.g. because of visible remains of burnt or cremated bone in their contents), a Licence from the Ministry of Justice, permitting their removal, must first be obtained
- Other probable cremation vessels or unburnt human remains should be left *in situ* after recording their visible portions

7. Contingency sampling:

- The proportion of features to be sampled within any trench, and the necessity of extensions to or additional trenching, may be increased at the reasonable request of the Local Authority Archaeological Adviser. In the case of features within a trench this could be up to a maximum of 100% (i.e. sampling all the features in a trench, rather than sampling only half of them), in exceptional cases, e.g. should they feel that insufficient of a complex of features has been examined to allow viable provisional interpretation or dating of the whole
- However if the trench contains a large number of features, it will not usually be considered appropriate to sample all such features
- The percentage of any one feature to be sampled may need to be so increased, for similar purposes, particularly for linear features, or to enable dating evidence to be obtained for a critical discrete feature such as a post-hole forming part of a wider complex of structures.

8. On sites with complex stratigraphy, one or more sondages or keyhole excavations shall be cut into the deeper stratigraphy. They shall be excavated by hand, and down to the natural subsoil, unless otherwise stated; and be of sufficient size to determine the depth of archaeological stratigraphy. It may be possible in some cases to reach these deeper deposits through excavation of later intrusions.

9. Particular care should be taken by the Archaeological Contractor not to damage any areas containing significant remains of potential national importance which might merit preservation *in situ*. Such remains are normally considered to include deep or complex ancient stratified archaeological layers and features; or rare, unusual or exceptionally well-preserved ancient archaeological structures, deposits, or collections of artefacts. Such areas should be protected and not left open to the weather, or other forms of deterioration. While archaeological investigation should not in general terms be carried out at the expense of the preservation *in situ* of archaeological structures, deposits, or features, it will be important to ensure that a sufficient sample of these is investigated to assess their character and quality. The presence, character and quality of environmental remains on a site will need evaluation. This will help the design of an environmental sampling methodology for any further stage of excavation, as well as provide information that will help interpret the site should no further fieldwork take place. A selection of features investigated during the evaluation should be sampled, processed and assessed as set out in the relevant sections of Appendix 2.

10. The Archaeological Contractor should notify archaeological features or deposits worthy of preservation *in situ* to the Local Planning Authority, via the Local Authority Archaeological Adviser, at the earliest opportunity.
11. In excavating a sample of archaeological features in any one trench the Archaeological Contractor shall take heed of and comply with the Local Planning Authority's reasonable request within the scope and time scale of the investigation to carry out small-scale additional investigation.
12. Where there is a high density of archaeological features exposed in any individual trench, the Local Planning Authority's Archaeological Adviser(s) may at their discretion advise the Archaeological Contractor that the full requisite sample of features to be excavated may be reduced. This may apply with the proviso that the purpose of the evaluation can be achieved in full, that is to inform the determination stage of the planning application process and enable a decision to be made on an appropriate level of preservation or mitigation of impact.
13. Unless otherwise advised by the developer, excavated trenches shall be backfilled by the Archaeological Contractor following completion of excavation with spoil derived from those trenches. Spoil shall be deposited and compacted as best as may be managed by machine and the surface of the fill left flush with the surrounding ground surface. No open cavities should be left from incomplete backfilling, especially around the edges of the trench. The quality of backfilling of the trenches must be inspected and approved by the Site Supervisor to the standard above mentioned prior to the Archaeological Contractor vacating the site.
14. Trenches containing archaeological features or deposits should not be backfilled by the Archaeological Contractor until the requirements set out above have been complied with.

ANNEX D: archaeological monitoring and recording exercise (watching brief)

1. Works of ground excavation carried out by the developer on site in connection with proposed development (e.g. for new buildings, structures, services, or landscaping) shall be carried out only in the presence of an Archaeological Contractor (the Monitoring Archaeologist(s)).
2. In case important archaeological remains come to light during the course of groundworks which require more than a brief record (i.e. more than four hours' continuous recording for one person in that area), provision for additional investigation and recording should be made by the developer:
 - Additional staff and time up to a maximum figure (persons per day) to be advised by the Local Authority's Archaeological Adviser
 - Up to a specified number of days' recording on part or parts of the site, free of disturbance from building works (as far as is reasonably practicable)
 - The Local Authority's Archaeological Adviser can determine on site whether such a contingency is applicable, should significant archaeological remains be uncovered.
3. Areas required for additional investigation and recording, if appropriate, shall be agreed on site by the developer, the Local Authority's Archaeological Adviser and the Monitoring Archaeologist. Such areas should not preclude the developer's essential access requirements, and shall fit in as far as is reasonably practicable with the applicant's work programme.
4. The strategy for excavation sampling and palaeo-environmental sampling during watching briefs will normally be the same as for comprehensive archaeological excavation.
5. The developer or developer's building contractor shall:
 - 5.1 Allow the Monitoring Archaeologist(s) at all reasonable times sufficient time, facilities and access to identify, clean, record and investigate archaeological features, deposits and structures on relevant parts of the Site, subject to Health and Safety considerations and to the requirements of the WSI.
 - 5.2 Not carry out mechanical excavation of building trenches, mains services or other ground reduction involving the stripping of topsoil or bedrock in connection with the planning permission unless the Monitoring Archaeologist is present, except where such ground excavation will involve excavation only of exposed clean natural bedrock.
 - 5.3 Provide for mechanical excavation being archaeologically monitored to be undertaken only by a flat-bladed bucket to ensure a clean finish for inspection. The use of bulldozers, box scrapers or tooth buckets is not acceptable during archaeological monitoring work.
6. In observing ground excavations on the site, the Monitoring Archaeologist shall:
 - 6.1 Inform the developer's building contractor as soon as reasonably possible where they believe that archaeological features, deposits, or structures have been exposed during the course of ground excavations on the Site, that will require identification, cleaning, investigation and recording.

- 6.2 Consistent with the requirements of these Standard and with the WSI for Archaeological Investigation, carry out necessary identification, cleaning, recording and investigation with due consideration to the developer's work programme and with regard to their desire to proceed with ground excavations and other building works without undue delay.
7. The Monitoring Archaeologist shall inform the Local Authority's Archaeological Adviser(s) by email of completion of monitoring and recording work on the site within three calendar days of such completion.
8. Reporting of watching briefs will follow the details set out above in Section 4 and Appendix 1 unless otherwise agreed in writing with the relevant Local Planning Authority and the Local Authority's Archaeological Adviser(s).

ANNEX E: Comprehensive archaeological excavation (and 'Stage 2' where Stage 1 investigation or evaluation has already been undertaken)

1. The standards set out in Annex A above will all be complied with, as a minimum.
2. In addition:
 - All archaeological features on the site will be comprehensively excavated by hand.
 - "Comprehensive" excavation will normally involve (as a minimum):
 - excavation by hand of sections across all junctions or intersections of cut features;
 - excavation by hand of 1 metre to 2 metre-wide sections through linear cut *datable* and *ancient* features, and linear features manifestly rich in ancient palaeo-environmental remains, at 10-metre intervals or up to a total of 25% of the length of the linear cut feature (whichever is the greater) with sampling of termini of linear features;
 - complete excavation (100%) of all discrete *datable* and significant cut features of less than two sq. metres plan area, and discrete features manifestly rich in artefacts and or ancient palaeo-environmental remains. Excavation may involve more rapid collection of all artefacts and samples from the second half of discrete features by context or spit where appropriate and following standard recoding of the section and first 50% of the feature;
 - complete (100%) excavation of all post holes, hearths, beam slots, ring gullies, pits internal to structures, where part of a structure;
 - complete (100%) excavation of the ditches of small mortuary enclosures of less than 25 sq. m enclosed area, with a sliding scale of reduced sampling of larger enclosures;
 - 100% excavation of graves and pits containing urned or unurned burial remains (cremation urns to be lifted wherever practicable for micro-excavation in laboratory environment), and pits or immediate environments of structured or placed deposits;
 - Discrete cut features containing "special" deposits or finds of locally or nationally unusual character or date will normally be completely excavated
 - On sites with complex stratigraphy, all horizontal deposits will be recorded and removed by hand, using heavy or small tools as appropriate, down to the natural subsoil, unless otherwise stated.
 - Any variations to these sampling levels will be agreed in writing the Local Authority's Archaeological Adviser(s)
3. Where comprehensive archaeological excavation is undertaken, a post-fieldwork assessment will normally be required (see Annexe G).
4. The strategy for palaeo-environmental sampling on comprehensive archaeological excavations will usually depend on the results of trial investigation and the minimum requirements will be in accordance with Appendix 2. The level of analysis of the samples will be identified in the post-fieldwork assessment.

ANNEX F: Excavation and Recording of Lithic Artefact Scatters

Overview

- 1 Lithic artefacts form an important component of prehistoric archaeology, they are highly durable and informative behavioural elements of the archaeological record and can be found in a wide range of geological or sedimentary and surface contexts from the Pleistocene and Early Holocene time periods. Therefore they provide a widespread record of human behaviour through much of human prehistory, often providing the only behavioural record of past human cultures and extinct human species. While accepted national guidance exists for the management and investigation of surface lithic scatters such as might be encountered in ploughsoil (English Heritage 2000), and standard assessment methodologies for deep Palaeolithic potential within fluvial gravels have generally been adopted regionally, there is currently no nationally accepted guidance for the assessment, investigation and recording of lithic artefacts across all sedimentary contexts.
- 2 While in south east England the majority of lithic artefacts are manufactured on flint, other raw materials are found (e.g. chert, quartzite). Lithic artefacts consist predominately of flakes, blades and bladelets produced during the production of tools (waste flakes or debitage), the blanks from which they were removed (cores, tool roughouts) the formal tools and utilised pieces as well as other items such as hammer-stones and anvils or querns.
- 3 Assessing the importance of even a single artefact requires careful consideration of age, context and condition; technological or typological features alone are not adequate factors when considered in isolation. Interpreting the significance of lithic artefact scatters, from diffuse spreads of material to large or dense accumulations, requires very close attention to palaeolandscape situation, sedimentary context and the application of detailed post-excavation analysis. Consequently the prime consideration in the field should be on how best to record the position and context of lithic artefacts encountered at an appropriate level for their possible significance. While overall interpretation of lithic material can only be made after excavation, careful assessment and evaluation can go a long way in determining the likely parameters of the material in terms of age, degree of preservation and importance at local, regional and national scales.
- 4 Therefore, where a site with abundant or potentially important lithic artefacts is anticipated or encountered, it is important that both a lithic technology specialist and a geoarchaeologist should be included as part of the project team to develop and implement an evaluation or mitigation strategy. They should be either based on-site permanently or on a regular daily basis to develop and oversee an appropriate recording strategy. Additional advice from an environmental archaeologist may also be necessary.

Site Assessment or Evaluation

- 5 The possibility of sedimentary or surface contexts containing prehistoric lithic artefacts should be considered at the outset, both in relation to the development of an Environmental Impact Assessment and in the formulation of an initial field evaluation strategy.
- 6 The site should be considered first in geoarchaeological terms as comprising a series of sedimentary contexts within a palaeolandscape that forms the basic unit of analysis for the Palaeolithic and early Holocene periods. Each sedimentary

context should be considered in terms of their likely age and significance, their potential to preserve lithic artefacts and the nature of the proposed development impact upon them. Consideration should be given to the likelihood of lithic material being found in primary context (i.e. with a sedimentary context of the same age as their manufacture, use and discard), in secondary context (reworked or derived by sedimentary processes subsequent to their manufacture, use and discard) and the degree to which the agents of sedimentary deposition may have altered, sorted or disturbed the original arrangement of lithic artefacts (resolution).

- 7 Seven types of geomorphological context are considered as useful to consider here: Surface, Feature, Slope, Valley bottom, Coastal platform, Plateau surface and Karstic. The presence, occurrence and inter-relationship of each needs to be determined across the site, in addition to the likely age range and the resolution of the archaeology preserved within them. Archaeological resolution is used here as a term to describe the degree to which the site may preserve a detailed record of past human behaviour and consequently requiring an appropriately detailed recording methodology.

Each sedimentary type is listed in the table below:

Geomorphological Context	Sediment type	Sediment type	Age of Deposits as Commonly Encountered in SE England	Archaeological Resolution
Surface		Ploughsoil, Topsoil, Made Ground	Holocene	Medium -Low
Feature		Ditch, Pit, Post Hole etc.	Holocene – Late Pleistocene	High - Low
Slope	Head or Colluvium	Colluvium, Gellifluct on Depos its,	Holocene – Middle Pleistocene	High - Low
Valley bottom	Fluvial and lacustrine	Coarse (sands and gravels), Fine (silts and clays).	Holocene – Early Pleistocene	High - Low
Coastal platform	Shallow marine	Coarse (sands and gravels), Fine (silts and clays).	Holocene – Middle Pleistocene	High - Low
Plateau surface and slopes	Aeolian	Coversands, Loess	Holocene – Middle Pleistocene	High- Medium
Karstic	Caves, dolines and rockshelters	Cave sediments, fills of solution and structural	Holocene – Early Pleistocene	High - Low

- 8 Evaluation of a site should aim to sample all sedimentary contexts which have been determined to be present within the development area. They should be sampled to at least the depth of development impact. Impact should be considered in terms of not only physical destruction of sediments and material or features within them but also in terms of the effects of geochemical modification and dewatering. In order to understand geoarchaeological contexts correctly it may be necessary to investigate to the base of the Quaternary sequence or beyond the limits of the development area.

- 9 Standard evaluation trenches will rarely be adequate in isolation to achieve a full assessment of potential unless it can be conclusively proven that surface deposits overlie only pre-Quaternary geology across the whole site. More commonly geoarchaeological trial pits and/or long sections, stepped trenches (*Sondage Profond*) will be needed to determine if deeper sedimentary contexts underlie the site with potential to preserve lithic artefacts and associated archaeological material or features. The scale and scope of these geoarchaeological interventions will be determined through discussions between the curatorial archaeologist, geoarchaeologist and lithic specialist. These interventions should be placed at intervals adequate to investigate the full range and relationship of sedimentary contexts underlying the site and they should purposively sample for the presence of lithic artefacts e.g. through sieving for artefacts (including microdebitage) or through hand excavation of sediments considered to have potential for high resolution archaeological signatures.
- 10 The evaluation report will describe any lithic artefacts recovered specifically in terms of sedimentary context, sedimentary history, age, and resolution in addition to statements about raw material, technology and typology. The evaluation report should contain a self-critical assessment of the limitations of the study and the impact these limitations may have had on the interpretation of the archaeological material and sedimentary context.

Dealing with High Resolution Signatures: Suspected primary context *In Situ* Lithic Scatters

- 11 Whether lithic artefacts are preserved in primary context or indeed *in situ* can often only be determined after post-excavation analysis. Consequently where lithic artefacts with the potential for a high-resolution archaeological signature are encountered, a record should be made which allows for this analysis and preserves the maximum information regarding their position and context.
- 12 Potential high-resolution signatures need to be defined spatially in three dimensions to determine the limits of the scatter within the area of investigation. Sites should be gridded to at least 1m resolution.
- 13 All lithic artefacts over an agreed size should be recorded three dimensionally by survey using a total station or GPS. This agreed size might be as small as 5mm Maximum Linear Dimension (MLD) for a site where microlith manufacture is prevalent, or as high as 30mm for a Neolithic axe production site. Generally 10mm or 20mm are appropriate for X,Y,Z recording. All lithic artefacts recorded in this manner will be individually bagged and recorded as small finds. Tools and tool fragments less than the agreed MLD can also be recorded in this manner as considered appropriate, for example where microlith fragments or micro-burins are identified.
- 14 Where lithic artefacts have a definite long axis (defined by maximum length of the artefact being at least twice that of the maximum width), the orientation of the artefacts long axis to north should be recorded. The proximal end of the artefacts should be taken to indicate the direction of orientation. An artefact with a proximal end pointing to the north east would have an orientation of 45 degrees. An artefact with a proximal end pointing to the south west would have an orientation of 225 degrees. Where a lithic artefact is not resting flat on or within a sediment body, the degree to which it dips should be measured with an inclinometer. An artefact encountered on its edge within a sediment body would have a dip of 90 degrees. Unless encountered directly on end or on edge the surface

of the artefacts which faced uppermost at discovery (ventral or dorsal) should be recorded.

- 15 Non-tool fragments of less than the agreed MLD (which can be referred to as small debitage) should be bagged according to an appropriate spatial recording system consistent with context. With potentially high resolution sites this should be no coarser than to within a spatially defined spit within a site grid square.

Dealing with Medium-Low Resolution Signatures: Lithic artefacts suspected as being disturbed or within a secondary context

- 16 If after initial assessment by a geoarchaeologist and lithic specialist it is considered highly likely that the lithic artefacts encountered are preserved within a secondary context or otherwise disturbed, the necessity to undertake three dimensional recording can reasonably be dispensed with in most cases.
- 17 Scatters, where disturbed or distributed within a sediment body are unlikely to yield high resolution archaeological signatures, should still be recorded to the nearest metre square or discrete context (e.g. feature fill). Consequently any area excavation where lithics are found within the sediment body under excavation should be gridded, generally to at least 1m square resolution. A decision can then be made whether to investigate the sediment body in it's entirety or to excavate a sample of 1m squares (e.g. as an alternate, chequer board arrangement).
- 18 Excavation of sediment bodies containing lithic artefacts in suspected secondary context should be excavated in spits of appropriate but consistent depths dependent on the intensity of lithic material. Spits will generally be in the order of 0.05-0.1m but may reduce in thickness under exceptional circumstances. It is important to survey in the height of each new spit within each metre square as a check on possible errors or inconsistencies.
- 19 A decision should be made on the size cut off for collection. For example a policy of total collection of all identifiable lithic artefacts could be made, but it might be considered practical to collect only those over 10mm and to take samples of sediment for bulk sieving to achieve a representation sample of smaller debitage.
- 20 Every attempt should be made to keep excavation and collection or sampling methodologies consistent across the site and during the excavation process. If methodology is changed during the course of an excavation the implications for consistent assessment of the site should be carefully considered and an explicit record of the reason and the nature of the change in methodology made.
- 21 Flints can work their way down a soil profile to a considerable degree and can in areas of peat formation be dragged upwards into the peat. Such flints still belong to a scatter even if they now occur in three or more geoarchaeological contexts.

Sediment Sampling

- 22 The level of sampling will be dependent on the nature of the sediment body and the character of the lithic artefact scatters encountered. This will vary between no or very perfunctory sampling where lithic artefacts are encountered in a surface deposit through to 100% sampling by grid square or spit for the densest self-contained scatters or within features. Bulk samples may be taken primarily for artefact recovery and these will not be put through flotation. But secondary

samples from each context should also be retained for full flotation. The level of such sampling will be determined in the field dependent on the quality of preserved environmental remains.

Dating Considerations

- 23 Dating of lithic artefact scatters can be problematic but every effort should be made to obtain datable material from each sedimentary context preserving lithic artefacts or to date the sediment body itself.
- 24 Specialist advice will be sought for applicable dating methods. Arrangements will be made for dating specialists to visit the site to and assess the potential for dating techniques through consultation with the geoarchaeologist and other relevant specialists.
- 25 Dates should be obtained for sediment bodies preserving lithic artefacts. Silts and sand deposits associated with a flint scatter may be suitable for OSL. Sampling of organic sediments or soil horizons (e.g. peat) associated with lithic artefact scatters may also yield radiocarbon dates. For Early or Middle Pleistocene contexts palaeo-magnetic dating techniques might be considered.
- 26 Dates may be directly obtained for burnt lithic artefacts through Thermoluminescence or associated organic ecofacts or artefacts might be directly dated by radiocarbon techniques.

Features Associated with Lithic Artefact Scatters

- 27 If cut (e.g. pits) or positive (e.g. hearths) features are shown to be present on or during the removal of lithic-bearing deposits, then these will require investigation. Initially, the area will then be extended by removal of the lithic-bearing deposit(s) from adjacent squares so as to expose and define the features. It will be the intention to reveal any features or feature-complexes in their entirety, if possible. For example, a structure, such as a building with a hearth, would be exposed and excavated as a discrete entity. Pre-excavation photographs will be taken using both digital and analogue cameras, and any feature complexes will be photographed from overhead.
- 28 The features will be 100% excavated by context in spits of between 0.02-0.05m. At least one section will be drawn and photographed to record the stratigraphic sequence of deposits within the feature. Normally, the feature will be excavated in two halves or by quadrants, with half the deposit being removed, the section(s) recorded, and the remainder of the deposit excavated. However, if complex elements such as *in situ* hearths are found within features, consideration will be given to excavating these in plan.
- 29 Any finds within the features will be given a unique identifying number and recorded in three dimensions. The spoil generated by excavation will be collected by context and intervention, although in certain circumstances it may also be appropriate to differentiate the arisings from individual spits. These samples will be wet sieved through a fine mesh for retrieval of finds and environmental remains.

Annex G: Metal detector survey

1.0 The specific aims and objectives of a metal detecting survey are:

A) To recover and record all metal items of archaeological and historical importance that would otherwise be destroyed by the development.

B) To inform the placing of evaluation trenches by identifying possible settlement and activity sites within the development area.

2.0 Method Statement

2.1 The archaeological work will be carried out in accordance with the Chartered Institute for Archaeologists' *Code of Conduct* (December 2014) and *Standard and Guidance for an Archaeological Excavation* (2014); the *Sussex Archaeological Standards* (2017); and the *Treasure Act* (1996).

2.2 The survey will be carried out by an East Sussex County Council (ESCC) and Portable Antiquity Scheme (PAS) registered local metal detecting group under the supervision of the archaeological contractor. Each volunteer will be required to complete the following disclaimer "I also confirm that I have no personal interest in any finds that I recover during my work at the site and acknowledge that all such finds belong to the landowner."

2.3 The survey will be carried out in a methodical manner to ensure that the entire area of the development has been covered. The make and model of each detector used will be recorded for the site archive records. After the recovery of an artefact any hole made shall be filled in and any turf reinstated. The size of any holes excavated will be kept to a minimum to enable the safe recovery of the artefact.

2.4 If it is clear that an archaeological deposit is being disturbed, or if the artefact is associated with other artefacts, excavation will cease and advice will be taken before attempting any further recovery. This may involve the excavation of a larger test pit to confirm the context of the artefact prior to its recovery.

2.5 Each artefact will be allocated an individual unique reference number. It will be entered onto the Metal Detecting Record Form (Appendix 1), along with its National Grid Reference (NGR) and a record of the depth at which it was found. The record form will also record the finder, the field in which it was found and a brief description of the artefact. Each artefact will be individually bagged, with the reference number, site code and NGR written on the bag. Any non-metallic artefacts found during the survey will be recorded in the same manner.

2.6 Each artefact will be located using GPS to provide an accurate NGR location. This information will be fed into an excel spreadsheet which will form the basis for a database of the artefacts recovered during the survey, and will form part of the archive.

2.7 The Client shall give the archaeological contractor safe access to the site to undertake the survey, and will provide information regarding access and any existing services.

3.0 Post-survey Analysis and Report

3.1 All artefacts will be appropriately cleaned and packaged in accordance with current guidance. They are to be suitably bagged, boxed and marked in accordance with the United Kingdom Institute for Conservation, Conservation Guidelines No 2 and on completion of the archaeological post-excavation programme the Client will arrange for them to be deposited in the agreed museum store.

3.2 Each artefact will be identified by an appropriate specialist and the identification added to the spreadsheet. Iron artefacts may be submitted for X-ray to aid identification, and provision should be made for X-Ray Fluorescence (XRF) analysis of any important metal artefacts to aid their identification and analysis. An interim report summarising the results of the metal detecting survey will be published within 90 days of the completion of the survey. The report will include distribution plots of the artefacts.

3.3 Any artefacts of local or national significance will be reported to the County Archaeologist at the earliest opportunity. All finds that fall under the definition of the *Treasure Act* will be reported to the Coroner's Office and to the Sussex Finds Liaison Officer.

3.4 The site archive will be created in accordance with the requirements of the Recommended Standards, and will be deposited at the agreed museum store or such other repository as agreed with the County Archaeologist within five years from the date of completion of the investigation.

Appendix 1: Metal Detecting Record Form

Ref No.	NGR	Field	Depth (mm)	Finder	Artefact

ANNEX H: Post-Excavation (fieldwork) Assessment: preparation of report and discussion of potential for analysis

1. A review of the results of fieldwork will indicate whether the Site Archive contains material which has the potential to contribute to the pursuit of local, regional or national research priorities. In such cases the Archaeological Contractor may, as soon as possible after completion of fieldwork on site, be required to prepare a written assessment of the potential of the data from the site to contribute to archaeological knowledge, and identify the further study and analysis necessary.
2. The assessment shall be carried out in accordance with Chapter 6 and Appendix 4 (assessment report specification) of the English Heritage publication The MoRPHE Project Managers' Guide (<https://content.historicengland.org.uk/images-books/publications/morphe-project-managers-guide/HEAG024-MoRPHE-Managers-Guide.pdf>) and where applicable any variations set out in the English Heritage Management of Research Projects in the Historic Environment (MoRPHE, 2016 and PPN3 2008 (<https://content.historicengland.org.uk/images-books/publications/morphe-project-planning-note-3/morpheprojectplanningnote3.pdf>)).
3. Where there is uncertainty about the scope of work necessary to assess a particular aspect of the archive, for example because the archive is very small or very large and complex, the Archaeological Contractor should raise this with the Planning Archaeologist.
4. The post-excavation assessment report will include the following:

Contents

Summary

Introduction

- Scope of report
- Site Location
- Background to project – project outline
- Fieldwork methodology and strategy
- Archaeological and historical background
- Original research aims and objectives

Summary of excavation results by phase using initial evidence for dating based on artefacts and stratigraphic relationships (include chronological phases for which no evidence found).

Quantification of data and records

Assessment of finds and environmental samples (artefacts and ecofacts)

Statement of potential and significance

- Results measured against the original project aims
- Local, regional and national research context

Revised aims and objectives

Method statement including tasks, named specialists, time and costs to achieve publication, dissemination and archiving (including): Stratigraphy

Geoarchaeology Artefacts and Ecofacts

- Historical research
- Illustration
- Outreach
- Archive deposition and quantification

Confirmation of programming and resources

- Personnel
- Task Lists

Bibliography

HER and OASIS summary sheets

Appendices - specialist tabulated data

Illustrations – site location plans, area phase plans, sections and photographs

Annex I –Digital data and report submission to East Sussex HER

Once the contractor has been notified of the discharge of the relevant archaeological condition, by being copied into the letter from the County Archaeologist to the Local Planning Authority, they will have 90 days from that date to provide the Historic Environment Record (HER) with a Compact Disc (CD) containing a PDF/A report and matching any other requirements as set out in Annex I of the Sussex Archaeological Standards 2019.

After 45 days from the date of the letter to the Local Planning Authority the East Sussex HER will remind the contractor of this obligation, notifying them that they have 45 days remaining before they should submit their CD to the HER.

The tables below set out the requirements regarding submission of digital data and reports to the East Sussex Historic Environment Record. Please refer to this for all projects in East Sussex and Brighton and Hove.

Please submit digital data and reports in the format described below. Please note, both digital data and reports for a project should be submitted to the HER on the same CD.

Digital Data submission

Type of Application	Urban	Rural
Large Major (e.g. road scheme)	Not Applicable (NA)	By agreement with the County Archaeology Team
Major (1000m ²)	By agreement with the County Archaeology Team	GIS shapefiles of trenches or survey area and features (e.g. for multi-period sites broken down by period)
Full	GIS shapefiles of trenches unless agreed otherwise by County Archaeology Team	GIS shapefiles of trenches or survey area and features (e.g. for multi-period sites broken down by period)
Householder	Good resolution drawings with grid reference provided by the contractor in .dwg format	Good resolution drawings with grid reference provided by the contractor in .dwg format

Digital report submission

Type of Project	Requirements to be sent on CD
Desk-based assessment	PDF(A) report.
Watching Brief	PDF(A) report
Evaluation excavation	PDF(A) report and GIS shapefiles of trenches or survey area and features
Geophysical reports	PDF(A) report and AutoCAD or equivalent figures separately.
Historic Building Report	PDF(A) report
Post-Excavation Assessment	PDF(A) report and GIS shapefiles of site plans with phasing.
Final excavation report (Publication)	PDF(A) report and GIS shapefiles of site plans with phasing (if not already supplied at the Post-Excavation Assessment (PXA) phase

The above may be subject to alteration in agreement with the County Archaeology Team.

At the present time we are asking for these digital files to be sent to the HER on CD until we have a long term digital storage solution.

Please can the CD's be sent in clear plastic cases (to avoid damage in the post) to:

FAO: HER Officer

The Keep

Woollards Way

Brighton

BN1 9BP

Sussex HER summary sheet

HER enquiry number						
Site code						
Project code						
Planning reference						
Site address						
District or Borough						
NGR (12 figures)						
Geology						
Fieldwork type	Eval	Excav	WB*	HBR*	Survey	Other
Date of fieldwork						
Sponsor or client						
Project manager						
Project supervisor						
Period summary	Palaeolithic	Mesolithic	Neolithic	Bronze Age	Iron Age	
	Roman	Anglo-Saxon	Medieval	Post-Medieval	Other	
Project summary (100 word max)						
Museum or Accession No.						

*WB – Watching brief; HBR – historic building recording

Finds summary

Find type	Material	Period	Quantity

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