



**AQUIND Limited**

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# **AQUIND INTERCONNECTOR**

## **Environmental Statement - Volume 3 - Appendix 21.2 Historic Environment Desk Based Assessment**

The Planning Act 2008

The Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 – Regulation 5(2)(a)

The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017

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**AQUIND Limited**

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Environmental Statement - Volume 3 -  
Appendix 21.2 Historic Environment Desk  
Based Assessment

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## ***APPENDICES***

### **Appendix 1 – Historic Environment Gazetteer**

# 1. INTRODUCTION

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## 1.1. PROJECT BACKGROUND

1.1.1.1. WSP has been commissioned by AQUIND Limited to carry out a historic environment desk-based assessment ('HEDBA') in advance of the proposed development of a new subsea and underground High Voltage Direct Current ('HVDC') power cable transmission link between Normandy in France and the south coast of England in the county of Hampshire ('The Proposed Development'). Converter Stations will be constructed in the UK and France where the HVDC cables will terminate. This HEDBA covers only the UK Onshore Components of the Project (Figure 1). A new Converter Station is proposed adjacent to the existing National Grid Substation in Lovedean, Hampshire.

1.1.1.2. The assessment forms a technical appendix in support of an Environmental Statement ('ES') and is required in relation to an application for Development Consent i.e. Development Consent Order ('DCO') rather than planning permission granted through Town and County Planning. This report is baseline only; the detailed impact assessment can be found in the ES (Chapter 21 Heritage and Archaeology). As set out in Chapter 3 (Description of the Proposed Development), the Site Boundary (hereafter referred to as the 'Order Limits') has been divided into 10 Route Sections. All known Heritage Assets within the study area have been assigned a unique Gazetteer reference (i.e. **A1**, **A2**, etc) of which the location can be seen on **Figure 2** (a-c) and the detailed descriptions can be found in the gazetteer at the back of this report (Appendix 1). This baseline is also supported by historic Ordnance Survey mapping (**Figures 8–10**) and photographs (**Figures 11–18**).

1.1.1.3. For the HEDBA, the 10 Route Sections have been divided into three broad groups, which equate with the northern end and the Order Limits at the proposed Converter Station Area, the main Onshore Cable Route, and the Cable Route and Optical Regeneration Station(s) ('ORS') at Eastney (Landfall) (see **Figure 1**). This is for the purposes of providing a broad archaeological and historical background narrative across such a large area. This includes mention of any past archaeological investigations that have been carried out. The grouping is as follows:

- 1.1.1.4.
- **Route Section 1** – the Converter Station Area and Onshore Cable Route at the northern end of the Order Limits,
  - **Route Sections 2–9** – the majority of the Onshore Cable Route, and
  - **Route Section 10** – the Onshore Cable Route at Eastney (Landfall), at the southern end of the Order Limits.



## 1.2. SCOPE

The report provides a baseline of known or potential buried heritage assets (archaeological remains) and above ground heritage assets (structures and landscapes of heritage significance), within or immediately around the Proposed Development. The setting of designated heritage assets within the vicinity of Proposed above ground structures is also considered. Professional expert opinion has been used to assess heritage significance, based on historic, evidential, aesthetic and/or communal interest, taking into account past ground disturbance which may have compromised survival.

1.2.1.1.

## 1.3. AIMS AND OBJECTIVES

Archaeology and built heritage has been a material consideration in the planning process since 1990 and its value is recognised in national and local planning policy. The aim of this report is to assess the impact of the Proposed Development and to provide a suitable strategy to mitigate any adverse effects, if required, as part of a planning application to develop the site. The aim is achieved through three objectives:

1.3.1.1.

- identify the presence of any known or potential heritage assets that may be affected by the proposals,
- describe the significance of such assets, in accordance with the National Policy Statement for Energy (EN-1), taking into account factors which may have compromised asset survival,
- determine the contribution to which setting makes to the significance of any sensitive (i.e. designated) heritage assets.

## 1.4. KEY HERITAGE CONSTRAINTS

### 1.4.1. DESIGNATED HERITAGE ASSETS

#### Section 1 – Lovedean (Converter Station Area)

There two options for the location of the proposed Converter Station; the original siting (i) and the microsited (ii) option. Neither footprint or the land adjacent contains any Designated Heritage Assets such as scheduled monuments, listed buildings or conservation areas. In the vicinity of Route Section 1 (within 500 m) there are six Grade II listed buildings (see **Figure 2a** and **Figure 3**). These comprise:

1.4.1.1.

- The late 17th century Ludmore Cottages (**A129**) located 260 m to the north-east of the Order Limits on Broadway Lane,
- The 18th century Grade II listed Denmead Farmhouse (**A109**) and Grade II listed Granary 20 m to the west (140 m to the west of the Order Limits),
- The 16th or 17th century house The Lower Gardens (**A26**), located 40 m to the west of the Order Limits on Edney's Lane,

- The 17th to 18th century Farmhouse at Little Denmead and Barn at Little Denmead Farm (**A101**), 500 m to the west of the Order Limits.

1.4.1.2.

Although not formally recognised, the baseline assessment has identified a hedgerow that could possibly be considered ‘important’ under the Hedgerow Regulations (1997). The north-south hedgerow (**A158**) is located in the north-eastern part of the Order Limits north of the existing Lovedean Substation and marks the historic parish boundary between Catherington and Hambledon. The ecology survey reports notes that the hedgerow is classified as species-rich (with more than 7 species), i.e. it is a mature hedgerow. According to the Hedgerow Regulations any such boundaries which were in existence from at least 1850 and which are more than 30 years old are considered ‘important’ and would be of high heritage significance, derived from historical interest.

### Sections 2 – 9 - Onshore Cable Corridor

Onshore Cable Corridor there are two Designated (protected) Heritage Assets. These comprise the Grade II listed early 19th century Sea Lock Canal and Basin (**A1c**) which is also designated as a LPA conservation area.

1.4.1.3.

Hampshire County Council (‘HCC’) has mapped Archaeological Alert Areas within Portsmouth based on known sites of archaeological interest. The red alert areas (highest sensitivity) are the extent of the scheduled monument constraint areas. The Onshore Cable Corridor intersects a number of yellow alert areas, which refer to ‘locally important monuments of known extent’. Whilst these do not present a planning constraint as such, they are used internally by HCC to flag sites for development control purposes. The Onshore Cable Corridor intersects the following ‘yellow’ areas:

1.4.1.4.

- Eastney Point, former Post-medieval Coast Guard Station within Route Section 10,
- Eastney Farm (possible medieval manor and homestead) (**A85**),
- Infilled former early 19th century Portsmouth Arundel Canal within Route Section 9 (**A1r**),
- Salterns (or saltings; area of coastal intertidal mudflats used in the production of salt, shown on historic mapping) within Route Section 5, 6, 8 and 9,
- Coastal defences and sluice within Route Section 7,
- Prehistoric Round Barrow on Portsdown Hill Road within Route Section 4.

### Section 10 – Eastney (Landfall)

The Landfall at Eastney does not contain any Designated Heritage Assets. In the near vicinity however lies a scheduled monument consisting of the late 19th century Grade II\* listed Fort Cumberland (**A96**), an angled bastioned fort on the south-west of Portsea Island. The scheduled constraint area encompasses the above-ground star-shaped fort itself and its immediate surroundings and includes three other Grade II listed buildings.

1.4.1.5. In addition to the Grade II\* listed Fort Cumberland (**A96**), there is a Grade II listed pillbox 400 m to the south-west (**A97**), along with anti-tank defences (**A1s**) also Grade II listed on Eastney Beach 170 m to the south.

The Landfall is in the administrative area of Portsmouth City Council. The council does not identify Archaeological Alert Areas.

## 1.4.2. HUMAN REMAINS

### 1.4.1.6. Section 1 – Lovedean (Converter Station Area)

There are no known burial grounds within the Order Limits. There is however, the potential for human remains, both in the Onshore Cable Corridor and proposed Converter Station Area.

1.4.1.7.

- Two Anglo-Saxon inhumation burials were recorded during an archaeological evaluation (**A1h**) carried out within the Order Limits, close to The George Inn on Portsdown Hill in 1966/67 (see **Figure 2b** and **Figure 7**). Two ditches were also revealed and were thought to form part of the boundary of a probable Saxon cemetery starting further to the west and including the two burials discussed above. The Saxon cemetery is thought to be located near the former Naval Telegraph on Portsdown Hill although the exact site is unclear and the location recorded on the HER is approximate.

1.4.2.1.

- Within the proposed Converter Station Area, an archaeological strip, map and sample excavation (**A1d**) undertaken in 2014 on land to the west of Lovedean Substation revealed two isolated Middle Bronze Age cremations which had been heavily truncated by ploughing.

Where human remains might potentially be disturbed by proposed development on land which is not subject to the Church of England's jurisdiction, a burial licence is required from the Secretary of State, under Section 25 of the Burial Act 1857 as amended by the Church of England (Miscellaneous Provisions) Measure 2014.

1.4.2.2.

## 2. PLANNING FRAMEWORK

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### 2.1. LEGISLATION

#### 2.1.1. SCHEDULED MONUMENTS

Parts of the Proposed Development lie in the vicinity of a scheduled monument. Nationally important archaeological sites (both above and below-ground remains) may be identified and protected under the Ancient Monuments and Archaeological Areas Act 1979. An application to the Secretary of State is required for any works affecting a Scheduled Monument. Prior written permission, known as Scheduled Monument Consent ('SMC') is required from the Secretary of State for works physically affecting a scheduled monument. SMC is separate from the statutory planning process.

2.1.1.1.

#### 2.1.2. LISTED BUILDINGS AND CONSERVATION AREAS

There are a number of statutorily Listed Buildings and local planning authority Conservation Areas within the study area. The Planning (Listed Buildings and Conservation Areas) Act 1990 sets out the legal requirements for the control of development and alterations which affect buildings, including those which are listed or in conservation areas. Buildings which are listed or which lie within a conservation area are protected by law. Grade I are buildings of exceptional interest. Grade II\* are particularly significant buildings of more than special interest. Grade II are buildings of special interest, which warrant every effort being made to preserve them.

2.1.2.1.

#### 2.1.3. HEDGEROW REGULATIONS

The Order Limits includes one possible historic hedgerow. Aside from the planning system, hedgerows are offered some protection under the Hedgerow Regulations 1997. Under these rules, a hedgerow is "important" if it, or the hedgerow of which it is a stretch has existed for 30 years or more; and satisfies at least one of the criteria below:

2.1.3.1.

- The hedgerow marks the boundary, or part of the boundary, of at least one historic parish or township and for this purpose "historic" means existing before 1850.
- The hedgerow incorporates an archaeological feature which is: (a) included in the schedule of monuments compiled by the Secretary of State under section 1 (schedule of monuments) of the Ancient Monuments and Archaeological Areas Act 1979(7); or (b) recorded at the relevant date in a Sites and Monuments Record (Now Historic Environment Record).

- The hedgerow is: (a) is situated wholly or partly within an archaeological site included or recorded as mentioned in paragraph 2 or on land adjacent to and associated with such a site; and (b) is associated with any monument or feature on that site.
- The hedgerow: (a) marks the boundary of a pre-1600 AD estate or manor recorded at the relevant date in a Sites and Monuments Record or in a document held at that date at a Record Office; or (b) is visibly related to any building or other feature of such an estate or manor.
- The hedgerow is: (a) recorded in a document held at the relevant date at a Record Office as an integral part of a field system pre-dating the Inclosure Acts(8); or (b) is part of, or visibly related to, any building or other feature associated with such a system, and that system is (i) substantially complete; or (ii) is of a pattern which is recorded in a document prepared before the relevant date by a local planning authority, within the meaning of the 1990 Act(9), for the purposes of development control within the authority's area, as a key landscape characteristic.

## 2.2. PLANNING POLICY

### 2.2.1. NATIONAL POLICY

#### National Policy Statement

The National Policy Statement for Energy (EN-1), Department of Energy and Climate Change, published in July 2011 sets out the overarching national policy for major energy infrastructure projects within England and Wales in order to meet future demand, deliver on obligations to reduce greenhouse gas emissions and ensure a secure energy supply through a diverse range of energy sources.

Section 5.8 contains the following statements which are relevant:

- 2.2.1.1. • *The construction, operation and decommissioning of energy infrastructure has the potential to result in adverse impacts on the historic environment (paragraph 5.8.1),*
- 2.2.1.2. • *The historic environment includes all aspects of the environment resulting from the interaction between people and places through time, including all surviving physical remains of past human activity, whether visible, buried or submerged, landscaped and planted or managed flora (paragraph 5.8.2),*
- *The applicant should ensure that the extent of the impact of the proposed development on the significance of any heritage assets affected can be adequately understood from the application and supporting documents (paragraph 5.8.10),*

- *In considering the impact of a proposed development on any heritage assets, the IPC should take into the account the particular nature of the significance of the heritage assets and the value they hold for this and future generations (paragraph 5.8.12),*
- *There should be a presumption in favour of the conservation of designated heritage assets and the more significant the designated heritage asset, the greater the presumption in favour of its conservation should be. Once lost heritage assets cannot be replaced and their loss has a cultural, environmental, economic and social impact. Significance can be harmed or lost through alteration or destruction of the heritage asset or development within its setting. Loss affecting any designated heritage asset should require clear and convincing justification. Substantial harm to or loss of a grade II listed building park or garden should be exceptional. Substantial harm to or loss of designated assets of the highest significance, including Scheduled Monuments; registered battlefields; grade I and II\* listed buildings; grade I and II\* registered parks and gardens; and World Heritage Sites, should be wholly exceptional (paragraph 5.8.14),*
- *Any harmful impact on the significance of a designated heritage asset should be weighed against the public benefit of development, recognising that the greater the harm to the significance of the heritage asset the greater the justification will be needed for any loss (5.8.15),*
- *Where the loss of the whole or a material part of a heritage asset's significance is justified, the IPC should require the developer to record and advance understanding of the significance of the heritage asset before it is lost (paragraph 5.8.20).*

### **National Planning Policy Framework**

The Government issued a revised version of the NPPF in February 2019 (Department for Communities and Local Government, 2018) and supporting revised Planning Practice Guidance in 2018 (ibid).

The NPPF does not contain specific policies for NSIPs, which are determined in accordance with the Planning Act 2008 and relevant National Policy Statements for major infrastructure as well as matters that are relevant.

2.2.1.3.

Section 16 of the NPPF deals with 'Conserving and Enhancing the Historic Environment'. The NPPF recognises that heritage assets are an irreplaceable resource which 'should be conserved in a manner appropriate to their significance, so that they can be enjoyed for their contribution to the quality of life of existing and future generations' (para 184). The NPPF requires the significance of heritage assets to be considered in the planning process, whether designated or not.

2.2.1.4.

## **2.2.2.**

### **LOCAL POLICY**

2.2.1.5.



Following the Planning and Compulsory Purchase Act 2004, Planning Authorities have replaced their Unitary Development Plans, Local Plans and Supplementary Planning Guidance with a new system of Local Development Frameworks. In most cases heritage policies are likely to be 'saved' because there have been no significant changes in legislation or advice at a national level.

The relevant local policies are listed below, in all cases they reflect the overarching National Planning Statement (EN-1).

2.2.2.1. **Portsmouth City Council**

The southern part of the Order Limits falls within Portsmouth City LPA. The Portsmouth Plan (Portsmouth's Core Strategy and spatial plan) was adopted in January 2012 (Portsmouth City Council, 2012). The Plan recognises the city's strong maritime heritage. Objective 1 notes that new development should protect the local architectural heritage (para 2.7), and policy PCS23 Design and Conservation provides the approach to the historic environment.

2.2.2.2.

**Winchester City Council**

2.2.2.3.

The northern part of the Order Limits lies within Winchester City LPA. The Winchester City Council Local Plan Joint Core Strategy was adopted in March 2013 (Winchester City Council, 2013). Policies relevant to the historic environment are included as part of the 'saved policies' from the 2006 Local Plan (HE 1-8).

The main objective of these policies is to conserve the historic environment by ensuring that 'the essential character and special interest of its assets are protected or enhanced whenever development takes place' (ibid).

2.2.2.4. **East Hampshire District Council**

The north-east part of the Order Limits lies within East Hampshire District. The East Hampshire District Local Plan Joint Core Strategy was adopted in June 2014 (East Hampshire District Council, 2014). Policy CP30 is relevant to the historic environment; it states that 'development proposals must conserve and, where possible, enhance the District's historic environment' (ibid).

2.2.2.5.

2.2.2.6.

## 3. METHODOLOGY AND SOURCES

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### 3.1. GUIDANCE

The assessment adheres to professional standards and guidance as set out in the following documents:

- *Standards and guidance for historic environment desk-based assessment* (CiFA [Chartered Institute for Archaeologists], 2014);
- *Standards and guidance for commissioning work or providing consultancy advice on archaeology and the historic environment* (CiFA [Chartered Institute for Archaeologists], 2014)
- 3.1.1.1. • *The setting of heritage assets. Historic Environment Good Practice Advice in Planning Note 3* (Historic England, 2017);
- *Guidelines for Landscape and Visual Impact Assessment 3rd Edition* (Landscape Institute and Institute of Environmental Management and Assessment, 2013)
- *Conservation principles, policies and guidance. Consultation Draft.* (Historic England, 2017).

### 3.2. DESK BASED ASSESSMENT

The assessment has been carried out in accordance with the requirements of the National Policy Statement (EN-1) and to standards specified by the Chartered Institute for Archaeologists (CifA Dec 2014a, 2014b) and Historic England (HE 2016, HE 2017).

- In order to identify any known or potential heritage assets within the Order Limits and wider study area that could be impacted by the Proposed Development, a broad range of sources were consulted. This included documentary and cartographic sources and the results from archaeological investigations within a 500 m archaeological assessment study area (centred on the Order Limits during the scoping stage). This information was examined to determine the likely nature, extent, preservation and significance of any known or possible heritage assets that may be present within or adjacent to the Order Limits.

- 3.2.1.2. A refreshed Historic Environment Record ('HER') search was carried out in 2019 during the ES assessment stage, based on 500 m study area from the Order Limits. The table below provides a summary of the key data sources.

**Table 1 – Summary of data sources**

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3.2.1.3.	AQUIND INTERCONNECTOR PINS Ref.: EN020022	WSP
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Source	Data	Comment
<b>Historic England</b>	National Heritage List for England ('NHLE') with information on statutorily Designated Heritage Assets	Statutory designations (scheduled monuments; statutorily listed buildings; registered parks and gardens; historic battlefields) can provide a significant constraint to development.
<b>Portsmouth City Council</b>	Historic Environment Record ('HER')	Primary repository of archaeological information. Includes information from past investigations, local knowledge, find spots, and documentary and cartographic sources.
<b>Winchester City Council</b>	HER	
<b>Hampshire City Council</b>	HER	
<b>Historic England</b>	National Record of the Historic Environment ('NRHE')	National database maintained by Historic England. Not as comprehensive as the HER but can occasionally contain additional information. Accessible via pastscape website. This was consulted for the Order Limits and its immediate vicinity only.
<b>Hampshire County Council</b>	Archaeological Alert Areas	Areas marked out as having potential archaeological interest, managed by the LPA to flag potential sites.  Note that Winchester and Portsmouth City Councils do not define such areas.

Source	Data	Comment
<b>Local Planning Authority</b>	Locally listed building	Heritage asset identified by the authority which are of local importance due to their architectural and/or historic significance and make a positive contribution to the character of an area. Whilst not statutorily protected, a building's inclusion on the list means that it is a material consideration in the planning process.
<b>British Geological Survey (BGS)</b>	Solid and drift geology digital map; online BGS geological borehole record data.	Subsurface deposition, including buried geology and topography, can provide an indication of potential for early human settlement, and potential depth of archaeological remains.
<b>Landmark Information Group</b>	Ordnance Survey maps from the 1st edition (1860–70s) to present day, and Goad fire insurance maps from the 19th century onwards	Provides a good indication of past land use and impacts which may have compromised archaeological survival. Provides an indication of the possible date of any buildings within the Order Limits. Goad maps can indicate the presence of basements if these were surveyed.
<b>Hampshire Record Office</b>	Historic maps (e.g. Tithe, enclosure, estate), published journals and local history	Baseline information on the historic environment

Source	Data	Comment
<b>Historic England</b>	National Air Photograph Library: vertical, oblique, and specialist aerial photographs.	Aerial photographic coverage of the rural sections of the Proposed Development were scrutinised to identify the presence of cropmarks and earthworks of possible archaeological origin. Part of the area has been covered by the Historic England National Mapping Programme; only photographs post-dating this work were consulted for these areas.
<b>Web-published local history</b>	Archaeological Data Service, British History Online	Many key documentary sources, such as the Victoria County History, and local and specialist studies are now published on the web and can be used to inform the archaeological and historical background. The Archaeological Data Service includes an archive of digital fieldwork reports.
<b>AECOM</b>	Environmental Impact Assessment Lovedean Substation	An Environmental Impact Assessment (2010) and Written Scheme of Investigation (2013) was carried out by AECOM in advance of works which took place at Lovedean Substation.
<b>WSP Environment Teams</b>	Ecology (Historic Hedgerows and Ancient Woodland); Landscape and Visual ('ZTV'); Ground Investigation	Liaison with other teams working on the project to ensure a joined-up approach which shares information.
<b>AQUIND Ltd</b>	Project acquired geotechnical data	The information can be very useful in enhancing understanding of the nature and depth of natural geology (see above) and any made ground, whether it is modern or of potential archaeological interest.

Source	Data	Comment
	Topographical survey data	Survey data can provide an indication of the impact of past land use, e.g. ground raising or lowering, which is useful for understanding possible truncation and likely depth of archaeological remains.
Wessex Archaeology	Geophysical Survey Report and Data (see Appendix 21.3 (Detailed Gradiometer Survey Report) of the ES Volume 3 (document reference 6.3.21.3).	Geophysical Survey data is used to determine, as far as is reasonably possible, the nature of the detectable archaeological resource to inform suitable mitigation strategy for archaeological remains.
	Marine Archaeology Technical Report	Information on the nature, extent and significance of potential archaeological features at the adjacent marine section of the route (i.e. seabed prehistory or maritime sites).

**Figure 2** (a–c) shows the location of known historic environment features within the study area, as identified by the sources above, site-walkovers, and during the course of research carried out for this assessment. Each feature of the historic environment identified has been allocated a unique 'assessment' reference number (**A1**, **A2**, etc.), which is listed in the gazetteer appended to this report.

3.2.1.5. Although scoped out of the assessment along the Onshore Cable Corridor, information on listed buildings has been provided so that a complete historical baseline is presented. Where appropriate, these are included to help inform and characterise the surrounding historic environment. Due to the considerable number of listed buildings in the vicinity of the Order Limits and because setting issues for the Onshore Cable Route is not a concern, the study area only includes listed buildings within 50 m, unless their inclusion is considered relevant to the study. All distances quoted in the text are approximate (within 5 m).

3.2.1.6. The HCC Archaeological Alert Areas are not shown. Archaeological Alert Areas are used to flag areas of archaeological potential for local planning authority development control purposes only. The extents are not readily available in digital format and are not provided by the HER and for this reason they are not mapped on **Figure 2** (a–c).

### 3.3. SITE VISIT

Four site visits were conducted within the Order Limits:

- 3.3.1.1. • A site visit to the Converter Station Area (Route Section 1) was carried out on the 14 May 2018 to determine the topography and existing land use, identify any visible heritage assets (e.g. structures and earthworks), and assess any possible factors which may affect the survival or condition of any known or potential heritage assets. The site visit also extended 2 km beyond the Converter Station Area for the purposes of scoping Designated Heritage Assets for an assessment of their settings, where this might be affected by the proposed development (as per Historic England guidance on the *Note 3 – The Setting of Heritage Assets*, 2017) and for the settings assessment itself.
- A site walkover across Route Sections 1–3 was conducted on the 24 April 2019 prior to the Geophysical Survey to identify suitable access and to assess suitability of the survey method. The Site was also visited subsequently on 29 April 2019 on commencement of the survey.
- A site walkover at the proposed Landfall (Route Section 10) was carried out on the 07 August 2019 for the purposes of assessing the potential impact to Designated Heritage Assets in the vicinity of the ORS.

Site walkovers have not been carried out for the majority of the Onshore Cable Corridor where the route crosses brownfield/developed land (i.e. along pavements/roads/hardstanding) as this would not be productive in identifying archaeological remains visible as earthworks, and as the cable route is below ground in these sections, the setting of heritage assets is not a consideration.

### 3.4. SITE INVESTIGATIONS

- 3.3.1.2. In order to inform the baseline, two site-based investigations were carried out. The scope of these are outline here, with a summary of the results presented in the relevant Route Section baseline.

#### 3.4.2. ARCHAEOLOGICAL MONITORING OF GEOTECHNICAL INVESTIGATION (2018)

- 3.4.1.1. Archaeological monitoring of geotechnical trial pits was carried out in April–May 2018. These were undertaken within the Converter Station Area, near Lovedean (Route Sections 1 and 2). The work consisted of monitoring the excavation of 20no. 1.5 m by 0.5 m by 4.5 m deep geotechnical test pits, and seven California Building Ratio test pits.

#### 3.4.3. GEOPHYSICAL MAGNETOMETRY SURVEY (2019)

- 3.4.2.1.

Following submission of the Preliminary Environmental Information Report ('PEIR'), Geophysical Survey was carried out across the suitable greenfield sections of the Order Limits in April–August 2019 (Appendix 21.3 (Geophysical Survey Report)). The results of this survey have been incorporated to the ES and included in the detailed baseline (see 21.4). The aims (or purpose) of the Geophysical Survey, in compliance with the ClfA Standards and guidance for archaeological geophysical survey (ClfA 2014a), were:

- 3.4.3.1.
- To determine, as far as is reasonably possible, the nature of the detectable archaeological resource within a specified area using appropriate methods and practices; and
  - To inform either the scope and nature of any further archaeological work that may be required; or the formation of a mitigation strategy (to offset the impact of the development on the archaeological resource); or a management strategy.

Prior to the survey, a scoping exercise was carried out across the Onshore Cable Route to determine appropriate sites for the proposed magnetometer survey. This assessed the preferred and optional 30+ Joint Bays ('JB's) and Horizontal Directional Drilling ('HDD') areas which would be positioned at 0.6–2.0 km intervals along the route.

- 3.4.3.2.
- Site selection was determined by a number of factors. Firstly, those areas with more than 1.0 m of made ground (as shown by geotechnical borehole or window sample records) were not considered appropriate as the likely modern intrusions and metallic contamination would prevent the identification of archaeological features. Sites on alluvium, colluvium, blown sand or peat were also scoped out, as the Geophysical Survey method was not considered to be appropriate to produce useful results. Archaeological features in these types of deposits would likely be deeply buried, beyond depths of 1.0 m, and outside the effective detecting range of the instrument.
- 3.4.3.3.

A further consideration was the extent of the area. For smaller areas, or at linear locations preliminary Geophysical Survey was not considered appropriate. This is because unless a wide area can be covered then the identification of features can be difficult. Professional judgement was applied in these cases, taking into account past disturbance and likely archaeological survival, and the archaeological sensitivity of the area.

- 3.4.3.4.
- The results of these investigations are described in Appendix 21.3; this report categorises the observed anomalies as 'probable' or 'possible' archaeology with further categories for historic agricultural, areas of increased magnetic response and also natural features. The 'probable' assets identified during the survey have been included in the Historic Environment Gazetteer at the back of this report and are referred to by their unique assessment reference (e.g. **A1, 2**).

The rationale for site selection is set out in Table 2 below:

- 3.4.3.5.

- 3.4.3.6.

**Table 2 – Criterial for sites selection for Geophysical Survey**

<b>Criteria</b>	<b>Comment</b>	<b>Answer</b>
Is the JB/HDD within a Brownfield site?	Brownfield sites do not offer suitable conditions for survey.	NO ↓
Does the site contain made ground at depths greater than <1.0mbgl? (as shown by Geotechnical data).	Not appropriate as likeleahood for metallic contaminatino high + made-ground would obscure any archaeological remains present.	NO ↓
Is the site on alluvium, colluvium, windblown sand or peat?	Magnetometry not considered as viable method within these geological conditions.	NO ↓
Is the impact area large enough that Geophysical Survey can identify features and influence trial trench placement?	Sites need to be large enough that	YES ↓
Is survey feasible? (i.e. accessible and safe to do so)	-	YES ↓
<b>Site recommended for Geophysical Survey, to inform second stage trial trench evaluation</b>		



### 3.5. ASSESSING HERITAGE SIGNIFICANCE

The Overarching National Policy Statement for Energy (EN-1) defines significance as 'The sum of the heritage interests that a heritage asset holds'. That interest may be historic, archaeological, architectural, artistic or historic. Significance derives not only from a heritage asset's physical presence, but also from its setting.'

The determination of the significance is based on statutory designation and/or professional judgement against the below values, identified in Historic England Conservation Principles (revised consultation draft Nov 2017):

- 3.5.1.1. • *Historic Interest:* the ways in which the asset can illustrate the story of past events, people and aspects of life (illustrative value, or interest). It can be said to hold communal value when associated with the identity of a community. Historical interest considers whether the asset is the first, only, or best surviving example of an innovation of consequence, whether related to design, artistry, technology or social organisation. It also considers an asset's integrity (completeness), current use/original purpose, significance in place making, associative value with a notable person, event, or movement.
- 3.5.1.2. • *Archaeological Interest:* the potential of the physical remains of an asset to yield evidence of past human activity that could be revealed through future archaeological investigation. This includes above-ground structures and landscapes, earthworks and buried or submerged remains, palaeoenvironmental deposits, and considers date, rarity, state of preservation, diversity/complexity, contribution to published priorities (research value), supporting documentation, collective value and comparative potential, and sensitivity to change.
- *Architectural and Artistic Interest:* derive from a contemporary appreciation of an asset's aesthetics. Architectural interest can include the design, construction, craftsmanship and decoration of buildings and structures. Artistic interest can include the use, representation or influence of historic places or buildings in artwork. It can also include the skill and emotional impact of works of art that are part of heritage assets or assets in their own right.

These values encompass the criteria that Historic England are obliged to consider when statutorily designating heritage assets. Each asset has to be evaluated against the range of criteria listed above on a case by case basis. Unless the nature and exact extent of buried archaeological remains within any given area has been determined through prior investigation, significance is often uncertain.

In relation to Designated Heritage Assets, the assessment considers the contribution which the historic character and setting makes to the overall significance of the asset.

- 3.5.1.3. The table below provides a guide to how heritage significance has been assigned.



**Table 3 – Criteria for Significance of Heritage Assets**

Heritage Asset Description	Heritage Significance
<b>World Heritage Sites</b> <b>Scheduled Monuments</b> <b>Grade I and II* listed buildings</b> <b>Grade I and II* listed registered parks and gardens</b> <b>Designated historic battlefields</b> <b>Protected Wrecks</b> <b>Non-designated Heritage Assets of high national importance</b>	Very High
<b>Grade II listed buildings</b> <b>Grade II registered parks and gardens</b> <b>Conservation areas</b> <b>Burial Grounds</b> <b>Protected heritage landscapes (e.g. ancient woodland or historic hedgerows)</b> <b>Non-designated Heritage Assets of lower national, regional or county importance</b>	High
<b>Heritage assets with a district value or interest for education or cultural appreciation</b> <b>Locally listed buildings</b>	Medium
<b>Non-designated Heritage Assets with a local (i.e. parish) value or interest for education or cultural appreciation</b>	Low
<b>Item with no significant value or interest</b>	Negligible
<b>Heritage assets that have a clear potential, but for which current knowledge is insufficient to allow significance to be determined</b>	Uncertain

### 3.5.2. THE SETTING OF DESIGNATED ASSETS

In relation to heritage assets, the assessment takes into account the contribution that setting makes to the overall significance of the asset.

Setting is the way in which the asset is understood (i.e. evidential and historical values) and experienced (aesthetic and communal values). It is not an asset in itself. It differs from curtilage (historic/present property boundary); context (association with other assets irrespective of distance) and historic character (sum of all historic attributes, including setting, associations, and visual aspects).

3.5.2.1. Guidance produced by Historic England (HE 2017) and the Landscape Institute and Institute of Environmental Management and Assessment (2013) has been used to

3.5.2.2. adopt a stepped approach for settings assessment. The former sets out five steps, or which the first four are relevant:

- Step 1: asset identification. The NPPF requires an approach that is proportional to the significance of the asset, and for this reason only the settings of the most sensitive (i.e. designated) heritage assets are considered in this assessment. A scoping exercise filters out those assets which would be unaffected, typically where there are no views to/from the site;
- Step 2: assess the contribution of setting. This stage assesses how setting contributes to the overall significance of a designated asset;
- Step 3: assess change. This stage identifies the effects the proposals may have on setting and considers the resultant harm or benefit to the significance of the heritage asset. It is noted however that it can be difficult to quantify such change to the overall significance of a designated heritage asset (for example, significance would rarely be downgraded from 'high' to 'medium' due to changes in setting). For this reason, the impact is reported in this assessment in terms of the extent to which the proposals would change how the asset is understood and experienced (in terms of no harm, less than substantial harm, substantial harm or total loss of significance);
- Step 4: mitigation. This explores the way to maximise enhancement and avoid or minimise harm. This is typically considered at the design stage (i.e. embedded design mitigation); and
- Step 5: reporting. Making and documenting decisions and outcomes. This reports the assessment of effects.

3.5.2.3.

The assessment has taken into account the physical surroundings of the asset, including topography and intervening development and vegetation. It also considers how the asset is currently experienced and understood through its setting, in particular views to and from the asset and the Site, along with key views, and the extent to which setting may have already been compromised.

## 3.6. ASSUMPTIONS AND LIMITATIONS

Data from the HER comprises secondary information derived from varied sources. It is assumed that this data, as well as that derived from other secondary sources, is accurate. Due to the limitations identified above, it is possible that previously unrecorded archaeological sites will have survived within the Order Limits.

Due to the nature of below-ground archaeological remains, buried and not visible from the surface, there is an element of uncertainty regarding the survival, condition, nature and extent of the known assets identified within the Order Limits. This will be addressed by further site-based archaeological investigation where appropriate.

3.6.1.1.

It should be noted however that the absence of features noted in Geophysical Survey (i.e. negative results) does not necessarily mean the absence of archaeological remains. The effectiveness of the method in identifying possible archaeological features can depend on a variety of factors such as geology, interference from nearby services, and also the nature of the archaeological remains.

3.6.1.2.

Access to all of the designated assets within the 2 km setting study area was not possible during the site walkover, especially where these are located on private land.

3.6.1.3.

In these cases, professional judgement has been applied and where available Google Streetview mapping has been used to assess baseline setting and the environmental effect of the Proposed Development. For example, for Scotland (cottage) (A117) the surveyors assessed possible views of the proposed Converter Station from the closest accessible point which was approximately 800 m to the west.

3.6.1.4.

Notwithstanding the limitations, the methodology is robust, utilising available information, and conforming to the requirements of local and national guidance and planning policy. A range of sources have informed the desk-based assessment, including documentary sources, cartographic evidence and archaeological evaluation results from within the Order Limits. As such, a reasonable assessment of the potential archaeological resource has been presented.

3.6.1.5.

## 4. HISTORIC ENVIRONMENT BASELINE

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### 4.1. SITE LOCATION

The Order Limits lies within seven historic parishes within the historic county of Hampshire.

#### 4.1.2. SECTION 1 – LOVEDEAN (CONVERTER STATION AREA)

The northern part of the Order Limits is located west of the village of Lovedean. The landscape is primarily a patchwork of agricultural fields and woodland with sparsely distributed houses and farmsteads.

#### 4.1.3.1. SECTIONS 2–9 – ONSHORE CABLE CORRIDOR

The Onshore Cable Route would connect to the proposed Converter Station and run south for 14 km, across the chalk ridge of Portsdown Hill to the low-lying land of Portsea Island before it reaches the Landfall at Eastney on the south coast. The Onshore Cable Corridor crosses, and for a short section in the Portsmouth area run adjacent to, Langstone Harbour, a large tidal bay lying between Portsmouth to the west and Hayling Island to the east. A number of tributaries and lakes run in close proximity to the Onshore Cable Corridor, notably Salterns Lake, and Ports Creek which runs beneath the current A2030, 200 m south of the A27 roundabout. To the north of Portsea Island, Ordnance Survey mapping of the area indicates a number of watercourses in the vicinity of the Onshore Cable Route, notably in the west of the study area between Soake and Waterlooville, and to the west of Purbrook. All watercourses in the study area drain to either the Langstone Harbour or the Portsmouth Harbour areas. The watercourses are part of the South East River Basin District.

#### 4.1.4. SECTION 10 – EASTNEY (LANDFALL)

The Landfall at Eastney is sited in a low-lying, flat coastal location, bounded by the English Channel to the south and the entrance to Langstone Channel, a large estuary, on the east. The beach at the landfall generally comprises a long, wide, continuous shingle beach with associated promenade and parking and landward development including a military barracks, a caravan park and disused military ranges.

### 4.2. GEOLOGY AND TOPOGRAPHY

4.2.1.1. Topography can provide an indication of suitability for settlement, and ground levels can indicate whether the ground has been built up or truncated, which can have implications for archaeological survival.

Geology can provide an indication of suitability for early settlement, and potential depth of remains. The Order Limits falls within three distinct geological and topographical areas (**Figure 4**):

- South Downs White Chalk (**Route Sections 1–3**),
- Central Clay (**Route Sections 4 and 5**), and
- River and Marine (**Route Sections 6–10**).

#### 4.2.1.2. SOUTH DOWNS WHITE CHALK BEDROCK

**Route Sections 1–3** overly White Chalk bedrock and a relatively flat landscape at the foot of the South Downs.

According to British Geological Survey ('BGS') online data, this area of the Order Limits is, for the most part, directly underlain by White Chalk bedrock. In the south-western edge of the Order Limits in the vicinity of Anmore and Soake, the bedrock is Lambeth Group (Clay, Silt and Sand) overlain by localised deposits of Head (clay, sand, silt and gravel) which partially follow the line of the Onshore Cable Route and the Converter Station Area. The corridor of Head running north from the A3 roundabout towards Lovedean, noted above, is continued in this area, following the line of the Onshore Cable Corridor and Converter Station Area until Lovedean Farm.

4.2.2.1.

4.2.2.2.

An archaeological watching brief was undertaken within Route Sections 1 and 2 in April–May 2018; consisting of the monitoring and excavation of 20 geotechnical test pits and seven Californian Building Ratio test pits (see **Figure 5**). The stratigraphy comprised chalk bedrock, overlain by dark yellowish brown silty subsoil, which in turn was overlain by ploughsoil/topsoil. The natural chalk was found at varying depths, at around 0.3–0.8 mbgl, directly beneath ploughsoil/topsoil.

4.2.2.3.

A spot height in the south-western corner of these Route Sections at Soake records an elevation of 41.0 m Ordnance Datum ('OD'). From this location the land rises steadily to the north-east towards Mill Copse at the northern edge of the Converter Station, where the land lies at 100.0 m OD. The footprint of the building for the Converter Station lies between 70.0–80.0 m OD.

#### 4.2.3. CENTRAL LONDON CLAY

4.2.2.4.

**Route Sections 4 and 5** overlie a bedrock that is predominantly London Clay and a south-sloping and gently undulating landscape.

4.2.3.1.

4.2.3.2.

For much of this area, according to BGS online data, the Order Limits is directly underlain by a bedrock of London Clay with a corridor of Lambeth Group sands running east to west across the northern part of this Route Section in the vicinity of Anmore and Lovedean. Localised outcrops of Wittering Formation are also present in the Purbrook area, while the ridge of higher elevation between Havant Road and Portsdown is underlain by Chalk Formations. Superficial deposits in this area are recorded as Head (clay, silt, sand and gravel) and are found running as an east to west corridor along the southern rise of the ridge from Havant Road, in the vicinity of Purbrook, and following the Onshore Cable Route from the A3 roundabout north towards Lovedean. At the southernmost part of this area (within Route Section 4), the geology consists of a high chalk ridge (Portsdown Chalk), which is characterised by a range of east-west superficial bedrock chalk deposits.

The elevation of the land in the south of this area rises sharply over a distance of 700 m from 10.0 m OD at Havant Road in the south, to 80.0 m OD at Portsdown in the north; a spot height 400 m to the east of the Order Limits at Portsdown Activity Centre records an elevation of 94.0 m OD. From this level, the elevation then drops down to 40.0 m OD in the vicinity of Purbrook. From Purbrook northwards, the landscape gently undulates between 40.0 m OD and 60.0 m OD, rising to 70.0 m in the north-east of this Route Section at Lovedean.

4.2.3.3.

### RIVER AND MARINE

**Route Sections 6–10**, covering the southern half of the Order Limits, are predominantly low-lying and flat, but with varying geology of River Terrace Deposits and Raised Marine Deposits.

4.2.4.1.

According to BGS data, the bedrock geology underlying this part of the Order Limits is varied. At the southern end Wittering Formation (sand, silt and clay) underlies the Landfall Site and a section of the Onshore Cable Route until Milton. Between Milton and the Great Salterns Golf Course, the bedrock is composed of laminations of Portsmouth and Whitecliff Sand Members, London Clay, Bognor Sand and Lambeth Group which run east to west across the Onshore Cable Route. The northern half of this Route Section is underlain by a number of Chalk Formations. The bedrock geology of this Route Section is primarily overlain by River Terrace Deposits (Sand and Gravels), with Raised Marine Deposits and Beach and Tidal Flat Deposits in the area of Langstone Harbour. Raised beach and tidal flat deposits are elements of marine sedimentary sequences preserved as ribbons of deposits around coastlines which are now raised above the shoreline (from former high sea-levels) (Pope & Bates, 2016).

4.2.4.2.

Elevations range from 1.4 m OD at the southern sea-facing boundary of the Landfall Site to 11.0–14.0 m OD, 2km to the west of the Order Limits in the City of Portsmouth. The east of Portsea Island lies at around 1.5 m OD, along the edge of Langstone Harbour which runs parallel to the eastern boundary of the Order Limits from Milton in the south to the A27 at the north.

### 4.3. PAST INVESTIGATIONS

#### 4.3.1. ARCHAEOLOGICAL MONITORING OF GEOTECHNICAL INVESTIGATIONS

4.2.4.3.

Archaeological monitoring of geotechnical trial pits was carried out in April–May 2018. These were undertaken in the area of the proposed Converter Station and Onshore Cable Corridor, near Lovedean (Route Sections 1 and 2). The work consisted of monitoring the excavation of 20 geotechnical test pits, and seven California Building Ration test pits (**Figure 5**). The results of the investigation identified only a limited number of archaeological features, including a possible shallow linear feature aligned east-west likely an undated field boundary. A number of geotechnical trial pits and boreholes were carried out at intervals along the remainder of the Onshore Cable Corridor, much of which lies within brownfield land. Due to the highly localised nature of these and their broad spacing, the data from them would be of very limited use and these were not archaeologically monitored. Information from the logs and pit descriptions has however been considered in this assessment and were consulted as part of the Geophysical fieldwork scoping exercise.

4.3.1.1.

#### 4.3.2. GEOPHYSICAL SURVEY (2019)

Between March–August 2019 Wessex Archaeology on behalf of WSP carried out a detailed gradiometer survey across the greenfield areas of the Site (**A1e**, see Appendix 21.3 (Geophysical Survey Report)). The area surveyed totalled 96.5 hectares including the proposed Converter Station Area, the greenfield sections of the Onshore Cable Corridor, and selected JBs and HDD areas (see 1.6.1.12).

4.3.2.1.

Within Route Section 1, the Geophysical Survey identified a number of potential archaeological assets. These include possible enclosure ditches within the north-eastern corner of the proposed Converter Station, of likely prehistoric or Romano-British date (**A161**). The features are visible as a network of rectilinear anomalies, which could represent former boundary features or enclosures.

4.3.2.2.

Weaker anomalies (interpreted as ‘possible’ archaeology), similar in form to the above were also identified to the north and east of this location which could indicate further ditch features or possibly a round barrow. Across this Route Section, several possible pits were noted. These could represent prehistoric refuse pits or possibly quarrying activity suggesting wider settlement activity nearby. Many of these are equally likely to be natural in origin and could be evidence of localised variation in the magnetic susceptibility of the underlying geological deposits or natural pitting in the bedrock.

4.3.2.3.



Elsewhere two chalk pits were identified these are most likely to representing 19th century chalk pits as seen on the Ordnance Survey historical mapping.

Within Route Sections 2–3, where the Onshore Cable Route passes through agricultural fields, the Geophysical Survey produced limited evidence of likely archaeological remains. Within Route Section 2, several probable archaeological pits were identified (**A162, 163, 164**), but these do not appear to follow any particular alignment and a natural origin cannot be ruled out. In the southern part of Route Section 2, further probable pits were identified (**A165, 166**) which appear to follow a linear alignment, suggesting they may be archaeological in nature, for example small-scale hand-dug quarrying.

4.3.2.4.

4.3.2.5.

In Route Sections 4, 5 and 7 no clear anomalies of archaeological origin were identified and in these areas, evidence of modern disturbance was evident (e.g. drainage features/ services).

### 4.3.3. OTHER PAST INVESTIGATIONS

Within the archaeological assessment study area there have been a total of 26 past investigations, consisting primarily of archaeological evaluations and watching briefs. Seven of these investigations have been undertaken within the Order Limits itself which are described below.

4.3.2.6.

Considering the full length of the Proposed Development, this is a relatively small number of investigations. Consequently, current understanding of the nature and distribution of past activity, in particular for the prehistoric, Roman and early Saxon period, for which there is no documentary record, is very limited.

4.3.3.1.

#### Route Section 1

Four site-based archaeological investigations have been carried out within this Route Section. These include the recent archaeological magnetometry survey undertaken across the Order Limits (**A1e**) and the archaeological monitoring of Geotechnical Trial Pits in 2018 (**A1t**) which are described above. Two further archaeological investigations have been carried out with this Route Section associated with other development schemes (**A1d** and **A147**), the results of which are described below.

4.3.3.2.

In 2014, an archaeological strip, map and sample excavation was undertaken to the west of the existing Lovedean Substation within the north-central part of the Order Limits. The investigation followed stripping of two areas and also included a watching brief during the digging of water pipe trench to the north of this area on higher ground (see **Figure 6**). Within the eastern area two isolated Bronze Age cremation pits were found, each of which contained an urn dated to the Middle Bronze Age filled with a small quantity of cremated bone. It was evident that both pits had been heavily truncated by ploughing.

4.3.3.3.

4.3.3.4.



Two further pits were identified to the south-east of this area, of which one contained a similar urn but no human remains. An associated 4 m long linear feature was also recorded to the south west of these pits which contained two prehistoric flint flakes. During the watching brief a single ditch of pit was revealed (on higher ground) which was found containing Middle to Late Bronze Age, Late Prehistoric and Romano-British pottery, suggesting possible background activity in this area.

- 4.3.3.5. In 2014, Cotswold Archaeology undertook an archaeological evaluation to the north of the eastern part of Route Section 1 (to the south of the existing Lovedean Substation), of which single trench out of seven was excavated within the boundary of the Order Limits. The investigation recorded two undated ditches along with a large pit 70 m to the north (outside of the Order Limits). The ditches were interpreted as relating to a post-medieval field boundary visible on the Catherington Tithe Map of 1838 (not reproduced). The function of the large pit was uncertain, prehistoric pottery was recovered from its fill but was interpreted as residual (not in original location in which it was deposited).
- 4.3.3.6.

### Route Sections 2–10

- 4.3.3.7. In Route Section 4, at Old Park farm to the south-east of Hambledon Road, an archaeological evaluation was carried out in 2005 (**A1f**), of which one small areas lie within the Order Limits. The investigation found six Romano British ditches, and undated ditches/postholes/pits. Two palaeochannels were also identified. The main phase of occupation for this site seems to have begun in the Late Iron Age and extended until just after the Roman conquest. The use of the site would appear to have ceased c AD150. None of the recorded features were recorded within the part of the site within the Order Limits
- A small part of the Order Limits has previously been covered by a wider geophysical survey, carried out in 2005 in Waterlooville (**A1g**). Features identified by the survey include a pentagonal enclosure, a funnel or second enclosure, possible ridge and furrow marks, a circular enclosure and a possible boundary ditch.
- 4.3.3.8. An archaeological evaluation was carried out close to The George Inn, Portsdown in 1966/67 within Route Section 4 (**A1h, see Figure 7**). The work was carried out in advance of construction of the new A3 London Road diversion at the Portsdown junction. It is not clear from the original fieldwork report the extent of topsoil stripping but it does state the topsoil was removed over the entire area south-east of the road junction. It is assumed this included part of the Order Limits which is currently occupied by the A3. The stripping in this area revealed evidence of a small Iron Age domestic site.
- 4.3.3.9. Two Anglo-Saxon inhumation burials and two parallel ditches were also found, which potentially form the edge of an Anglo-Saxon cemetery located further to the west.

An archaeological watching brief was carried out in 2009 during ground investigations works along the M275, M27 and A27 revetments (**A1i**). A total of ten test pits were dug, two of which lies within the Order Limits in the south-east corner of the A27 roundabout (Route Section 7). No archaeological features or finds were observed, however preserved timber recovered from an alluvial deposit indicated the potential for palaeoenvironmental remains.

4.3.3.10. A geoarchaeological watching brief was carried out in 2009 on geotechnical works relating to the North Portsea Island Coastal Flood and Erosion Risk Management Scheme (**A1j**). A subsequent archaeological watching brief was carried out in 2016 for the scheme. No material of archaeological interest was recorded during either investigation. Half of the 42 geotechnical locations recorded on the Portsmouth HER lie within the Order Limits.

## 4.4. ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

### 4.3.3.11. 4.4.1. THE PALAEOLITHIC (800,000–10,000 BC)

The Palaeolithic saw alternating warm and cold phases and intermittent perhaps seasonal occupation.

4.4.1.1. In the Lower Palaeolithic, during the glacial maxima, sea levels would have been lower and the English Channel dry land suitable for hominin (a species closely related to humans) exploitation (Wessex Archaeology 2019, 20). The earliest evidence of hominin activity in the UK has been identified at Happisburgh on the Norfolk coast and at Pakefield on the Suffolk coast, dating from 900,000 and 700,000 BP respectively (Parfitt *et al* 2005, 2010, quoted in Wessex Archaeology 2019, 20).

4.4.1.2. Falling sea levels exposed former beach deposits along the South coast, and these sand and silt deposits shows signs of coastal deposition. Raised beach deposits with evidence of hominin activity in the form of *in situ* flint knapping debris has been found, notably at Boxgrove in West Sussex, and at Benbridge on the Isle of Wight (Wessex Archaeology 2019, 20).

Throughout most of the Anglian Glaciation (500,000–400,000BP) it is thought that Britain was largely uninhabited but with the warmer conditions of the Hoxnian interglacial evidence of hominin activity can be seen, with evidence in hand axes from the gravel terraces along the Solent (*ibid*, 21). It is possible that the coastal plain was used for forays into intertidal marshes, with the lower portion of river valleys exploited for fishing and fowling (*ibid*).

4.4.1.3. During the Upper Palaeolithic (40,000–10,000 BC), after the last glacial maximum, and in particular after around 13,000 BC, further climate warming took place and the environment changed from steppe-tundra to birch and pine woodland. It is probably at this time that England saw continuous occupation. Hunting camps are recorded in Southern Britain, suggesting a mobile, adaptable population of skilled hunters.

4.4.1.5. The landscape around the Langstone Harbour and Portsea Island would have been shaped by the changing sea levels resulting in landscape characterised by a series of rivers running south through deep ravines into the Solent across a low-lying plain (Hey & Hind 2014). After 15,000 BP, there was an increased human exploitation of the landscape. Former shorelines, lakefronts and riverbanks would have been particularly attractive locations for hunting camps with close access to predictable resources such as fish, game and water. As the climate warmed, the area is likely to have presented a favourable habitat and as such, almost anywhere within the marine zone with buried sediments has the potential to produce Upper Palaeolithic material (Wessex Archaeology, 2019).

The only Palaeolithic finds from the archaeological assessment study area, as noted on the HER, are limited to a group of presumably residual flint implements (**A80**) found by chance in Milton Cemetery in 1921, 380 m to the south-west of the Order Limits.

#### 4.4.2. THE MESOLITHIC (10,000–4000 BC)

4.4.1.6. The Mesolithic hunter-gatherer communities of the postglacial period inhabited a still largely wooded environment. The river valleys and coast would have been favoured in providing a predictable source of food (from hunting and fishing) and water, as well as a means of transport and communication. Evidence of activity is characterised by flint tools rather than structural remains. During the early Holocene, the rising sea levels gradually submerged the English Channel, which drowned the Solent River eventually creating the West Solent, Christchurch Bay and Poole Harbour (Wessex Archaeology 2019, 22). At this time, the palaeovalleys became filled by estuarine deposits by rising sea levels, with eventual inundation of marine sediments (ibid.)

4.4.2.1. Known early Mesolithic activity within Hampshire is focused almost entirely in the east of the county in the Greensand landscapes and evidence for activity in the Chalk lands is sparse. By the late Mesolithic, smaller dispersed camps and activity are visible over a wider part of the Hampshire landscape and flint scatters are widespread, both on and off the chalklands.

#### Section 1 – Lovedean (Converter Station Area)

4.4.2.2. Within the archaeological assessment study area around the Converter Station evidence for Mesolithic activity is limited to a possible Thames Pick (early Mesolithic adze) found by chance in a dump of material in a garden at Saltbox Barn, Denmead (**A127**), 15m from the western edge of the Order Limits, and flint flakes which were found to the east of Sawyer’s Hill (**A133**), 225 m to the north-west of the Order Limits.

#### Sections 2–9 – Onshore Cable Corridor

4.4.2.3.

4.4.2.4. The intertidal area of Langstone Harbour, adjacent to the east of the Onshore Cable Corridor, is known to have been a focus for activity during this period. During the late Mesolithic, rapidly changing sea levels had a significant impact not only on the whole terrestrial environment and coastal landscape, but also on the nature, presence and distribution of resources. The present coastal plain of Hampshire would have been far inland in the late Mesolithic, prior to marine regression; evidence from Langstone Harbour shows that it remained a river valley with an open, grassy hinterland and not a marine environment, only really starting to become a coastal environment in the Bronze Age (Hey and Hind 2014, 73).

Evidence of Mesolithic activity derives primarily from the north-western edge of Langstone Harbour near Farlington Marshes. A number of flint tools were also recovered from a small island to the west of the marshes (A27), 50 m to the east of the Order Limits. A Mesolithic microlith was also found on the shoreline (A23), 60 m to the east of the Order Limits. Mesolithic waste flakes have also been found on the north side of Grove Road, Drayton (A57), 420 m to the west of the Order Limits.

#### **Section 10 – Eastney (Landfall)**

4.4.2.5. There are no sites or finds dating to the Mesolithic period recorded within this Route Section of the study area.

#### **4.4.3. THE NEOLITHIC (4000–2000 BC)**

4.4.2.6. The Neolithic period is usually seen as the time when hunter gathering gave way to farming and settled communities, and forest clearance occurred for the cultivation of crops and the construction of communal monuments. Pollen records indicate forest clearance over large areas of the British Isles during this period. Evidence of Neolithic activity in Hampshire is abundant, however, it is difficult to trace the transition from a mobile to a settled agricultural lifestyle using the archaeological evidence. The evidence indicates that all landscape types were utilised and exploited, including the coastal areas and Neolithic material has been found in many locations on Portsea Island and on the islands and mud flats in both Portsmouth and Chichester Harbour. 4.4.3.1. These low-lying areas would also have been suitable for settlement and farming, providing dry land with close access to the intertidal resources of Langstone Harbour and ready access to the coast.

#### **Section 1 – Lovedean (Converter Station Area)**

Only one find dating to the Neolithic is recorded from within the Converter Station archaeological assessment study area: a stone axehead found by chance in Anmore (A134), 230 m to the south-east of the Order Limits.

#### **Sections 2–9 – Onshore Cable Corridor**

Within the study area, Neolithic flakes and a segment of a leaf-shaped arrowhead were recovered from a small island to the west of Farlington Marshes (**A27**), 60 m to the east of the Order Limits. This is an area which has produced significant quantities of prehistoric material (see above). A flint axehead was also found immediately adjacent to the north-east of the Order Limits in a rear garden at Southdown View (**A34**), towards the northern end Route Section 4.

4.4.3.3.

A prehistoric barrow of probable Neolithic date (**A74**) located on Portsdown Hill, 60 m to the west of the Site Boundary, was broken into in 1816 and found to contain 12 Saxon burials (later insertions). Further investigation in 1966 (**A1h**) found that the chalk forming the mound was modern (relating to nearby road construction). The most substantial evidence for Neolithic activity from within the study area comes from an area of land to the west of Waterlooville (**A1f**), the border of which lies directly adjacent, or in close proximity to, the western edge of the Order Limits. Numerous features were revealed during geophysical surveying of the area (**A1g**); subsequent excavation found a late Neolithic or early Bronze Age pit containing flint and pottery fragments. Middle-late Neolithic pottery sherds were also recovered from the topsoil. A Neolithic double-ditched enclosure, along with burnt flint and pottery was also identified.

4.4.3.4.

### **Section 10 – Eastney (Landfall)**

No evidence of Neolithic activity is recorded within the study area of the Landfall.

4.4.4.

### **THE BRONZE AGE**

This period is characterised by technological change, when copper and then bronze eventually replaced flint and stone as the main material for everyday tools. It is seen as a period of increasing social complexity and organised landscapes, probably due to increasing pressure on available resources. Settlement on the chalk landscapes continued in the Bronze Age, and farming intensified. During this period, with rising sea levels, the wetland area of Langstone Harbour became increasingly subject to tidal inundations along the broad river valleys and saw the growth of saltmarsh environments, which may have been exploited for salt production as early as the Bronze Age, although at present the earliest evidence for this dates to the Iron Age (HCC 2010, 19). Field and linear divisions become more prominent and important and linear ditches, or ranch boundaries appear at this time. Trackways and rectilinear enclosures were also created but contemporary settlements were apparently rare and unenclosed (Hey & Hind 2014, 124). Round barrows also become much more conspicuous features on the landscape during this period, and sometimes developed into entire cemeteries (Hey & Hind 2014, 104).

4.4.3.5.

4.4.4.1.

### **Section 1 – Lovedean (Converter Station Area)**

4.4.4.2.

Within the Converter Station study area, an archaeological strip, map and sample excavation, followed by a watching brief during the digging of a water-pipe trench to the north of the stripped areas, was undertaken on land to the west of Lovedean Substation (**A1d, see Figure 6**). The investigations found two isolated Middle Bronze Age cremation pits, each of which contained an urn dated to the Middle Bronze Age, although they were found to have been heavily truncated by ploughing. Each contained a small quantity of cremated bone. Two further truncated pits were also found, one of which contained a similar Middle Bronze Age urn but no human remains. A 4.0 m long linear feature located immediately to the south-west of the two pits was also revealed on the lower slopes of the excavation site (with two flint flakes). The cremation burials and other pits are typical features associated with Middle Bronze Age funerary activity.

During the watching brief, a single ditch or pit was also revealed at the northern end of the investigation area on the higher ground and was found to contain Middle to Late Bronze Age, Late Prehistoric and Romano-British pottery, which may be indicative of nearby prehistoric settlement activity. Finds from the area include Mesolithic flint flakes and unclassified Iron Age finds, discovered 390 m to the north-west of the Order Limits.

4.4.4.3.

The recent magnetometry survey (**Appendix 21.3**) within this Route Section identified a number of potential archaeological features from this period. Notably, these include a network of positive linear anomalies (**A161**). These cover an 85 x 55 m area and are indicative of ditch features forming a network of enclosures. Such features could represent Bronze age boundary features (based on form and nearby evidence), although it is not possible to predict based on the Geophysical Survey results alone. Otherwise, numerous possible pits were identified throughout, which could represent prehistoric pits.

4.4.4.4.

#### **Sections 2–9 – Onshore Cable Corridor**

Within Section 2 numerous discrete positive anomalies have been identified by the recent Geophysical Survey (**A162–A166**). These are 3–5 m in diameter and are interpreted as archaeological in origin as they are on a broadly north-east to south-west orientation and likely indicate pit-alignments. It is not possible to determine an exact date for such features from the Geophysical Survey results alone. However, features of this type can typically date to the Bronze Age.

4.4.4.5.



- 4.4.4.6. Much of the activity dated to the Bronze Age within the Onshore Cable Corridor study area appears to be focused on the chalk ridge of Portsdown Hill, west of Purbrook and Waterlooville. A Bronze Age boundary was identified by a line of post-holes bounded by an east-west gully (**A20**) on Portsdown Hill, 100 m north of the Order Limits. An oval Bronze Age barrow (Gob's barrow) located on Portsdown Hill 40 m to the north of the Order Limits was opened in 1926 (**A10**). The western part of the barrow contained a crouched inhumation burial of a young male accompanied by a flint dagger, beaker and jet bead; the eastern part contained cremations and a flint scraper. A further possible Bronze Age bowl barrow 400 m to the east of Gob's Barrow (**A39**) and 160 m to the north of the Order Limits is indicated on Ordnance Survey maps of 1930 and 1951.
- To the north of Portsdown Hill, archaeological investigations on an area of land to the west of Waterlooville (**A140**) were carried out after initial geophysical survey (**A1g**). The border of the area lies directly adjacent to the Order Limits. The investigations revealed a late Neolithic or early Bronze Age pit containing burnt and worked flint, and pottery fragments. Later Bronze Age activity included a ditched trackway; a gully enclosing a Middle-Bronze Age urned cremation burial was also observed. Residual Middle Bronze Age pottery was also found across the investigation area.
- 4.4.4.7. Elsewhere, Bronze Age flint remains have been found at Purbrook Park Clay Pit (**A137**), 450 m to the west of the Order Limits (within plough soil). Towards the northern end of the Onshore Cable Corridor, fragments of probable Bronze Age pottery were found near Wecock Common (**A29**), 1.5 m to the east of the Order Limits. An Early Bronze Age barbed and tanged arrowhead was also found in the vicinity of Kingscote Road, Cowplain (**A32**), 785 m to the north east of the Order Limits.
- 4.4.4.8. In the southern part of the Onshore Cable Corridor on Portsea Island (Route **Sections 7-10**), as with the earlier prehistoric periods (see above), most evidence for Bronze Age activity in the area derives from the vicinity of Farlington Marshes. Bronze Age pottery was recovered from an area to the west of the marshes (**A22**; **A23**), 80 m and 245 m to the east of the Order Limits, respectively. 25 pieces of Bronze Age pottery (from 3 pots) were also recovered from a pit found in this area (**A25**), 30 m to the east of the Order Limits.
- 4.4.4.9. Further to the south near Milton, a Bronze Age hoard of four palstave axes (**A95**), 630 m to the west of the Order Limits, was found in the spoil heap during excavations for foundations at St. Mary's Hospital. Within Route Section 9, the HER records the chance of a Late Bronze Age hoard discovered within the grounds of St James Hospital (390 m west of the Order Limits). No further information is listed on the HER other than the asset was destroyed in 1941 by WWII bombing action.

#### **Section 10 – Eastney (Landfall)**

4.4.4.10.

No evidence of Bronze Age activity is recorded from within the study area of the landfall site.

#### 4.4.5. IRON AGE (600 BC–AD 43)

4.4.4.11. During this period the climate deteriorated with colder weather and more rainfall. The period is characterised by expanding population, which necessitated the intensification of agricultural practices and the utilisation of marginal land. The intensification of farming supported the beginnings of European trade and urban populations in the Later Iron Age, for example at the Hampshire Iron Age oppidum which preceded the Roman town of Calleva Atrebatum (Silchester) (HCICA 2010, 26).

4.4.5.1. The greatest extent of field systems and settlement hierarchies have been found on the open downland and evidence suggests that woodland was extensively cleared in Hampshire by the Late Iron Age. Hillforts were established in lowland Britain and the chalk landscape is studded with these sites, such as Old Winchester Hill (7 km to the north of the Order Limits), and Beacon Hill (10.5 km to the north-west of the Order Limits). These important central defended sites indicate political and/or military control of the landscape. The non-chalk landscapes were also being permanently exploited, however, the degree of settlement and field systems in these areas is often

4.4.5.2. much more limited and in places absent, indicating less intensive agricultural uses such as seasonal grazing, or small-scale production (ibid). The nature of coastal exploitation in the Iron Age is not clearly understood (HCC 2012, 24), however, in the natural bay of Langstone Harbour to the east, water levels would have been sufficient to allow saltwater ingress enabling an intertidal salt making industry to flourish; Iron Age salt production sites have been observed at the top of both Portsmouth and Langstone Harbours.

#### Section 1 – Lovedean (Converter Station Area)

290 m to the east of the proposed Converter Station (within the Order Limits), pottery broadly dated to the later prehistoric period was recovered from a ditch or pit found during a watching brief at Lovedean Substation (**A1d**). It was suggested that the ditch/pit is presumably of late prehistoric or Romano-British date and may be evidence of nearby settlement or activity. Unclassified Iron Age finds and pottery sherds were also found to the east of Sawyer’s Hill (**A133**), 225 m to the north-west of the Order Limits

#### 4.4.5.3. Sections 2–9 – Onshore Cable Corridor



4.4.5.4. As for the Bronze Age, much of the activity dated to the Iron Age within the Onshore Cable Corridor study area appears to be focused on the chalk ridge of Portsdown Hill and the area to the north, west of Purbrook and Waterlooville. Within the middle/central part of the Site Boundary, evidence of a small Iron Age occupation site was revealed during an archaeological evaluation close to The George Inn, Portsdown (**A1h**) in 1966/67. The occupation site consisted of a hearth, storage area and a domestic or manufacturing area. Finds consisted of weaving equipment, pottery fragments (quern stone) and animal bones, most of which were recovered from features cut into the chalk. Excavations undertaken in 1963–5 near Hoylake Road, within the study area revealed evidence of an Iron Age ranch boundary and stock enclosure (**A142**). The boundary ditches of another Iron Age enclosure (**A48**) were discovered 75 m to the north of the Order Limits during the cutting of a gas pipe trench in 1969. Possible fragments of quern stone were also recovered, along with fired clay, three pig molars and pottery.

A further archaeological investigation, conducted in 1995 at Portsdown Hill (**A3**), 475 m north-east of the Order Limits, found a complex of successive Iron Age fields and boundary earthworks. A few sherds of pottery and a prehistoric scraper/arrowhead were found in the plough soil by the footpath to the west of The Dell (**A49**), 175 m to the west of the Order Limits.

4.4.5.5. To the north of Portsdown Hill, archaeological investigations carried out on area of land immediately adjacent to the west (and partially within) the Order Limits in Waterlooville (**A1f, A1g/A140**) found extensive remains of a Late Iron Age/Romano-British settlement. The remains comprised large ditches, gullies, shallow pits and hearths along with a banjo enclosure. Prior to these investigations, there had been little or no evidence of rural settlements of this nature being present or having been identified within this part of Hampshire.

4.4.5.6. At Old Park Farm, Waterlooville (**A1f**), two phases of archaeological investigation were carried out over 40 ha of farmland. The north-eastern boundary of the farmland runs directly adjacent to the Order Limits. The investigations revealed a series of cut features including ditches, however, the second phase of investigation identified that the main phase of occupation at the site appears to have begun in the Late Iron Age and extended until just after the Roman conquest. Further possible prehistoric features including pits, ditches and an area with patches of burnt flint were also observed.

In the southern part of the Onshore Cable Corridor on Portsea Island (Route Sections 7–10), Late Bronze Age/Early Iron Age pottery sherds were recovered from a small island to the west of Farlington Marshes (**A27**), 60 m to the east of the Order Limits. Iron Age pottery was also found at Ebery Grove (**A94**), 40 m to the north-west of the Order Limits in Route Section 8.

### **Section 10 – Eastney (Landfall)**

4.4.5.7. No evidence of Iron Age activity is recorded from within the study area of the Landfall.

#### 4.4.6. ROMAN PERIOD (AD 43–410)

Roman influence on the landscape of Hampshire lasted 400 years and included urbanisation, population growth, and the extension of agriculture into more marginal areas (HCICA 2010, 27). A principal site of Roman activity in the area was the late 3rd century Saxon shore fort at Portchester (Portus Adurni), 4.9 km to the west of the Order Limits, which controlled the sheltered Portsmouth Harbour, an important communication link with the continent at this time. The great walled fortress was part of a defensive line of similar ‘Saxon shore forts’ designed to ward off foreign invaders, which stretched from the Wash to the Solent (Quail 2011, 19). Winchester (Venta Belgarum) (24 km to the north-west), Chichester (18 km to the east) and Silchester (Calleva Atrebatum) (45 km to the north) were the three main towns, but there were also a number of small market towns such as Havant (4 km to the east) and Bitterne (22km to the west). Evidence of Roman occupation along the coast is limited, however, despite the two sizeable Roman walled sites at Bitterne (Clausentum) and Portchester (Portus Adurni).

4.4.6.1.

The Order Limits is intersected by a known Roman road; Margary’s (1973) projected route ‘421’ (A1q) which crosses the Onshore Cable Corridor in Route Section 4. The road would have linked the Roman settlements at Chichester and Bitterne, two important Roman towns. The road intersects the Order Limits just south of Purbrook and can be traced through Southbourne, Emsworth and Warblington to Havant, with the modern A27 following its approximate course.

4.4.6.2.

Within the rural landscape, villas and farmsteads were built, and a new strategic road network laid out over the irregular pattern of earlier fields and trackways. Agricultural production was highly valued, and capable of supporting urban populations and trade with the empire. Intensive farming continued on the chalk where large field systems with embedded farms are evident. Whilst farms and estates were probably amalgamated, the evidence suggests continuity of ownership and tenure embedded in Iron Age field systems but with continued modification in the Roman period (HCICA 2010, 27).

4.4.6.3.

##### **Section 1 – Lovedean (Converter Station Area)**

Within the Converter Station Area study area, Roman pottery was found in an enclosure ditch at Prew’s Hangar oil exploration site (A53), 670 m to the north of the Order Limits. Romano-British pottery was also recovered from a ditch or pit revealed during a watching brief for the digging of a water-pipe trench to the west of Lovedean Substation in 2014 (A1d) within the northern part of Route Section 1. The excavation report suggests the ditch or pit, located on high ground looking south across the site, is presumably of later prehistoric or Romano-British date and may be evidence of nearby settlement or activity.

4.4.6.4.

##### **Sections 2–9 – Onshore Cable Corridor**

4.4.6.5. The focus for Roman activity within the Onshore Cable Corridor study area appears to be to the north of the chalk ridge of Portsdown Hill in the area to the west of Purbrook and Waterlooville. Archaeological investigations were carried out on an area of land to the west of Waterlooville (partially within the Order Limits) (**A140**) in 2007, 2008 and 2013 following geophysical surveying of the area in 2004/5 (**A1g**). Extensive remains of a Late Iron Age/Romano-British settlement and activity focussed on the higher ground in this area was identified in the form of an enclosure ditch which contained Roman pottery (Samian ware) and burnt material. Investigations nearby at Old Park Farm (**A1f**), adjacent to the Order Limits, revealed a series of cut features including numerous ditches and other features of Romano-British date. One large ditch was recut at least once and contained large fragments of Romano-British pottery suggesting settlement nearby. Use of the site appears to have ceased shortly after the conquest (AD 44-60). Evidence for domestic occupation and metalworking was also observed. The investigation also produced the earliest find of okra in Britain, which suggests it was indirectly associated with coastal trade and contact.

4.4.6.6. Roman pottery was also found in the garden of 168 London Road, 30 m to the south-west of the Order Limits and opposite the area of land investigated west of Waterlooville (**A1g**; **A140**). Small fragments of Iron Age and Roman coarseware were also recovered from the fill of an Anglo-Saxon inhumation burial during an archaeological evaluation at The George Inn, Portsdown (**A1h**) within the central part of the Order Limits within Route Section 4. The top of a Roman pitcher was also found on the surface of one of two ditches and was possibly related to the burials. On Drayton Lane, a bronze coin of Vespasian was found in a backfilled pipe trench (**A51**), 240 m to the south of the Order Limits, while 60 m to the south, a hoard of nine Roman silver coins was found during metal detecting of the area in 1976 (**A61**). A Roman coin was also found in the garden of the Rectory, Portsdown (**A55**), 90 m north of the Order Limits.

4.4.6.7. Elsewhere in the Onshore Cable Corridor study area, on Portsea Island, Roman pottery sherds and briquetage (pottery sherds from salt water evaporation bowls used for salt production) were recovered from the west and south of Farlington Marshes, along with other prehistoric material (**A22**; **A26**; **A27**), while the flint footings of two east–west walls of a Roman building were exposed in a trench, together with pottery and tiles of 1st to 2nd century date, in the vicinity of Gladys Avenue, Cowplain (**A31**) 2.2 km to the east of the Order Limits in Horndean.

4.4.6.7. **Section 10 – Eastney (Landfall)**

There is one find dating to the Roman period from within the Order Limits at the Landfall. In 1977, a 3rd century bronze coin was found on the shore of West Winner (**A1p**) on the southern edge of the Order Limits.

4.4.7. **EARLY MEDIEVAL (SAXON) PERIOD (AD 410–1066)**

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4.4.7.1.

Following the withdrawal of the Roman army from England in the early 5th century AD the whole country fell into an extended period of socio-economic decline. There is limited evidence for the early medieval period within Hampshire, however, the evidence that does survive indicates a rural agricultural society. Early Saxon cemeteries and a range of settlements have been found on the chalk hills such as at Charlton (5.4k m to the north-east), where evidence of over 60 buildings has been found. By the 5th century, settlement nucleation was taking place in the valleys, and the higher ground left for stock pasture or arable (HCICA 2010, 30). It is difficult to ascertain exactly how early Saxon agriculture and land use was organised, however, it is clear that in the chalk landscapes the modern land divisions and settlement were set in in this period; a feudal system of large manors and estates farmed in smaller units. Hampshire's recognisable boundaries were recorded in the Saxon period charters. Both the county boundary and many estate and parish divisions that are still present today emerged at the end of the Saxon period and were often the focus for the foundation of later medieval villages (HCC 2012, 36; HCICA 2010, 30).

4.4.7.2.

A shift occurred between the 8th and 11th centuries, from which a much more organised society emerged with population growth, trading ports, cathedrals, urban centres and a capital city. In rural areas in southern England recognisable villages formed, with many 'planned' in nature along a main street or around a village green. Many village origins, likely to be related to the organisation and exploitation of field systems, may belong to the increasing organisation of rural life along with the formation of parishes and hundreds (an administrative and judicial unit, originally comprising a 100 families) in the 9th and 10th centuries (Hey & Hind 2014, 240). In the 9th and 10th centuries, the Saxon Minster system began to be replaced by local parochial organisation, with formal areas of land centred on nucleated settlements served by a parish church. By the end of the 11th century most present day villages were in existence (HCICA 2010, 30). These were particularly formed around manor farms and village churches which started to be built from the 7th century onwards.

### **Section 1 – Lovedean (Converter Station Area)**

There are no known sites or finds dating to the early medieval period within the Proposed Converter Station archaeological assessment study area. The area would have been largely forest during this period, and would later become part of the Royal Forest of Bere, a hunting ground established in the Norman period.

### **Sections 2–9 – Onshore Cable Corridor**

4.4.7.3.

4.4.7.4.

Within the Onshore Cable Corridor study area, early medieval activity is focussed on the chalk ridge of Portsdown Hill towards the centre of the Order Limits (Route Section 4). An archaeological evaluation was carried out close to The George Inn, Portsdown (**A1h**) in 1966/67. Two Anglo-Saxon inhumation burials and two parallel ditches were discovered on an east–west alignment. The first grave contained the remains of an adult male accompanied by three iron knives, an iron buckle and the remains of a bronze bound wooden bucket. The burial had been contained within an arrangement of planks or a coffin. The second grave had been cut into the surface of the chalk and the head had been severed. There was no evidence of a coffin or any grave goods. Fragments of Saxon and earlier pottery were also recorded from the grave fill. Two ditches possibly related to the burials were revealed to the south and east of the graves, possibly forming a boundary to the cemetery. The Saxon cemetery (**A74**) is thought to be located near the former Naval Telegraph on Portsdown Hill although the exact site is unclear and the location added to the HER is approximate. The HER locates the cemetery 80m to the west of the Order Limits. The HER records that 12 probably Saxon burials were removed from a prehistoric barrow on Portsdown Hill in 1816 after it was broken into by labourers quarrying chalk and that the site probably consisted of a Neolithic long barrow and secondary Saxon cemetery. To the north of Portsdown Hill, an archaeological evaluation was carried out at 86–92 London Road, Purbrook in 2011 (**A30**), immediately adjacent to the Order Limits recorded a number of features ranging in date from the Saxon period.

### Section 10 – Eastney (Landfall)

4.4.7.5.

There are no recorded sites or finds dating to the early medieval period within the Landfall study area, nor on the part of the Onshore Cable Corridor on Portsea Island. Portsmouth is not recorded as a manorial estate in the Domesday Book of 1086, however as it was a favourable landing place there is likely to have been a harbour or port here and a small maritime settlement. Settlement in the area of Portsea Island likely consisted of a few sea-faring people along the coast, occasional market towns linked by a road network with scattered farmsteads beyond.

4.4.8.6.

### **LATER MEDIEVAL PERIOD (AD 1066–1540)**



4.4.8.1. Following the Conquest, the Normans imposed their rule on an already settled landscape, with its patterns of villages and other settlements almost complete, and a level of farming equal to that of later centuries. According to the Domesday Survey in 1086, the majority of people in Hampshire lived along the river valleys, and agricultural wealth was similarly focused there (HCICA 2010, 31). Hampshire's landscape was heavily influenced by the extent of royal and ecclesiastical ownership and around a quarter of Hampshire's land was church-owned. There are still many chases (private land for hunting) and deer-parks which date to the medieval period, as well as a range of medieval fish ponds in former royal forest areas (Forest of Bere), which radiate out from Winchester, 24 km to the north-west (ibid).

4.4.8.2. The later medieval villages of Hampshire were set within the parishes that emerged at the end of the Saxon period, and are still traceable in our present landscape. The Saxon and medieval open field system which operated within the river valleys started to be enclosed through informal agreements. The strip and furlongs of the open field system were reflected in the enclosures and can be traced in places (ibid). In the chalk downland the parishes often extend up to where there are extensive areas of common pasture. In vales and valleys, large parishes typically have nucleated villages.

**Section 1 – Lovedean (Converter Station Area)**

4.4.8.3. This Route Section lies within the historic parishes of Hambledon in the west, and Catherington in the east. The boundary of the two parishes runs broadly north–south through the centre of the area. The Royal Forest of Bere lies partly within the southern reaches of the two parishes, also covering much of the parishes of Southwick and Wymering through which the proposed Onshore Cable Corridor would run. The Royal Forest of Bere was heavily wooded with agricultural clearings extending across south-east Hampshire from the River Test at King's Somborne in the west to the River Ems, Emsworth in the east. Like other royal forests, its main purpose was to provide hunting, but by the 17th century it had become an important timber resource and was used as a source of oak for the navy to use in shipbuilding.

4.4.8.4. In 1316 Hambledon was included in the East Meon Hundred which was held by the bishop of Winchester. It was formed into a separate hundred in the reign of Edward III, when it contained the tithings of Chidden, Glidden and Denmead. The village of Hambledon lies in the west of the parish, 2 km to the north-west of the Order Limits, with its current church having developed from a small pre-Conquest nave and chancel, a good part of which still remains.

- 4.4.8.5. The submanor of Denmead in Hambledon parish was also in the hands of the Bishop of Winchester in 1316 and was leased by the bishops to various tenants during the 13th century. It was first called a manor in 1449. Denmead, which lies 650m to the west of the Order Limits, was never a clearly defined settlement like Hambledon, but consisted of a number of scattered farms and cottages. It is generally accepted that Rookwood Farm (**A87**), 1.4 km to the west of the Order Limits, dating from around 1200, was previously Denmead Manor Farm (VCH Hants iii). Rookwood, a Norman Hall with late medieval extensions, is a Grade II\* listed house which lies 1.4 km to the east of the Site Boundary. A few sherds of later medieval pottery were found amongst a dump of artefactual material in the garden at Saltbox Barn, Denmead (**A127**) immediately adjacent to the Order Limits near Edney's Lane in Route Section 2.
- 4.4.8.6. Catherington is a large parish with its village, 1.5 km to the north-east of the Order Limits, lying almost in its centre on the brow of the hill round the base of which runs the main road from Clanfield to Lovedean. It was included in the hundred of Finchdean (known as Ceptune at the time of Domesday). The parish church of St. Katherine dates to the end of the 12th century, and though it is thought to develop from an older church, gives little evidence of its predecessor's size and arrangements. The manor of Catherington is probably included under the heading of Ceptune in the Domesday Book and seems to have formed part of the great manor of Chalton until the time of Robert de Belesme at the start of the 12th century. The modern village of Anmore lies along the edge of the southern boundary Route Section 2, along Anmore Road. In early times, the manor of Anmore formed part of the manor of Hinton Daubnay. The lands were recorded in 1381 as a mixture of arable, pasture and underwood.
- 4.4.8.7. The village of Lovedean lies 1.3 km to the east of the Order Limits. The sub-manor of Lovedean was purchased by the manor of Hinton Daubnay in the 18th century and still forms part of the estates (VCH Hants iii). The placename of Broadway Farm House, which lies in the south-east of the Order Limits (Route Section 1), just south of the current Lovedean Substation, is recorded in the Hampshire HER (HER ref: 39333) as being documented from 1350, where it is recorded as 'Brodweye'; similarly, Lovedean is also first documented in 1350 under the name of 'Levedent' meaning Leofa's Valley (HER ref: 39336).
- 4.4.8.8. Data recorded via the Hampshire South Downs Mapping Project to the north-east and south-east of the Converter Station Area indicates a dense concentration of undated linear features (ditches and banks) which may relate to the agricultural history of the area (**A146**). These are visible as cropmarks identified on aerial photographs in the west of the parish and was digitally plotted by HCC. These cropmarks may be evidence of further ancient field systems and boundaries.



The 16th century saw the break-up of monastic lands, which had a major landscape impact as these estates were eventually sold off to private landowners. This resulted in the growth of largely privately-owned farming estates with new landowners and a tenant farming class which completed the shift from a feudal system to a privatised system (HCICA 2010, 33).

### Sections 2–9 – Onshore Cable Corridor

- 4.4.8.9. The Onshore Cable Corridor crosses five historic parishes in Route Sections 2–9, two of which have been described above (Hambleton and Catherington). The remaining four are summarised separately below.

#### Farlington

- 4.4.8.10. The Order Limits runs through this parish from the A27 in the south, north through Farlington and Purbrook until Waterlooville. The Order Limits mainly runs north through this parish but then forks to the north-west just below the northern boundary of the parish adjacent to Waterlooville.

- 4.4.8.11. Farlington parish runs northwards from Langstone Harbour. In the south of the parish and to the east of the Order Limits is the low-lying expanse of Farlington Marshes, from which the ground rises to Portsdown Hill and beyond. To the north is the well-wooded country of Purbrook and Waterlooville, which once formed part of the Forest of Bere. Farlington seems originally to have been a royal manor, lands in which were leased out by the king to various tenants. The church of St. Andrew, Farlington dates from the 14th century and lies 800 m to the east of the Order Limits, along Havant Road, although Pevsner and Lloyd (1967, 467) suggest that the lofty but relatively narrow nave of the church are proportions indicative of a Saxon origin.

- 4.4.8.12. Within the parish, a small amount of later medieval pottery was found in the garden of 168 London Road (**A107**), 30 m to the east of the Order Limits at the northern end of the parish (Route Section 4), while an Anglo-Norman ditch was discovered during an archaeological evaluation at 86–92 London Road (**A30**), 580 m to the south of this and immediately adjacent to the east of the Order Limits.

#### Wymering

- 4.4.8.13. The Order Limits lies within part of this parish: running north along the eastern edge from the Portsdown Hill/ A3 junction in Route Section 4 until its boundary at the northern edge of Portsea Island.

- 4.4.8.14.

At the time of the Domesday Survey, Wymering was part of the hundred of Portsdown and an ancient demesne of the crown, and land in Cosham and Portchester belonged to this manor. The modern village of Wymering lies approximately 2 km to the west of the Order Limits on the main road between Cosham and Fareham. Its church dates to the late 12th century and it is likely that settlement was focused in this area. The hamlet of Hilsea, 1.9 km to the west of the Order Limits seems to have no separate recorded history until the 14th century, and it is thus probable that up to this time Hilsea was also recorded in the Wymering manor.

4.4.8.15.

#### **Portsea**

The southern part of the Order Limits from Eastney Landfall running north for approximately 3 km (Route Sections 8 and 9) lies within the historic parish of Portsea. During the later medieval period, parts of the Order Limits lay within the western extent of the manor of Milton. The focus of settlement within the manor was probably strung out along Milton Road, one of the main north–south roads across Portsea island and which the Onshore Cable Corridor would run across for over 1 km. There is no medieval church so the settlement would have been small. An archaeological watching brief at Milton Campus (A4), 350 m to the north-west of the Order Limits along Milton Road observed the footings of buildings that are likely to relate to Lower Milton Farm, a farmstead known to be part of Milton manor from a document dated to 1691.

4.4.8.16.

4.4.8.17.

#### **Section 10 – Eastney (Landfall)**

The proposed Landfall lies within the south-east corner of the historic parish of Portsea. At the beginning of the later medieval period, this area was sparsely inhabited, and the town of Portsmouth, 2 km to the west of the Order Limits at its closest point, did not exist until the 12th century. The town was founded by King Richard I at the edge of the natural bay in the south-west corner of Portsea Island (Hey & Hind 2014, 241). Portsmouth's status grew following a royal charter granted in 1194 allowing a market to be held, arising from Richard I's decision to create a naval and military base from which he could attack France (Stapleton & Thomas 1989, 24). The south coast of Hampshire had always been important for overseas trade, coastal trading and for cross-channel shipping routes to Normandy and beyond (Hey & Hind 2014, 252); Portsmouth became an important trading port with the continent. Langstone Harbour to the east likely continued to be used for fishing and oyster farming, as well as saltmaking; three salterns are recorded in the Domesday Survey (Langstone Harbour Board 2018).

4.4.8.18.

During the later medieval period, the Landfall probably lay within the manor of Eastney. In the early 13th century, a manor and hamlet of Eastney was granted to Herbert, son of Matthew, along with a royal grant of Warblington (VCH Hants iii 192–202). The HER records the site of Eastney Farm (**A85**) 140 m to the north-west of the Order Limits, along Bransbury Road. A farm is shown on maps of this area dating back as far as 1600. Eastney was a manor by the end of the 14th century, and it is therefore possible that a medieval farmstead had existed within this area. There is no medieval church, thus the settlement was probably fairly small in this period.

4.4.8.19.

4.4.9.

## **POST-MEDIEVAL PERIOD (AD 1540–PRESENT)**

### **Section 1 – Lovedean (Converter Station Area)**

The Ordnance Survey 1st edition 1": mile map of 1810 (**Figure 8**) shows the Order Limits as lying within a rural landscape within the Forest of Bere at its southern extent and isolated farmsteads scattered across the open, agricultural landscape to the north. A number of farmsteads are shown within the study corridor, including the Broadway Farm. Much the same picture is given by the Ordnance Survey 1st edition 6": mile map of 1867–1875 (**Figure 10**), where the Order Limits is shown to be predominantly open and rural, with a mixture of open fields, woodland, copses and commons. Numerous chalk pits are also marked on this map and are most heavily concentrated in the west of the archaeological assessment study area in the vicinity of Denmead.

4.4.9.1.

In the Ordnance Survey 3rd edition 6" mile map of 1910–11 (not reproduced), there is little change in terms of landscape development, however, the extent of chalk quarrying in the area is clear, with old chalk pits scattered across the whole of the archaeological assessment study area. Two of these chalk extraction pits were identified during the recent Geophysical Survey within Route Section 1 (**Appendix 21.3**).

4.4.9.2.

Mapping of the area throughout the 20th century indicates little change to the Order Limits as a whole, however, the rapid expansion of the mid to late 20th century is shown to encroach into the study area, with the village of Denmead, located adjacent to the south-western boundary of the proposed Converter Station Area, which was once a small isolated village, growing rapidly from the 1960s onwards until today, where it verges on the scale of a town.

4.4.9.3.

The proposed Converter Station area remains largely rural, with the exception of the construction of Lovedean Substation located in the north east of the Order Limits and which is first shown on the Ordnance Survey 1: 10,000 map of 1980 (not reproduced). Today, the landscape of Route Section 1 with the exception of the existing Lovedean Substation, remains predominantly rural, with a patchwork of agricultural fields, woodland and small clusters of residential properties connected by narrow lanes.

### **Section 2–9 – Onshore Cable Corridor**

4.4.9.4.

4.4.9.5.

There is little indication on the Ordnance Survey 1st edition 1": mile map of 1810 (**Figure 8**) of settlement or industry within the area north of Portsea Island crossed by the proposed Onshore Cable Corridor. The landscape is shown to be a mixture of woodland, heath and open land presumably used for grazing and agriculture. The extensive Forest of Bere is also indicated on this map; the forest was the last Royal Forest in Hampshire to be disbanded in 1810 (HCICA 2012, 6). On Portsdown Hill Road, a telegraph is indicated on this map. This is the site of the first Naval telegraph in Portsmouth, erected in 1795 (**A75**), which lies 190 m to the west of the Order Limits. It was one of a line of shutter semaphore stations which operated between Southsea Common and London and allowed messages to be passed between the fleet at Portsmouth and the Admiralty in London.

4.4.9.6.

By the Ordnance Survey 1st edition 6" map of 1866–1868 (**Figures 10c and d**), the Order Limits is shown to intersect the north-eastern branch of the Portsmouth line of the London, Brighton & South Coast Railway (Route Sections 6 & 7), which was constructed in the mid-19th century in the area of Drayton Marshes. Adjacent to the northern edge of the railway, and 360 m to the east of the Order Limits, a reservoir, engine house and series of wells belonging to Farlington Waterworks are marked (**A150**). As the Onshore Cable Corridor moves north to the foot of the Portsdown Hill ridge, a further reservoir at Drayton, adjacent to the eastern edge of the Order Limits can be seen 480 m to the east; Farlington Farm (**A88**) is also marked. The farm is known to have existed since at least the 18th century and was replaced by an engineering works in 1852. As the proposed Onshore Cable Corridor moves north up the ridge, several chalk pits are shown to the west of the Order Limits. As the proposed Onshore Cable Corridor crosses the ridge and descends the slope to the north, the landscape changes from open, undeveloped fields to a mixture of fields and woodland, interspersed with cottages and farmhouses. The late 18th century landscape park at Purbrook (**A103**) lies 510 m the east of the Order Limits. To the north lies the village of Waterlooville, where the Order Limits forks to the form a loop around the proposed Converter Station Area (within Route Section 1). The village of Waterlooville began in 1815 after the Royal Forest of Bere was disbanded, divided into plots and sold for building.

4.4.9.7.

In the Ordnance Survey 3rd edition 6" mile map of 1910–11 (not reproduced), in the area of the Order Limits surrounding Farlington and Drayton Marshes (Route Section 7), a racecourse is indicated, crossing the Order Limits laterally with a Grandstand marked adjacent to the western edge. Along Portsdown Hill, gravel and chalk extraction pits continue to be indicated in the vicinity of the Order Limits. The Grade II listed Christ Church (**A111**), built in 1874, is also marked adjacent to eastern edge.

By the time of the Ordnance Survey 6" mile map of 1931–32 (not reproduced) residential development is shown to focus on Havant Road, which runs east to west across the Order Limits in the vicinity of Portsdown Hill (Route Section 4). Significant urban development is also shown to occur either side of the Order Limits along London Road, heading north towards Waterlooville. This development again focuses largely on the roadside and the area beyond remains largely rural and open.

- 4.4.9.8. The Scheduled Monument of Fort Purbrook (**A63**), located 270 m to the east of the Order Limits on Portsdown Hill, is also indicated for the first time on Ordnance Survey maps of the area from the early 20th century. The fort formed part of a ring of forts known as 'Palmerston's Follies' which were built in the later 19th century (c. 1860) to protect Portsmouth, its dockyard and harbour from French invasion. Five of the six forts positioned along the ridge of Portsdown Hill survive; additional forts were also located in Gosport and the Solent. The Scheduled Monument of Hilsea Lines (**A59**), 280 m to the west of the Order Limits and just south of the A27, a system of ramparts, bastions, casements and ditches built across the north of Portsea Island in 1858 on the site of earlier defensive works, are also indicated.

The mid-20th century brought great devastation to the area during the two World Wars. Further remains of the Second World War defence systems are also extant in the study area focused on the north of Portsea Island and Portsdown Hill. These include a bombing decoy shelter (**A21**) 165 m to the east at Farlington Marshes; anti-tank cubes near Tangier Road in Route Section 8, and at Farlington in Route Section 7 (**A65, A66**); three pillboxes, an interdiction battery and a London Air Raid Shelter in the vicinity of Portsdown Hill (**A67; A68; A69; A70; A71**).

- 4.4.9.10. The mid to late 20th century saw the rapid expansion of Havant, Purbrook and Waterlooville, and mass housing developments. Large areas of woodland were cleared for development, leaving 'island' fragments such as Queen's Enclosure, 600 m to the east of the Order Limits at Waterlooville (HCICA 2012, 7). The beginning of such development is clearly shown in the Ordnance Survey 1: 10,000 map of 1962–63 (not reproduced) where the urban settlement of Drayton is much expanded, with development bounded by the railway line to the south. To the north, settlement previously focussed along the roadside has expanded, particularly to the east of the Order Limits in the vicinity of Purbrook and the majority of the study area from Drayton, north to Waterlooville is urbanised. The construction of the A27, which crosses the proposed Onshore Cable Corridor laterally to the north of Portsea Island and Farlington Marshes (Route Section 6, 7), is indicated on the Ordnance Survey 1:10,000 map of 1973. Continued urban development is apparent in later maps of the area as a whole, particularly in the region of Waterlooville which has expanded significantly to the north-west along Hambledon Road towards Soake, and north-east along London Road towards Lovedean.



- 4.4.9.12. Baffins Farm (**A86**), a further post-medieval farmstead, is also indicated on the Ordnance Survey 1st edition 1": mile map of 1810 (**Figure 8**), 400 m to the north-west of the Order Limits in Route Section 8. A farm is known to have existed at Baffins from at least 1737. Salterns can also be seen running along the western edge of Langstone Harbour; salt extraction was a well-established industry in Portsmouth at this time. The fringes of Langstone Harbour are known to have been used for salt production since the prehistoric period. The process involved filling shallow pans with seawater in a field adjoining the sea to create brine. The brine would then be heated in a boiler house to create salt crystals (Brown 1983).
- 4.4.9.13. The proposed Onshore Cable Corridor continues south through Milton. Unlike other parts of Portsmouth, which rapidly urbanised in line with the expansion of the dockyard, Milton appears to have retained its rural character and the settlement appears largely confined to the roadside, with the surrounding area largely open, undeveloped land. As the proposed Onshore Cable Corridor continues north, running broadly parallel to Langstone Harbour, the landscape remains rural and open, with a number of lakes and ponds shown to the west of the Order Limits, on the edge of the intertidal mudflats of Langstone Harbour (marked as 'salterns'). As the route heads further north, towards the northern end of Portsea Island, there is little evidence of settlement or industry in this area. Farlington and Drayton Marshes are clearly labelled on this map indicating that much of the area was low-lying marshland at this time.
- 4.4.9.14. In the 18th century, Portsea Island was still largely comprised agricultural or common land. Holley's map of Milton, dated to 1750 (not reproduced) is useful in showing the principal roads and the surrounding tidal creeks at this time. A cluster of buildings can be seen between Milton Road and Locksway Road, immediately adjacent to the Order Limits. The Portsmouth HER suggests this was the site of Lower Milton Farm, a post-medieval farmstead. An archaeological watching brief carried out at Milton Campus in 2004 (**A4**) revealed evidence of the demolition layer of an 18th or early 19th century building likely to relate to the farm.
- 4.4.9.15. The proposed Onshore Cable Corridor continues south and passes through Eastney Farm (**A85**). From here, the Order Limits continues through an area of open land to Eastney Lane where it heads north and is crossed by the Portsmouth and Arundel Canal (**A1r**), which runs laterally through the Order Limits at the junction of Milton Road and Goldsmith Avenue, and is marked as 'The Old Canal'. The canal opened in 1823 and was built to allow better trading connections into Portsmouth and was entered from Langstone Harbour via a sea lock at Milton. The sea lock and basin to the east and within the Order Limits are the only surviving remnants of the Canal, which was designed as a stopping place for barges waiting for the incoming tide before continuing through Langstone and Chichester Harbours (PCC Conservation Area Appraisal, 18). The canal was ultimately unsuccessful and fell into disuse between the 1830s–1840s and was filled in by the 19th century.

## Section 10 – Eastney (Landfall)

- 4.4.9.16. By 1665, overcrowding within the walled town of Portsmouth, 2.2 km to the west of the Order Limits led to inevitable expansion out of the dockyard onto Portsea Island and the island's population increased significantly. King Charles I's warfare against the Netherlands in the second half of the 17th century and the post-1668 French struggle made Portsmouth an operational base, provisioning and maintaining the naval fleets (Webb, Quail & Riley 1997, 21). Following the renewed ship building in the dockyard with the launch of the Portsmouth (1650), a new double dry dock was ordered to be constructed in 1658, which increased business for the town. The majority of development was focused 2.2 km to the west of the Order Limits around Portsmouth Harbour, with the surrounding areas of Portsea remaining open fields. The settlement of Milton, to the west of the Order Limits, for example, appears to have retained its rural character throughout much of this period. An early map of 1665 by De la Fabvolliere (not reproduced) shows the area to the east of Milton as 'Milton Common Pasture', indicating it was undeveloped at this time.
- A small indistinct linear feature also marked on La Fabvolliere's map might indicate the remains of a later medieval or Tudor haven. In this area, the HER records a timber structure consisting of 64 timbers in the form of an inverted 'horse shoe' shape enclosing a shingle bank on the southern side of Eastney Lake (**A37**), 250 m to the north of the Order Limits. Alternatively, this area may have been used to dig clay to make the bricks for the building of the late 18th century Fort Cumberland (**A96**, see below).
- 4.4.9.17. At the beginning of the 19th century, the Landfall and the proposed Onshore Cable Corridor on Portsea Island remained a largely open, undeveloped landscape, as indicated by the Ordnance Survey 1st edition 1": mile map of 1810 (**Figure 8**). A small roadside settlement at Milton is indicated, as is Eastney Farm (**A85**) which lies 40 m to the south of the Order Limits and 780 m north-east of the Landfall Site. Eastney Farm is known to have existed from at least 1600; the HER suggests that an earlier manor had existed in Eastney by the end of the 14th century, however this is likely to have been small in scale. Apportionment for the parish of Portsea records the farm as a homestead with garden, marsh and pond. By 1932 the area had been developed for housing.
- 4.4.9.18.



4.4.9.19.

The proposed Landfall is located 85m to the west of Fort Cumberland scheduled monument (**A96**). The large angled bastioned fort was built in the mid 18th century and was designed to control the entrance to Langstone Harbour and to improve the defences of Portsmouth Dockyard. Prior to the construction of the fort, an earthwork battery was built on Eastney Point (by 1716) to defend access to Langstone Harbour. Work began on the first Fort Cumberland in 1747 and this first fort was star shaped. The second Fort Cumberland, completed in 1812, was pentagonal in shape with projecting defensive earthworks and was built mainly of brick and Portland limestone, with the Guardhouse and Storehouse being retained from the first fort. In 1858 Fort Cumberland was transferred from the War Department to the Board of Admiralty and in 1859 the fort became the temporary headquarters of the Royal Marine Artillery. The 1861 Royal Commission assessing barracks and accommodation lead to the construction of further buildings around the fort and to the modification of other buildings. During the twentieth century the fort was home to the Royal Marine Artillery Howitzer and Anti-Aircraft Brigade. In 1964 the fort became a scheduled monument and was vacated by the Royal Marines in 1975. It is now home to the English Heritage's Centre for Archaeology. The interior contains a number of free-standing buildings, including officers' quarters, a hospital, stores and workshops, the majority dating from the use of the fort in the 19th and 20th centuries.

There have been three past investigations on the fort (**A96; A5**); excavations across earthworks on the western side of the fort recorded below ground evidence of the glacis (artificial slope). Further evidence of the ramparts and ditches belonging to the first fort Cumberland of 1747 was revealed during a watching brief between casemates 36 and 13. A watching brief at the eastern edge of the fort (**A5**) revealed probable evidence of the glacis, which was found to be cut by an infilled ditch dating to the 18th century or later.

4.4.9.20.

The Ordnance Survey 1st edition 6" mile map of 1870 (**Figure 10e**) shows the Landfall and surrounding area as mainly undeveloped open land. A triangular area broadly located in the centre of the Site Boundary, bounded by the coast on the south, is shown as containing a gravel pit, with a coastguard station and practicing battery marked in the northern corner. (outside of the Order Limits) To the north-east of the coastguard station on the edge of Eastney Lake is marked a tidal lagoon known as 'Glory Hole'.

4.4.9.21.

- 4.4.9.22. The Ordnance Survey 2nd edition 6" mile map of 1897–98 (not reproduced), covering the area of the Landfall Site in the south, indicates military developments in the triangular parcel of land previously occupied by the gravel pit and coastguard station, with targets and a rifle range running north-east. The coastguard station has now moved south to the shoreline. To the south-west of the Landfall the extensive complex of Eastney Barracks (**A99**) is now shown. Eastney Barracks, designed by William Scamp (assistant director, Admiralty Works Department), was built as headquarters for the Royal Marine Artillery, who moved in from Fort Cumberland (**A96**) in 1867. Many of the remaining buildings are Grade II listed, while the two forts (Eastney Fort East and Eastney Fort West), and the perimeter defences are Scheduled Monuments. An archaeological assessment of the western fort was undertaken in 1994; the natural and mid-19th century stratification was found to be largely consistent and intact, with some degree of modern disturbance, however, no archaeological finds or features were recorded. Most of the complex was converted to housing in the mid-1990s and is now known as Marine Gate. The Royal Marines Museum, established in 1958, is located in the former officers' mess at the barracks. The Eastney Sewage Pumping Station (**A108**), which lies immediately adjacent to the eastern boundary of the Order Limits along Bransbury Road, is also indicated on this map. The pump house, boiler house and chimney of the former Portsmouth Corporation Pumping Station were built in 1887. The site is now an industrial museum and is a Scheduled Monument. The museum, engine house and gas engine house are all Grade II listed. At the northern end of Milton, to the east of the Order Limits in the vicinity of Warren Lane, a sand pit, gravel pit and kilns are indicated, while further to the north, to the west of the Order Limits, a brick, tile and pottery works is indicated in the vicinity of Great Salterns. These were to provide local brick for an expanding Portsmouth.
- 4.4.9.23. Little change to the Order Limits is apparent by the time of the Ordnance Survey 3rd edition 6" mile map of 1910–11 (not reproduced) aside from residential development which has occurred either side of the Onshore Cable Corridor to the south of the canal (**A1r**), 900 m to the north of the Landfall. By the time of the Ordnance Survey 6" mile map of 1931–32, the urbanisation in the area to the north of the Landfall Site noted above has begun to spread further south, bordering the Order Limits on its western side from south of the canal to the northern edge of Eastney Barracks (**A99**).
- 4.4.9.24. The urban development noted above is also indicated to have continued north into Milton, however, beyond this area, the landscape remains largely unchanged and undeveloped.

- 4.4.9.25. The mid-20th century brought great devastation to the area during the two World Wars. As a naval dockyard during the Second World War, Portsmouth was a key target. The city suffered 67 air raids from 1940–44, destroying nearly 10% of housing and killing 930 civilians (Easthope 1944, 5), although the focus was the centre of Portsmouth. Coastal defences can be seen in the area, at Eastney Beach within the Order Limits at Landfall, where anti-tank cubes (**A1s**), and a pillbox (**A97**) still remain. Further groups of anti-tank blocks also remain 780 m to the north-east of the Landfall on the edge of Langstone Harbour (**A41**; **A42**). The HER also records a machine gun emplacement (**A40**) 835 m to the west. To the north (within Route Section 8), an anti-aircraft battery (**A43**) is located 140 m to the west of the Order Limits, along Burfields Road, while 240 m west of the Order Limits in Route Section 7, lies a Pickett-Hamilton Fort ‘disappearing’ pillbox (**A15**), a Scheduled Monument. Pillboxes of this type were specially designed for the defence of the airfields. Three were built to defend Portsmouth airport and this is the only one still in its original location. A second (**A50**), now demolished, was located 690 m further south, immediately adjacent to the western edge of the Order Limits along Anchorage Road in Route Section 7.
- By the Ordnance Survey 1:10,000 map of 1962–63 (not reproduced), residential development has encroached further south towards the northern edge of the Landfall and lines the proposed Onshore Cable Corridor consistently from its junction with the Landfall in the south to Baffins, 2 km north. In the north of Portsea Island, to the west of Farlington Marshes and the Order Limits, Portsmouth City Airport is indicated. In the south, at the Landfall, the Ordnance Survey 1: 10,000 map of 2000 (not reproduced) indicates a Caravan Park within the Order Limits, with residential development immediately to the north.
- 4.4.9.26.

## 4.5. FACTORS AFFECTING SURVIVAL

- Given the scale of the Proposed Development and the varying landscape which it crosses, archaeological survival across the Order Limits is anticipated to be variable. Archaeological survival is predicted to be highest in the northern part of the Order Limits, in the vicinity of the proposed Converter Station and northern extent of the Onshore Cable Corridor (Route Sections 1–3), which is a predominantly rural and undeveloped landscape, although historic quarrying in the area will have had significant localised impacts.
- 4.5.1.1. Where the proposed Onshore Cable Route is located on existing roads, archaeological survival is anticipated to be low or possibly moderate, due to truncation from road and pavement construction and from the excavation of services and drainage trenches, which typically follow roads.
- At the Landfall, archaeological survival is expected to be low to moderate, due to developments on the Site from the late 19th century onwards.

### 4.5.1.2.

The main past impact on archaeological survival within the Order Limits as a whole are modern building developments, mechanised ploughing, historic quarrying, road construction and associated services, electricity pylons, vegetation root disturbance, and coastal erosion.

#### 4.5.2. SECTION 1 – LOVEDEAN (CONVERTER STATION AREA)

4.5.1.4. The existing Lovedean Substation, which lies at the eastern part of Route Section 1 was built in the late 20th century and represents a major change to the rural, undeveloped landscape of the surrounding area. The foundations used for the buildings present on the Site are unknown, however, if piled foundations have been used, any archaeological remains within the footprint of each pile will have been removed. Other kinds of foundations (e.g. standard pad or strip) would likely have extended to a depth of 1.0–1.5 mbgl and have truncated or completely removed any archaeological remains within their footprint.

4.5.2.1. It is assumed that the large expanse of hardstanding that covers much of the Site would have entailed fairly superficial ground disturbance and thus has had a limited impact on any underlying archaeological remains. Trenches for drains, services and electrical cables associated with the substation are likely to extend to depths of 1.0–1.5 mbgl and have truncated or completely removed any archaeological remains within their footprint.

4.5.2.2. Route Section 1 is located on almost entirely agricultural land. A number of the fields have been ploughed in modern times. The impact of this ploughing will depend on its nature, where deep ploughing has been used, this can cause considerable disturbance to any archaeological remains do a depth of around 0.3–0.4 mbgl. This was evidenced during the recent excavation of land adjacent to the current Lovedean Substation (A1d) where Middle Bronze Age funerary activity was recorded, however, the level of preservation was generally poor due to truncation by ploughing. The bases of deep cut features can survive the reworking of the topsoil by ploughing however.

4.5.2.2. 18th century chalk pits are shown scattered across Route Section 1 and archaeological assessment study area, as shown on Ordnance Survey historical mapping and the recent Geophysical Survey. This and any other past quarrying activity within the Order Limits and will have removed entirely any earlier archaeological remains within its footprint.

4.5.2.3. Several electricity pylons and posts run broadly south-west to north-east across the Order Limits. The construction of the foundations for these are likely to have truncated or completely removed any archaeological remains locally within their footprint.

4.5.2.4.

Fences, gates, stiles and hedgerows demarcating property and field boundaries are found on the land within the Order Limits. Section 1 also contains three areas of Ancient Woodland. Whilst archaeological features can survive within woodland and hedgerows, there may have been localised truncation from root action. The digging of trenches and holes for fence and gate posts will also have had a similar impact. Ground intrusion could potentially have severely truncated or completely removed any remains within their footprint to a depth of 1.0–1.5 mbgl at these locations.

#### 4.5.2.5. SECTION 2–9 – ONSHORE CABLE CORRIDOR

Trenches for drains and services associated with the roads and pavements are likely to extend to depths of 1.0–1.5 mbgl and have truncated or completely removed any archaeological remains within their footprint.

The construction of the existing road surfaces and pavement is likely to have involved excavation to a depth of 0.5 m. This may have truncated or removed any shallow archaeological remains.

4.5.3.1. Where the Order Limits comes off existing roads on to adjacent verges, archaeological survival is likely to be higher; although construction works associated with highways may have affected the survival in these areas.

4.5.3.2. Where the Order Limits lies on open playing fields/parks (e.g. Farlington Playing Fields in Route Section 7) archaeological survival is anticipated to moderate to high. The main potential impact in these areas would be from below ground service trenches, and possibly drainage ditches, especially along former wetland sites.

4.5.3.3. For example, numerous drainage features were recorded by the Geophysical Survey at Farlington Playing fields, in Route Section 7 (Appendix 21.3, Figure as suggested by the Geophysical Survey results from Farlington Playing Fields (Figure 26, **Appendix 21.3** (Geophysical Survey Report)).

#### 4.5.4. SECTION 10 – EASTNEY (LANDFALL)

4.5.4.1. The development of military constructions at the Landfall area are shown on the Ordnance Survey 2nd and 3rd edition 6": mile mapping (not reproduced). Within the Landfall, this is limited to former rifle ranges, extending across the existing Landfall carpark and proposed Onshore Cable Corridor in a north-east to south-west direction. Whilst the levelling for the rifle ranges may have truncated or removed archaeological remains within their footprint, these are not anticipated to be deep. By the Ordnance Survey 1: 2500: scale map of 1952–69 part of the Landfall it intersected by stone platform targets associated with the Rifle Range (100 & 200 yards), the construction of which may have affected the survival of potential archaeological remains

Any areas of concrete hardstanding associated with building development would have entailed ground disturbance to the depth of the works and thus has a limited impact on any underlying archaeological remains.

The construction of the existing road surfaces and pavement is likely to have involved excavation to a depth of 0.5 m. This may have truncated or removed any shallow archaeological remains.

- 4.5.4.3. The southern end of the Order Limits lies on Eastney beach, comprising intertidal mud and sand and a sand/shingle beach. An erosional landscape is presumed given the presence of concrete erosion protection on the beach. Coastal erosion may have compromised the survival of any archaeological deposits present on the shoreline. If the construction of the concrete erosion protection required below ground disturbance, this will also have compromised archaeological survival within its footprint, however, the nature and extent of the protection measures taken is, at present, unknown.
- 4.5.4.4.



# 5. STATEMENT OF SIGNIFICANCE:

## BURIED HERITAGE ASSETS

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### 5.1. INTRODUCTION

The ES Chapter contains a detailed breakdown of archaeological potential and likely significance for each Route Section.

The potential for each chronological period for the Order Limits is summarised below. This is based on the archaeological and historical background of the area, its geology, topography and hydrology, the likelihood for evidence of past activity, and taking into account past disturbance which may have affected survival. For example, there may be a high potential for the presence of activity of a particular period, but with low survival. This Section also includes professional opinion on the likely heritage significance of such remains, where there is potential for such to be present.

5.1.1.1.

### 5.2.1.2. PALAEOENVIRONMENTAL

*Overall, the Order Limits has a localised, moderate potential for palaeoenvironmental remains most likely to be present in the low-lying intertidal areas surrounding Langstone Harbour (Route Sections 7–10). Surviving alluvial deposits may contain well-preserved (due to waterlogging) organic remains, as indicated by the recovery of preserved timber from an alluvial deposit during a watching brief on the M275, M27 and A27 Portsmouth Revetments (A1i), at the northern end of Langstone Harbour in the vicinity of Ports Creek. Minerogenic deposits such as alluvial silts and clays have high potential for diatom preservation, the assessment of which can provide information on the salt or freshwater nature of deposits that would enhance interpretation of the past landscape. Peat deposits preserve pollen and floral and faunal microfossils such as seeds, plant fragments, molluscs and occasionally ostracods. Organic material can also be dated by radiocarbon techniques, important for establishing the chronology for the depositional sequence. In combination with geoarchaeological assessment of the sediments, examination of pollen and diatoms can provide valuable information of contemporary local environmental conditions. Such remains have evidential value for the past environment in which prehistoric and later people lived, and would be of **low** or **medium** heritage significance, derived from archaeological interest.*

5.2.1.1.



### 5.3. PREHISTORIC

Overall, the Order Limits has a moderate to high potential to contain prehistoric remains. Across the study area as a whole, there is evidence for prehistoric activity from the Palaeolithic through to the Iron Age. Within the proposed Converter Station Area (Route Section 1), the potential for prehistoric remains is considered high. Excavation to the west of Lovedean Substation revealed evidence of a Middle Bronze Age funerary activity, and a later prehistoric or Romano-British ditch or pit feature (**A1b**). Further investigation in the form of Geophysical Survey has revealed a series of recti-linear boundary ditches (**A161**), which could relate to the Bronze Age activity recorded nearby. Elsewhere, numerous pits have been identified across Route Sections 1–3, which are likely to relate to archaeological activity (**A162–166**). If present, such remains would be of **medium** or **high** significance, depending on their preservation and extent, derived from archaeological and historical interest.

5.3.1.1.

The upper chalk ridge at Portsdown Hill at the southern part of Route Section 4 appears to have been a focal point for late prehistoric activity. Within the Order Limits, evidence of Iron Age activity has been recorded in the form of a small domestic settlement with evidence for agricultural features and domestic activity nearby. As such, the potential for prehistoric remains in this area is considered high. It appears that some of these Iron Age field systems may have had Bronze Age origins, suggesting a sustained period of settlement. If present, such remains would be of **medium** or **high** significance, depending on preservation and extent, from derived from archaeological and historical interest.

5.3.1.2.

Part of the Onshore Cable Corridor and the Landfall at Eastney are located on Portsea Island to the west of Langstone Harbour (Route Sections 7–10), which would have been a suitable location for prehistoric settlement, being located on a natural promontory with close access to wetland intertidal resources of Langstone Harbour and the coast, and prehistoric (Mesolithic to Iron Age) evidence from within the study area appears to cluster particularly in the area to the west of Farlington Marshes, at the northern end of Portsea Island. Whilst limited evidence is recorded along the eastern extent of Portsea Island, this may be due to the lack of investigation carried out. The position adjacent to Langstone Harbour is likely to have been a favourable location for prehistoric activity, as such the potential for prehistoric remains in these area is considered moderate. The likely remains however would be limited to isolated flint tools, of **low** heritage significance, based on the archaeological and historical interest of the finds.

5.3.1.3.

### 5.4. ROMAN

5.4.1.1. Overall, the Order Limits has low, moderate to high potential to contain Roman remains. The focus for Roman activity within the study area appears to be to the north of the chalk ridge of Portsdown Hill in the area to the west of Purbrook and Waterlooville, adjacent to the Order Limits, where extensive remains of a Late Iron Age/Romano-British settlement and activity has been identified (A1g, A1f, A140). The activity is located just north of a projected Roman Road (A1h). It is possible that remains of this road lie preserved beneath the part of the proposed Onshore Cable Corridor where the road intersects along London Road. Within the proposed Converter Station Area, recent excavation to the west of Lovedean Substation revealed evidence of a later prehistoric or Romano-British ditch or pit feature, which contained pottery from these periods in its primary fill (A1b). Although uncertain, it is possible that dispersed settlement might thus have been located relatively close by. If present, such remains would be of **medium** or **high** significance, depending on preservation and extent, from derived from archaeological and historical interest.

## 5.5. EARLY MEDIEVAL (SAXON)

5.4.1.2. The Order Limits has a localised, moderate potential to contain early medieval (Saxon) remains in the area of Portsdown Hill (Route Section 4). Two Anglo-Saxon inhumation burials and two parallel ditches on an east–west alignment (A1h) were observed during an archaeological evaluation carried out within the Order Limits, near to the George Inn (see Figure 7). The two ditches were thought to be contemporary with the burials and although their function is not clear it is possible that they formed a boundary to a probable Saxon cemetery (A74) starting further to the west. The Order Limits thus has the potential to contain further archaeological remains relating to this possible cemetery.

5.5.1.1. If present, such remains would be of **medium** or **high** significance, depending on preservation and extent, derived from archaeological and historical interest.

## 5.6. LATER MEDIEVAL

5.5.1.2. Overall, the Order Limits has a moderate to high potential to contain later medieval agricultural remains, most likely within the rural parts of the Proposed Development (Route Sections 1–3). The Order Limits is located away from the main centre of medieval settlements, which lie further to the west and few finds or features dating to the later medieval period have been recorded in the study area. Field systems of possible medieval or later origin are visible as cropmarks on aerial photographs in the study area and evidence of ridge and furrow cultivation was seen in the Geophysical Survey results throughout Sections 1–3 (although these are more likely to be of a later post-medieval date). Potential Later medieval remains are likely to take the form of landscape features such as field boundaries and drainage ditches and possibly buried evidence of ridge and furrow cultivation.

If present, such remains would be of **low** significance, depending on preservation and extent, from derived from archaeological and historical interest.

## 5.7. POST-MEDIEVAL

5.6.1.2. Overall, the Order Limits has a moderate to high potential to contain post-medieval remains. For the majority of the Order Limits, the post-medieval landscape would have comprised agricultural farmland. As such, the main potential is for surviving features relating to this history, such as field boundaries and drainage ditches. These are most likely in the rural areas of the Order Limits (Route Sections 1–3, as suggested by the identification of field systems, visible as cropmarks on aerial photographs along with evidence of ridge and furrow cultivation recorded by the Geophysical Survey (A1e). Post-medieval agricultural remains such as field boundary ditches of cultivation layers would be of **negligible** heritage significance, based on the archaeological and historical interest of the finds.

5.7.1.1. Within route Section 9 of the Order Limits there is a moderate potential for remains associated with the early 19th century Portsmouth and Arundel Canal (A1r), which was located at the south-west of Portsea Island. The former canal passes through the Onshore Cable Corridor, at the junction of Milton Road and Goldsmith Avenue. The remains are likely to be limited to sections of canal walls and depending on their nature and extent the likely significance would be **low** or **medium**. This is derived from historical interest.

5.7.1.2.

# 6. STATEMENT OF SIGNIFICANCE: ABOVE GROUND HERITAGE ASSETS

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## 6.1. INTRODUCTION

Following Step 1 of the settings guidance, a scoping exercise took place for the entire route. Construction Stage and Operational Stage effects on above ground heritage assets along the Onshore Cable Route were scoped out on the basis the works would comprise only below-ground disturbance there would be no potential impact on the setting of heritage assets. The two sections taken forward for assessment were Section 1 – Lovedean (Converter Station Area) and Section 10 – Eastney (Landfall) (due to the additional Optical Regeneration Station(s) ('ORS') associated with Fibre Optic Cable Infrastructure).

### 6.1.1.1.

In respect of the potential impacts on above ground heritage assets around the Proposed Converter Station, a study area of 2 km from the footprint of the structures was used for the identification of heritage assets. In conjunction with the WSP Landscape team, a ZTV (see **Figure 3**) was used to identify Designated Heritage Assets beyond the radial 2 km where long-distance views of the proposed Converter Station may have an impact on their setting.

### 6.1.1.2.

Assets scoped into the assessment outside of the study area include Catherington Conservation Area, which was identified using the ZTV as having potential views of the proposed Converter Station. The ZTV was also used to scope out other potentially affected assets outside of the study area, such as Hambledon Conservation Area to the west.

For Route Section 10 (Eastney (Landfall)), a 500 m radial study area was used from the proposed ORS building(s), located within a car-park at the Landfall.

### 6.1.1.3.

Tables 5 and 6 below indicate which Designated and Non-designated Heritage Assets within each study area have been scoped out of the assessment as they would not be affected by the Proposed Development, in terms of material changes to their setting and or views. This is based on the distance of the asset from the proposed structures; the asset's location, scale and orientation, and the nature, extent and scale of intervening built form, vegetation and topography between asset

### 6.1.1.4.

and the buildings.

### 6.1.1.5.

Some assets have been grouped together, this is because they are historically associated or in close proximity to each other.

## 6.2. ROUTE SECTION 1 – LOVEDEAN (CONVERTER STATION AREA)

Table 4 – Justification for assets scoped out of assessment

Assessment Gazetteer Ref	Name, description	Rationale for exclusion
A124	<b>224 and 226</b> (Lovedean Lane) Grade II Two cottages, 17th century.	Located 800 m east of the proposed Converter Station (Option i) The assets 224 and 226 are located on Lovedean Lane. The rising landscape to the west of the Order Limits prevents any potential views of the proposals, as identified in the ZTV. There would also be no impact on the relationship between the two assets.
A118	<b>Rose Cottage</b> Grade II 18th century thatched cottage.	Located 1.9 km to the south-east of the proposed Converter Station Rose Cottage is located on Lovedean Lane. The asset is currently enclosed with modern residential development, limiting its views of the surrounding area. There are therefore no views of the proposals, as identified on the ZTV.
A1a	<b>Barn at Shafters Lane</b> Grade II 17th century barn.	Located 1.7 km to the south of the proposed Converter Station within Route Section 2. The barn is located on Anmore Road. Despite being identified as having potential views in the ZTV, later farm buildings to the north prevent any views towards the Converter Station (i & ii).
A26	<b>The Lower Garden</b> Grade II 16th century house.	Located 1.5 km to the south west of the proposed Converter Station, The Lower Garden is located on Edney's Lane. The cottage is currently completely enclosed by dense vegetation screening, preventing any views towards the proposed structures.
A84	<b>Pyles Farmhouse</b>	Located 1.6 km to the south-west of the proposed Converter Station.

Assessment Gazetteer Ref	Name, description	Rationale for exclusion
	Grade II Mid-18th century farmhouse.	Pyles Farmhouse is located on Kindmore Lane. Despite being identified in the ZTV, extensive vegetation screening in front of the house limits views to the north-east. This limited view would not impact on the setting of the asset or its significance.
<b>A121</b>	<b>Church of All Saints</b> Grade II Parish church, constructed 1880.	Located 1.8 km to the south west of the proposed Converter Station, the church is located on Hambledon Road. Residential development in the direction of the Order Limits and the rising topography of the land prevents any potential views, as identified in the ZTV.
<b>A123</b>	<b>Hartsfield and Gate Piers</b> Grade II House, dated 1700.	Located 2 km to the south west of the proposed Converter Station, the gate piers are located off Hambledon Road. Extensive residential development and tree screening prevents any potential views of the proposed structures.
<b>A122</b>	<b>Fairholme Cottage</b> Grade II 17th century cottage.	Located 2 km to the south west of the proposed Converter Station. The cottage is located on Hambledon Road. Extensive residential development and tree screening prevents any potential views towards the proposed structures, as identified on the ZTV.
<b>A89</b>	<b>Pithill Cottage</b> Grade II 17th century timber-frame cottage with thatched roof.	Located 1.1 km to the west of the proposed Converter Station, on the corner of Pit Hill Lane and Harrowgate Lane. The building is located north of a sharp land rise which prevents any views of the proposals as shown in the ZTV.



Assessment Gazetteer Ref	Name, description	Rationale for exclusion
A126	<b>Lone Barn Farm Barn</b> Grade II Early-18th century barn.	Located 1.9 km to the north-east of the proposed Converter Station. The barn is located on Old Mill Lane. The low position of the asset together with the rising landscape to the south as and an area of dense tree cover prevents any views of the proposals. This is shown on the ZTV.
A145	<b>Kings Cottage</b> Locally Listed Timber-framed cottage with thatched roof, 16th/17th century.	Located 1.7 km to the south of proposed Converter Station. Kings Cottage is located on Anmore Road. The distance of the asset from the Proposed Development prevents there being any harm to the setting and views of the asset, as confirmed by the ZTV.
1b	<b>Homestead</b> Locally Listed Timber-framed cottage with tiled roof, 17th century.	Located 1.7 km to the south of the proposed Converter Station. The Homestead is located on Anmore Road. The distance of the Converter Station to the asset prevents there being any harm to the setting and long views of the asset, as confirmed by the ZTV.
A91	<b>Barn at Lovedean Farm</b> Locally Listed Barn, unknown date.	Located 1.2 km south east of the proposed Converter Station. The Barn and Stable at Lovedean Farm are both located on the corner of Lovedean Lane and Coldhill Lane. Lane to the west of Lovedean Lane rises up significantly preventing any views of the proposals. This was confirmed by the ZTV.
A112	<b>Woodcroft Farmhouse &amp; Barn</b> Locally Listed	Located 1.8 km to the south east of the proposed Converter Station. Woodcroft Farmhouse and Barn are located at the end of Woodcroft Lane. The distance from the Proposed Development, interceding

Assessment Gazetteer Ref	Name, description	Rationale for exclusion
	Farmhouse dated to 1830 of flint with red brick quoins. Barn, dated to 1845, flint and brick.	vegetation screening and the low position of the asset prevents any views which would impact on the significance of the asset. There would also be no impact on the relationship between the two assets as part of the same farm complex.
A116	<b>Granary, Merrett's Farm</b> Locally Listed Granary, 18th/19th century, timber-frame and weatherboarded	Located 1.4 km to the south west of the Proposed Converter Station. Merritt's Farm is located on Whitehorse Lane. The distance of the asset from the Proposed Development together with intervening built form prevents any view which would impact on the significance of the asset.
A13	<b>Firgrove, Anmore Road</b> Locally Listed Former coach house, knapped flint with brick dressings. Unknown date.	Located 1.7 km to the south west of the Proposed Converter Station, Firgrove is located on Anmore Road. The distance of the Proposed Development from the asset prevents there being any harm to the setting and views of the asset, as confirmed by ZTV.
A14, A6, A131	<b>Soake Farmhouse and outbuilding</b> Locally Listed Farmhouse, 18th century brick. Outbuilding, 18th/19th century, thatched.	Located 2.3 km to the south of the Proposed Converter Station. Soake Farm is located on Soake Road. The long distance of the Proposed Development from the assets prevents there being harm to the setting and views out from the assets. The relationship between the two building would not be impacted.

Assessment Gazetteer Ref	Name, description	Rationale for exclusion
A160	<p><b>Hambledon Conservation Area</b></p> <p>Conservation area covering the village of Hambledon.</p>	<p>Hambledon is located approximately 2.8km to the north west of Options 1 and 3. The distance of the two options from the asset prevents there being any harm to the setting and views of the conservation area, this was confirmed with the ZTV. There would also not be any impact on the relationship between the heritage assets within the CA.</p>

### 6.3. SELECTED ASSETS OUTSIDE OF THE SITE

#### 6.3.1. ROOKWOOD

The pair of buildings at Rookwood include Rookwood (Grade II\*) (**A87**) and Granary 5 Metres West of Rookwood (Grade II) (**A125**). They are situated approximately 1.8 km to the west of the proposed Converter Station.

Rookwood is a Norman hall dated to approximately 1200 AD with later extensions from the medieval period and the 16th, 19th and 20th centuries. It is described by Historic England as a 'first-floor hall', and is a rare surviving building type. Originally the main living space would have been on the first-floor and would have been reached via an external staircase, the ground floor would have been used for storage.

6.3.1.1.

The Granary at Rookwood dates to the 17th century, it is of timber frame construction with a thatched roof.

6.3.1.2.

The setting of Rookwood and The Granary contributes to their heritage significance. As a pair, they form a strong historic group and their relationship to each other is an important factor in their setting. Furthermore, the assets are still located in a rural agricultural landscape, prominent in views out from the assets towards the south which also contributes to their significance.

6.3.1.3.

Rookwood is an asset of **very high** significance, derived from its historical and architectural interest. The Granary at Rookwood is an asset of **high** significance,

6.3.1.4.

derived from its historical and architectural interest. Their setting makes a high contribution to their significance, derived from their value as a pair of associated assets and in their views of the surrounding agricultural landscape and wooded area.

#### 6.3.2. LUDMORE COTTAGES

6.3.1.5.

Ludmore Cottages (**A129**), 970 m to the north east of the proposed Converter Station is Grade II listed and dates to the late-17th century. It was originally one dwelling which was split into two cottages in the late-20th century. It is likely to be of timber-frame construction with a later brick façade.

Ludmore Cottages was originally a farmhouse which continues to exist in a historic agricultural landscape. This contributes to its significance as a heritage asset and it helps understand its historic context.

- 6.3.2.1. Ludmore Cottages is an asset of **high** significance, derived from its historic and architectural interest. Its setting makes a high contribution to its significance, retained in its views of the historic agricultural landscape.

### 6.3.3. BARN COTTAGE

- 6.3.2.2. Barn Cottage (**A102**) is listed at Grade II and is located 1.2 km to the south of proposed Converter Station. It is a 16th century barn constructed of timber frame and brick infill with some early 19th century weatherboarding, 20th century west extension and a hipped thatched roof. The brick walls are of Flemish bond with part exposure of the frame.

- 6.3.2.3. Originally a barn, the asset remains in a historic agricultural landscape and has significant views of the surrounding fields. Primary views are to the north, east and south. Those to the west are screened by vegetation in the form of hedges along Edney's Lane.

- 6.3.3.1. Barn Cottage is an asset of **high** significance, derived from its historic and architectural interest. Its setting makes a high contribution to its significance, retained in its views of the surrounding agricultural landscape.

### 6.3.4.2. DENMEAD FARM

- 6.3.3.2. This group of assets are located 890 m to the south-west of the proposed Converter Station and include Denmead Farmhouse (Grade II) (**A109**), the Granary (Grade II) (**A109**) and the Cottage at Denmead Farm (Locally Listed).

- 6.3.3.3. Denmead Farmhouse dates to the 18th century and is constructed of brick with flint and brick dressings. The Granary is located 20m west of the main farmhouse. Dating from the early-19th century, it is constructed from timber frame with weatherboarding and a corrugated iron roof. The Cottage at Denmead Farm was originally a malt house of an unknown date.

- 6.3.4.1. Denmead Farmhouse and the Granary at Denmead Farm are assets of **high** significance, derived from their historic and architectural interest. The Cottage at Denmead farm is an asset of **medium** significance, derived from its historic and architectural interest. Their setting makes a high contribution to their significance, retained in their value as a group of associated farm buildings and in views of the surrounding agricultural landscape.

### 6.3.5. LITTLE DENMEAD FARM & BLEAK COTTAGE

This group of assets includes the Farmhouse at Little Denmead (Grade II) (**A101**), the Barn at Little Denmead (Grade II) (**A101**) and Bleak Cottage (Grade II) (**A93**). These assets are located approximately 1.1 km to the south-west of the proposed Converter Station.

Little Denmead Farmhouse is dated to the mid-17th century and is built of flint with red brick dressings and has a half hipped thatched roof. The Barn at Little Denmead dates to the 18th century. It is constructed of timber-frame with weatherboarding and a corrugated iron roof.

6.3.5.1.

Located adjacent to Little Denmead Farmhouse to the south, Bleak Cottage is a 16th century timber frame farmhouse with 20th century renovations. The walls are of exposed timber framing with painted brick infill, it has a half hipped tiled roof.

6.3.5.2.

This group of assets is situated in a rural agricultural landscape which is reflective of their historic farming associations. Views of this landscape contribute to the setting of the farm houses and associated ancillary buildings. Furthermore, their value as a group also contributes to setting, especially the relationship between the Farmhouse at Little Denmead and the Barn at Little Denmead as surviving assets belonging to the same historic farm.

6.3.5.3.

This group of assets are of **high** significance, derived from their historic and architectural interest. Their setting makes a high contribution to their significance through their views of the surrounding agricultural landscape and value as a group.

6.3.5.4.

### 6.3.6. STONEACRE

Stoneacre (**A120**) is a Grade II listed building dated to c 1450 and is located 1.2 km to the south west of the proposed Converter Station. Originally a hall house, it is constructed of timber frame with a half hipped thatched roof. Historic England describes the building as a rare and an exemplary example of a medieval hall house which retains many original features.

6.3.5.5.

Stoneacre has many views onto the surrounding agricultural landscape. Once a farmhouse, these views contribute to the asset's significance as they increase historic understanding.

6.3.6.1.

Stoneacre is an asset of **high** significance, derived from its historic and architectural interest. Its setting makes a high contribution to its significance through the views of the agricultural landscape which retain the asset's historic context.

### 6.3.7. SCOTLAND

'Scotland' (**A117**) is a Grade II listed early-16th century timber framed hall with 18th re-facing and a 20th century rear wing, it was later used as a farmhouse. It is located approximately 2 km to the north of the proposed Converter Station.

6.3.6.2.

6.3.6.3.

‘Scotland’ still exists within a rural agricultural landscape and is situated in an isolated position some distance from other properties. Its setting contributes to its significance through wide ranging views of the surrounding fields.

‘Scotland’ is an asset of **high** significance, derived from its historic and architectural interest. Its setting makes a high contribution to its significance as the historic agricultural landscape has largely been retained.

### 6.3.8. HINTON MANOR HOUSE

6.3.7.2.

Hinton Manor House (**A141**) is Grade II listed. It is an early-17th century Jacobean E-plan house with 19th and 20th century additions, situated approximately 2.3 km to the north east of the proposed Converter Station. The house is constructed from chalkstone and faced with flints, it has a tile roof with a Victorian Tudor stack and Victorian porch. Once a manor house, Hinton was later used as a farmhouse and remains in an isolated position enclosed within farmland.

6.3.7.3.

Its views onto the surrounding farmland form its main setting and contribute to its significance.

6.3.8.1.

Hinton Manor House is an asset of **high** significance, derived from its historic and architectural interest. Its setting makes a high contribution to its significance through its views of the surrounding farmland.

### 6.3.9. CATHERINGTON CONSERVATION AREA

6.3.8.2.

Catherington Conservation Area (**A159**) was designated by East Hampshire District Council in 2003. The conservation area is located 2.1 km to the east of the proposed Converter Station. The small village is situated on the top of a hill which developed over time into a linear development running parallel to the A3. It contains several listed buildings, including All Saints Church (listed at Grade II\*) and several cottages and farm buildings associated with the village's agricultural past.

6.3.8.3.

The position of the village on higher ground means that it has long views out of the surrounding countryside, seen from the main street through the gaps between buildings contained within it. This backdrop of agricultural views contributes to the significance of the area as it frames the rural position and historic agricultural context of the asset. The buildings of the village are spread along Catherington Lane and views of this sporadic settlement along the road also contribute to the significance of the conservation area.

6.3.9.1.

Catherington Conservation Area is an asset of **high** significance, derived from its historic and architectural interest. Its setting makes a high contribution to its significance through its extensive views of the surrounding countryside and through the visual and historic relationships of the designated heritage assets in the village to each other.

6.3.9.2.

## 6.4. SECTION 10 – EASTNEY (LANDFALL)

6.3.9.3.



**Table 5 – Justification for assets scoped out of assessment**

Assessment Gazetteer Ref	Name, description	Rationale for exclusion
A1s	<p><b>World War II Anti-Tank Defences at Eastney Beach</b></p> <p>Grade II</p> <p>Concrete cubes - anti-tank obstacles on Eastney Beach, installed in 1940.</p>	<p>Located 200 m to the south of the Landfall and 90 m west of the Order Limits. The intermittent anti-tank defences are spread along Eastney Beach in an east-west direction. Views of the Landfall from the beach are prevented by a leisure park and the low-lying nature of the beach; as such, the potential for significant harm through a change in setting is unlikely. There would also not be any impact on the component parts of the anti-tank defences to each other and their relationship to the beach itself.</p>
97	<p><b>World War II Pillbox at Eastney Beach</b></p> <p>Grade II</p> <p>Rare type pillbox, built 1940.</p>	<p>Located 410 m to the south-west of the Landfall, the pillbox is located on the corner of Eastney Esplanade and Henderson Road. Views of the proposed ORS Building(s) are prevented by intervening built structures, such as a restaurant and leisure park, therefore there is no potential for harm to the asset, through a change to its setting.</p>
A108	<p><b>Eastney Sewage Pumping Station</b></p> <p>The asset includes:</p> <ul style="list-style-type: none"> <li>- Eastney sewage pumping station Scheduled Monument</li> <li>- Grade II listed mid 19th century Eastney beam engine museum</li> <li>- Grade II listed mid 19th Eastney depot: engine house</li> </ul>	<p>Located 405 m to the north-west of the Landfall. Eastney Sewage Pumping Station is located on Henderson Road. Based on the intervening residential buildings and the size of the proposed ORS Building(s), there is no potential for views from the asset and therefore no potential for harm to the asset through a change to its setting. There would also be no impact on the relationship of the historic assets to each other.</p>



Assessment Gazetteer Ref	Name, description	Rationale for exclusion
	<ul style="list-style-type: none"> <li>- Grade II listed mid 19th century Eastney depot: gas engine house</li> </ul>	

## 6.4.1. FORT CUMBERLAND

The group of assets which make up Fort Cumberland (**A96**) have been assessed together as they are all contained within the Scheduled Monument Area. They form a historic group and are located in close proximity to each other. The listed buildings within the scheduled monument area have not been assigned unique gazetteer references. The group of assets includes:

- 6.4.1.1. • Fort Cumberland – 17th–18th century fort buildings and surrounding perimeter defences (including below-ground features) - Scheduled Monument (**A96**),
- Grade II\* listed Late 18th century Fort Cumberland (**A96**),
- Grade II listed mid 19th century Former Officers Quarters (**A96**),
- Grade II listed Late 18th century Former Hospital and Ancillary Buildings (**A96**), and
- Grade II listed Late 18th century Former Guard House (**A96**).

6.4.1.2. Fort Cumberland (**A96**) is a pentagonal artillery fortification erected to guard the entrance to Langstone Harbour, east of Portsmouth’s Royal Navy Dockyard. The first forts on the site were earthwork fortifications, the first being built in 1714 with a replacement completed in 1747 on the orders of the Duke of Cumberland (Historic England, 1999). Work began on the first masonry fort on the site in 1785 and was completed in 1812 (ibid.). The second fort was built on a much larger scale, only retaining the guard house and store room which were incorporated into the new design (ibid.).

The fort continued to be used up to the 20th century, with adaptations and modifications made over the years to accommodate the changing nature of weaponry and military tactics (ibid.) It remained in military ownership for most of the 20th century, serving as a base for the Royal Marines who transferred ownership over to English Heritage (now Historic England) in 1975 (ibid.). The entire site was designated as a Scheduled Monument in 1964 and the main fort structure was listed as Grade II\* in 1969.

6.4.1.3. The Former Officers Quarters, constructed in 1865, was designated at Grade II in 1999. The Former Hospital and Ancillary Buildings were designated at Grade II in 1999. They were first constructed in 1746 with later extensions and adaptations. The Former Guard House, constructed in 1746, was designated at Grade II in 1999.

6.4.1.4. The setting of the designated assets within Fort Cumberland contributes to their heritage significance. They form a highly significant group of structures making up the Fort Cumberland complex, which is considered to be, ‘one of the most impressive pieces of 18th century defensive architecture remaining in England,’ (ibid.)

The location of the fort is important in understanding how it would have defended Langstone Harbour in an attack. It had direct lines of sight out to sea, and was also protected by a ravelin on its western side which defended the landward approaches. These sight lines are still evident and location significantly contributes to significance. The designated assets within Fort Cumberland (**A96**) have a strong relationship to each other as well as the surrounding landscape of the fort, situated prominently at the entrance to Langstone Harbour, which contributes to their context and understanding.

6.4.1.6.

The group of assets which make up Fort Cumberland is considered to be of **very high** significance. Their setting makes a **high** contribution to their significance, derived from their value as a group and the preserved surrounding landscape which contributes to their context and understanding as heritage assets. Although the presence of modern residential developments have impacted on the asset's historic setting.

6.4.1.7.

6.4.1.8.

## 7. CONCLUSION

### 7.1. ARCHAEOLOGY (BELOWGROUND)

Given the scale of the site and the varying landscape which it crosses, archaeological survival is anticipated to be variable. Archaeological survival is predicted to be highest in the northern parts of the Order Limits in the vicinity of the proposed Converter Station Area and northern part of the Onshore Cable Corridor in Route Sections 1–3. These areas lie within a predominantly rural and undeveloped landscape. The majority of the Onshore Cable Corridor from Soake in the north-west and Lovedean in the north-east running south to the Landfall at Eastney (Route Section 10), lie within the footprint of the existing roads and landfill areas. Archaeological survival is expected to be low to moderate in these areas. At the Landfall, archaeological survival is expected to be low to moderate.

7.1.1.1.

The table below contains a summary of the known or likely buried assets within the Order Limits and their predicted significance. The impact of the Proposed Development on the significance of these predicted assets is assessed with Chapter 21 Heritage and Archaeology, along with a detailed description of the relevant elements of the Proposed Development which would cause impact.

**Table 6 – Buried Heritage Assets identified within the Order Limits**

7.1.1.2.

Heritage Asset	Potential	Asset Significance
<p><b>Palaeoenvironmental Remains</b> in the form of alluvial deposits containing information on local/contemporary environmental conditions.</p> <p>Such remains are likely to be present in the low-lying intertidal areas where Raised Marine Deposits survive surrounding Langstone Harbour, in Route Sections 7–10.</p>	Localised, Moderate potential	<b>Low or Medium</b>
<p><b>Previously unrecorded Prehistoric remains, comprising:</b></p> <ul style="list-style-type: none"> <li>- Evidence of dispersed settlement/agricultural field systems, ie enclosure ditches (<b>A161</b>), rubbish/quarry pits and possibly kilns within Route Sections 1–3,</li> <li>- Potential Bronze Age cremation burials within the proposed Converter Station Area (Route Section 1),</li> </ul>	Moderate to high potential.	<b>Low, Medium or High</b>

<ul style="list-style-type: none"> <li>- Possible Iron Age agricultural/settlement activity within Route Section 4,</li> <li>- Isolated prehistoric flint tool finds, across Route Sections 1–3 and 7–10.</li> </ul>		
<p><b>Previously unrecorded Roman remains</b> in the form of agricultural activity (ie field boundary ditches) and possibly below-ground evidence of a former Roman road (<b>A1h</b>) in Route Section 4 and possible dispersed settlement remains in Route Section 1.</p>	Low to high potential.	<b>Medium or High</b>
<p><b>Early Medieval (Saxon) burials and possible enclosure ditches</b> at Portsdown Hill (Route Section 4).</p>	Localised, moderate potential.	<b>Medium or High</b>
<p><b>Previously unrecorded later medieval agricultural remains</b> in the form of field systems and possible buried cultivation remains (ridge and furrow), most likely in Route Sections 1–3.</p>	Moderate to high.	<b>Low</b>
<p><b>Previously unrecorded post-medieval remains</b> including:</p> <ul style="list-style-type: none"> <li>- Surviving agricultural features (ie field boundary ditches of negligible significance),</li> <li>- Surviving below ground remains of the former Portsmouth and Arundel Canal (<b>A1r</b>) within Route Section 9,</li> </ul>	Moderate to high	<b>Negligible</b> (for agricultural remains and <b>Low or Medium</b> for canal walls)

## 7.2. BUILT HERITAGE

Neither of the proposed Converter Station options contain any Designated Heritage Assets. Within the Site itself there are two Designated Heritage Assets, comprising the Grade II listed former Milton Lock and Basin in Route Section 9, which is also designated as a conservation area (**A1c**). There are 21 Grade II listed buildings and one Grade II\* listed building in the 2 km study area around the proposed Converter Station location. Those assets that would be impacted through changes to their setting will be assessed in the Chapter 21 (Heritage and Archaeology) of the ES Volume 1 (document reference 6.1.21). Within the vicinity of the landfall, the assessment has identified one asset that could be affected in terms of changes to its setting, comprising Fort Cumberland Scheduled Monument, which lies 85 m to the east of the Order Limits.

7.2.1.1.

## REFERENCES

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- AOC. (2018). *AQUIND Interconnector, Archaeological Watching Brief Report*.
- Brown R. (n.d.). Story of Hayling Island. 1983.
- CiFA [Chartered Institute for Archaeologists]. (2014). Standards and guidance for commissioning work or providing consultancy advice on archaeology and the historic environment. Reading.
- CiFA [Chartered Institute for Archaeologists]. (2014). Standards and Guidance for historic environment desk-based assessment. Reading.
- Council for British Archaeology. (2009). Defence of Britain: a national study if Second World War anti-invasion landscapes in Britain. English Heritage.
- Department for Communities and Local Government. (2018). *National Planning Practice Guidance*. Retrieved October 23rd, 2018, from <https://www.gov.uk/government/collections/planning-practice-guidance>
- Department for Communities and Local Government. (2018). Revised National Planning Policy Framework.
- East Hampshire District Council. (2014). East Hampshire District Local Plan Joint Core Strategy.
- Geotechnics. (2019). *Ground Investigation UK-France HVDC Interconnector Package 3, Factual Report*.
- Hampshire County Council. (2010). Hampshire County Intergrated Character Assessment .
- Hampshire County Council. (2012). Hampshire Archaeological Strategy.
- Hampshire County Intergrated Character Assessment. (2010). An Overview of the Hampshire Landscape.
- Havant Borough Council. (2011). Havant Borough Local Plan (Core Strategy).
- Hey, G & Hind, J. (2014). Solent-Thames Research Framework for the Historic Environment Resource Assessments and Research Agendas. Oxford.
- Historic England. (1999, October 29). *Fort Cumberland 1015700*. Retrieved from Historic England: <https://historicengland.org.uk/listing/the-list/list-entry/1015700>
- Historic England. (2017). Conservation principles, policies and guidance. Consultation Draft. Swindon.
- Historic England. (2017). The setting of heritage assets, Historic Environment Good Practice Advice in Planning Note 3. Swindon.

- Landscape Institute and Institute of Environmental Management and Assessment. (2013). Guidelines for Landscape and Visual Impact Assessment 3rd Edition (GLVIA3).
- Langstone Harbour Board. (2018). *Langstone Harbour Board - History of the Harbour*. Retrieved March 26th, 2018, from <http://www.langstoneharbour.org.uk/about-history.php>
- Legislation. (1997). The Hedgerow Regulations.
- Page, W. (1908). A History of the County of Hampshire. *Victoria County History*.
- Pevsner, N & Lloyd, D. (1967). Hampshire and the Isle of Wight (Buildings of London). London.
- Pope, M., & Bates, M. (2016). Coastal and Submerged landscapes. In M. White, *Lost Landscapes of Palaeolithic Britain* (pp. 53-72).
- Portsmouth City Council. (2012). The Portsmouth Plan (Core Strategy).
- Stapleton B & Thomas J. (1989). The Portsmouth Region. Alan Sutton.
- Webb J, Qual S, Riley R. (1997). The Spirit of Portsmouth, A History. Sussex.
- Wessex Archaeology. (2019). Appendix 14.1 Marine Archaeology Technical Report.
- Winchester City Council. (2013). Local Plan Joint Core Strategy.



