


RPS

SHEERNESS WTM

HISTORIC ENVIRONMENT DESK BASED ASSESSMENT

8th July 2011

Our Ref: JLL0574

RPS
14 Cornhill
London
EC3V 3ND

Tel: 020 7280 3200
Fax: 020 7283 9248
Email: rpslp@rpsgroup.com

CONTENTS

SUMMARY	1
1 INTRODUCTION.....	7
2 DEVELOPMENT PROPOSALS.....	10
3 POLICY FRAMEWORK	12
4 TOPOGRAPHICAL AND GEOLOGICAL BACKGROUND	30
5 HISTORICAL BACKGROUND.....	31
6 BUILT HERITAGE BASELINE ASSESSMENT	44
7 ARCHAEOLOGICAL BASELINE ASSESSMENT.....	87
8 HERITAGE ASSETS/ASSESSMENT CRITERIA	107

Appendix 1: Historic Environment Record

Appendix 2: Plates (site photographs)

FIGURES

Figure 1:	Site Location
Figure 2:	The Proposal Site
Figure 3:	Heritage Features – Historic Dockyard Zone and Vicinity
Figure 4a:	Built Heritage Features within 1km Study Area
Figure 4b:	Built Heritage Features within 1km Study Area
Figure 5:	Built Heritage Features within 5km Study Area
Figure 6:	Archaeological Sites and Finds – Northern Study Area
Figure 7:	Archaeological Sites and Finds – Southern Area (including Whiteways)
Figure 8:	Historic Landscape Characterisation
Figure 9:	1572 Map ('Oriens')
Figure 10:	1667 Dutch Map
Figure 11:	1665-9 Map (De Gomme Defences)
Figure 12:	1755 Plan of His Majesty's Dockyard
Figure 13:	1770 Plan of His Majesty's Yard

- Figure 14: 1813 Plan of Dockyard pre-Rennie
- Figure 15: 1824 – Rennie’s Dockyard
- Figure 16: Plan Showing Mast Tunnel/Mast House
- Figure 17: Plan Showing Pump House
- Figure 18: Quadrangle Plan Showing Foundations
- Figure 19: 1858 Map
- Figure 20: 1864-5 1st Edition OS 1:10,560
- Figure 21: c.1900 Sheerness HM Dockyard
- Figure 22: 1908 OS 1:2,500 (Showing Whiteways)
- Figure 23: CC Department Offices – Pumping and Flooding Arrangements to Docks
- Figure 24: 1954 Admiralty Map
- Figure 25: 1974 Admiralty Map
- Figure 26: 1977 Medway Ports Authority Map
- Figure 27: Lappel Bank Reclamation
- Figure 28: 1980’s Borehole Record Sections for Lappel Bank.

DRAFT

SUMMARY

This report provides historic environment (built heritage and archaeological) baseline study relating to a proposed 68.4ha wind turbine manufacturing site within the southern area of Sheerness Dockyard and incorporating the northern area of the recently reclaimed Lappel Bank to the south. The report will inform a subsequent detailed impact assessment (EIA chapter) to be compiled following discussions with the heritage advisors to the statutory authorities including English Heritage, Swale Borough Council and Kent County Council. The study was commissioned by K2 on behalf of Peel Ports. In addition to the main Proposal Site the desk based assessment also considers heritage issues in relation to a subsidiary area known as the 'VW Group relocation site' (or 'Whiteways') that would be required for the relocation of the car import business currently located within the Lappel Bank.

a) Historical Summary

There are currently no records of settlement or naval activities within the Proposal Site until the 16th century, at which time there was a simple Tudor 'blockhouse' at the tip of the peninsula. The fort was rebuilt by Sir Bernard De Gomme in the 1660's during the 2nd Dutch Wars with a series of earthwork defences enclosing wider fortified triangle fully enclosing the peninsula. The south-west corner of the moated defences may have extended into the north-east corner of the Proposal Site. At this time the area to the south (including much the northern extent of the Proposal Site) comprised a Royal Navy repair yard and ordnance wharf centred on Powder Monkey Bay. These relatively undeveloped docks were set within the riverside inter-tidal mud flats. In the late 17th and 18th century a number of hulks were used as breakers and additionally as accommodation for the dock-workers and their families. The cluster of accommodation hulks was referred to as a squalid 'floating town' by contemporary observers including John Wesley. The hulks were sunk in the early 19th century following the provision of dry land accommodation at Blue Town. The dockyard was further modified during the 18th century with the addition of warehouses and other structures, presumably associated with episodes of reclamation. There followed a radical improvement associated with further reclamation and a complete rebuild and extension under the auspices of the engineer Sir John Rennie and his son between 1815 and 1830.

Rennie's dockyard was enclosed within a high wall and included expansion to the east of the earlier 17th and 18th century dockyard, thus necessitating levelling of much of the east-west portion of De Gomme's 17th century defensive earthworks. His defences had survived relatively intact to 1813, by which time Blue Town was constructed to the south, thus necessitating a new (2nd) line of defences. These defences (constructed by the Board of Ordnance c.1780 to c.1870) were known as the Sheerness Lines and ran further south across the peninsula to fully incorporate Blue Town and the dockyard. The Sheerness Lines followed and augmented De Gomme's defences that ran from the tip of the peninsula SE along the Thames (known as the Indented Lines) and survive partially where they are now Scheduled Ancient Monuments. However, most of the east-west alignments that had proceeded west to the Medway, to the south of Blue Town, including Bastion 4 at the south extent of the historic dockyard are now removed (at least as above ground features). The extreme western extent of the Sheerness Lines moat may have

extended into the eastern edge of the Proposal Site. Similarly the 'Queenborough Lines' defensive dyke which cut across the peninsula between Queenborough and Sheerness and were first constructed in 1782 extended up to the eastern edge of the Whiteways site. The current Garrison Point Fort was constructed in the 1860's and is also a Scheduled Ancient Monument. Further modifications to the Sheerness defences and the Queenborough Lines such as additional gun emplacements occurred throughout the 19th century through to World War II in concert with similar defences on the opposite side of the Medway at the Isle of Grain.

b) Built Heritage Baseline

The port includes a number of listed buildings, the majority of which will remain within the retained area. To facilitate the WTM 'Building 26' would need to be removed, which would require specific permissions. This would constitute a principle heritage consideration for Planning.

Other unlisted dockyard structures that may be affected by the Proposal Site have also been considered. Other dockyard structures within the Proposal Site including the formerly Grade II* Listed Shed No. 19 (former Quadrangular Store House – demolished in 1980) are no longer extant, although remains of these may survive archaeologically).

This report also considers the potential for visual impacts to Listed Buildings including the Grade I Listed Boat House and the Garrison Point Fort, both close to the northern extent of the Proposal Site and a Conservation Area located to the east of the Proposal Site.

There are also built heritage setting issues in relation to several Scheduled Ancient Monuments in the vicinity of the Proposal Site. These include the Sheerness Defences Scheduled Ancient Monument's including the 19th century Garrison Point Fort and Indented Lines and elements of the Sheerness Lines which provided protection to the fortress and dockyard area. The SAM's are protected under the Ancient Monuments Act (1979) and although they would not be directly affected there would be inter-visibility with the Proposal Site which will require impact assessment within the forthcoming EIA. However, the defences are principally on the northern and north eastern sides of the peninsula and their setting adjacent to and overlooking the Thames estuary would not be affected. The Garrison Point Fort SAM overlooks both the mouth of the Medway and the Thames estuary approach (Thames Gateway) and would be highly visible to and from the Proposal Site both during construction and operation. The key consideration will be retention of key military views. There are also a number of World War II defences associated with the shoreline and the Sheerness Lines alignment. The closest of these is an installation at Garrison Point Fort.

c) Archaeological Baseline

There are several strands of archaeological interest in relation to the Proposal Site. Most significant are potential buried elements of various phases of the 16th-19th century dockyards and defences which are referred to here as the Historic Dockyard Zone. The latest significant period of archaeology and most likely to be represented by buried remains relate to early 19th century elements of Sir John Rennie's dockyard.

These include the relatively recently in-filled Great Basin, dry docks and slipway now partially located beneath current warehouse No.2 and the former Small Basin and Culvert beneath Warehouses 1 and 67/68. The upper walls of these buried structures are likely to survive just below modern tarmac level. The foundations of various other former storehouses, sheds and basins of the early 19th century dockyard may survive elsewhere (including the former Quadrangular Store House). Rennie was responsible for intensive piling and foundation design incorporating clusters of linked piles overlaid by inverted brick arches for the dockyard. His engineering solutions thus included extensive piling of the soft alluvial mud, partially reclaimed for the earlier dockyards. These foundations and piles will have truncated earlier remains of the dockyard and may be encountered by the Proposal Site's groundworks depending on final design.

Ground reduction may expose the walls of the previously in-filled facilities. The design team are currently considering options for foundations. These will be assessed in terms of impacts in due course.

The western arm of the southern tidally flooded 'moat' of Sir Bernard De Gomme's 17th century fort defences may have extended into the extreme north-east area of the Proposal Site and could survive as a cut feature. The remains of 17th 18th hulks that were sunk into the estuary mud or broken up as hardcore, may also partially survive later truncation in some areas beneath the northern area of the modern dockyard. The HER reference is for 'old ships sunk with design to make new docks at Sheerness' centred on the current site of Warehouse 1 based on Admiralty maps. This area of the former 'Powder Monkey Bay' was, however, subsequently dug out in the early 19th century to form the Small Basin, (otherwise known as the Middle Basin) such that at least some of these hulks were almost certainly removed. Even though substantial piling also occurred for the dockyard generally and specifically for some of its more robust structures such as the Quadrangle, parts of sunken hulks may survive archaeologically in areas between the deep basins, foundations and piles. This should be considered in terms of impact assessment following further design information.

The 1755 and 1813 maps show extensive areas of reclaimed land at the dockyard and various standing structures in addition to the docks and harbour areas. This was followed by further episodes of infilling by Rennie. The made ground would have comprised large dumps of earth, and possibly industrial debris, parts of former defensive structures (e.g. derived from De Gomme's defences) and of various phases of dockyard structures such as dockyard basins and docks compressed onto the underlying alluvial mud.

The Proposal Site, to the south of the southern retaining wall of Rennie's dockyard, was mud flats until the land reclamation instigated in the 1970's and only recently completed. This area is known as Lappel Bank on the mapping and is referred to as the 20th Century Reclamation Zone for the purposes of this report. The zone includes several known heritage features recorded on the HER. These include the 17th-early 19th century Mast Pond and the location of Sheerness (Blue Town) pier on its north side, former location of a wreck site of unknown date, and a 19th century sewer outfall. The eastern edge of the Proposal Site is defined by the 19th century sea wall. The western extent of the late 18th century Sheerness Lines moat may have also extended into the eastern extent of the Proposal Site, and could survive as a deeply buried archaeological feature (geotechnical records suggest c.4-6m of made ground was placed upon the former

foreshore). Similarly there may archaeological remains associated with the late 18th century and later Queenborough Lines within Whiteways (the 1933 OS shows a bank on the approximate alignment – although this was not shown on earlier maps).

Prehistoric to medieval exploitation of the coastline and former inter-tidal zone mud flats (alluvium) may have occurred within the area of the Proposal Site, although any evidence will be deeply buried beneath the modern dockyard and reclaimed land to the south (the made ground appears to be 4-6m deep). Therefore although no settlement, industrial or other activity sites are currently known of within the Proposal Site there is some potential for intertidal zone archaeology to survive beneath the made ground. Inter-tidal zone remains have been known to include preserved wooden fish traps, track-ways, revetments, boats and canoes, oyster pits and salt-working remains such as red mounds or brine settling pits of various dates (prehistoric to post-medieval). Former dry land prehistoric sites are also occasionally identified within mudflats due to the effects of sea level rise. However, such remains are deeply buried beneath later made ground at this site and may be too deeply buried to be impacted.

The other archaeological issue relates to the potential for dredging to impact currently unknown marine wrecks (including lost cargoes) or former intertidal zone archaeology/former dry land archaeology within proposed dredging zones. It is, however, likely that previous phases of dredging to facilitate and maintain deep water berths, depths for which area recorded on Port plans, will have removed any archaeologically significant remains that might have been present in some or all of the dredging sites.

d) Strategy

It is clear that to achieve the demolition of the Mast House there will be a requirement for significant dialogue with a number of stakeholders

Initial stages in that dialogue include the preparation of this assessment to form the basis of discussions with EH, the LPA and their Advisers plus other stakeholders

In addition to the Grade II* Listed Mast House there are other heritage assets that have been identified through the assessment process and will need to be taken into consideration. This may – dependent upon proposed development impacts – include building recording and archaeological evaluation and /or excavation.

Although the proposed development will have the effect of removing the Grade II* Listed Mast House (regarded as being of high significance – see section 8) the type of development is such that PPS 5 indicates that (HE 1.3) “the public benefit of mitigating the effects of climate change should be weighed against any harm to the significance of heritage assets in accordance with the development management principles in this PPS and national planning policy on climate change”.

PPS22 'Renewable Energy' sets out the Government's planning policies for renewable energy planning and states that "permission for renewable energy projects should only be granted where it can be demonstrated that the objectives of designation of the area will not be compromised by the development, and any significant adverse effects on the qualities for which the area has been designated are clearly outweighed by the environmental, social and economic benefits"

The Former Working Mast House still retains a visual relationship with Rennie's still-exposed dockyard sea wall when viewed from the south and a physical relationship to the blocked entrance arch to the mast tunnel to the west. Railway tracks still visible set into nearby hard standings also still lend some historic ambiance to the building's setting. However, the setting of the Former Working Mast House has been greatly eroded through the infilling of the Mast Pond, Great Basin and associated dry docks and the Small Basin and through the demolition of all nearby historic buildings, including the corresponding East Mast House and Quadrangular Storehouse. Its setting is further damaged by the large modern sheds that have been constructed since the 1970s over most of the southern portion of the historic dockyard, including adjoining and abutting both the east and west sides of the building, the latter extension covering the former site of the mast pond. The Former Working Mast House is thus almost entirely isolated and divorced from the remainder of the historic dockyard and arguably no longer retains the original objectives of designation.

Swale Borough Council Policy E14 "provides a general presumption in favour of the preservation of a Listed Building except where a convincing case can be made for alteration (or demolition)". Policy E14 also states that "the total or part demolition of a Listed Building will be wholly exceptional, and will only be permitted provided convincing evidence has been submitted showing that:

- a) all reasonable efforts have been made to sustain existing uses or viable new uses and have failed;
- b) preservation in charitable or community ownership is not possible or suitable; and
- c) the cost of maintaining and repairing the building outweighs its importance and the value derived from its continued use.

If as a last resort, the Borough Council is prepared to consider the grant of a listed building consent for demolition, it may, in appropriate circumstances, consider whether the building could be re-erected elsewhere to an appropriate location. When re-location is not possible and demolition is permitted, arrangements will be required to allow access to the building prior to demolition to make a record of it and to allow for the salvaging of materials and features".

In relation to Scheduled Ancient Monuments and archaeology the Local Plan includes the following policy:

(E16)

"Development will not be permitted which would adversely affect a Scheduled Ancient Monument, as shown on the Proposals Map or subsequently designated, or other nationally important monument or archaeological site, or its setting.

Whether they are currently known or discovered during the Plan period, there will be a preference to preserve important archaeological sites in-situ and to protect their settings. Development that does not achieve acceptable mitigation of adverse archaeological effects will not be permitted.

Where development is permitted and preservation in-situ is not justified, the applicant will be required to ensure that provision will be made for archaeological excavation and recording, in advance of and/or during development.”

On the basis of the following assessment it is considered that a strong case for the demolition of Building 26 can be made:

- in policy terms,
- in terms of the benefits that the proposed development will bring to Sheerness (economic and social)
- in terms of the eroded setting of Building 26, and
- in terms of the positive effect on climate change that the proposed development will entail.

In line with local and national policy, it is considered that impacts (both above and below ground) once fully assessed can be mitigated. Where mitigation by design is not achievable it is considered that appropriate programmes of mitigation works can be discussed and the scope agreed with the LPA and their Advisers.

1 INTRODUCTION

- 1.1 This report provides a Historic Environment assessment for a proposed 68.4ha Wind Turbine Manufacturing facility development at Sheerness Port, Sheerness, Kent (henceforth 'the Proposal Site' - Figures 1 and 2). There is a subsidiary area that will be necessitated for the relocation of the Volkswagen operation currently located at the dockyard. This is referred to as the VW Group relocation site ('Whiteways') sub-area of the Proposal Site (Fig. 1). The proposed development and its associated options are discussed in Section 2.
- 1.2 Located at the confluence of the River Medway and the Thames, Sheerness forms part of one of the UK's most important trading arteries, handling a diverse range of cargoes. With its close proximity to the M2, M20 and London's M25 orbital motorway, Sheerness is well connected to facilitate onward distribution to major markets in the South East of England and beyond.
- 1.3 Medway Ports, of which Sheerness forms part, is the statutory harbour, pilotage and conservancy authority for 27.3 nautical miles of the River Medway, from the Medway Buoy to Allington Lock at Maidstone, and the Swale. Sheerness is a deep water port with no lock restrictions, offering easy access for shipping.
- 1.4 In 1975 planning consent was given to fill the existing mud bank beyond the existing sea wall, known as the Lappel Bank. In 1980 work commenced to fill the area in phases, as the need arose, commencing at the port end. The first phase was filled with dredge material, the next phase with PFA, the next with dredge material and finally the last phase at the end of the Lappel Bank was bunded with dredge material and in-filled with local inert material (brick rubble, etc). The area is currently used for storage of imported cars. In 1998 the existing berths were extended to create berth 6 & 7 and an area behind berth 6 in-filled back to the bank to support a new cold-store which was opened in 2000.
- 1.5 Following the proposed agreement with the WTM, the port operations will be substantially cut back to only provide Port Authority functions and retain certain key customers which will include steel import/export, timber suppliers, corrugated packaging suppliers and vehicle importers.
- 1.6 This report will outline the historic/archaeological background to the Proposal Site and the potential effects that may occur to "heritage assets". The effect that these impact may have (either direct or indirect) will be addressed in the ES chapter.
- 1.7 The report has been prepared on behalf of Peel Ports in support of an outline planning application submission to Swale Borough Council.
- 1.8 The Institute for Archaeologist's Standard and Guidance for Desk-Based Assessments (2008) defines an assessment as a collation of written and graphic evidence to identify the likely character, extent, quality and worth of the known or potential resource. The purpose of the assessment is to gain information about the resource in order to assess the likely impact of any

proposed development and enable strategies for the resource to be formulated.

- 1.9 PPS 5 (Planning & the Historic Environment) indicates that in submitting planning applications that have a Historic Environment dimension to them, applicants will be required to provide a description of the significance of the heritage asset that may be affected and to submit a desk-based assessment, where an application site includes or is considered to have the potential to include, heritage assets with archaeological interest.
- 1.10 The report is structured to provide the baseline data and then to make an assessment of the Site's potential historic environment resource and the significance of the associated receptors/ Heritage Assets. The report sets out the development proposals and provides a baseline including topographical and geological considerations, a historical background, a review of the built heritage issues and a review of the archaeological issues. The Built Heritage and Archaeology sections include an initial assessment of the significance of the heritage assets and the potential sources of impact associated with the proposed development. A full and detailed impact assessment will be provided within a Historic Environment chapter of a subsequent Environmental Statement for the scheme.
- 1.11 To compile this assessment, the following actions have been undertaken:
- A search of the Kent County Council Historic Environments Records (HER) database for archaeological sites and Grade II listed buildings within a 1.0 km radius of the Site and a 5km search for Grade II*/Grade I Listed Buildings and Scheduled Ancient Monuments;
 - An examination of local, regional and national planning policies in relation to archaeology / the historic environment;
 - An examination of available topographical evidence;
 - An inspection of available geological sources (maps/borehole logs/trial-pit data) relevant to the Site;
 - A map regression exercise looking at the cartographic evidence for the Site;
 - Visit to the Kent Records Office in Maidstone to examine historic maps and other sources for the Site;
 - A Visit to the Royal Navy archives held at the Historic Dockyard, Chatham;
 - An assessment of impact that has previously occurred on the Site;
 - An assessment of relevant published, unpublished and web-based sources;
 - Site visits/walk-overs on 1st and 23rd June 2011;
 - Visit to the heritage assets identified within a 1.5km radius of the Site; and
 - Assessment of non direct impacts on heritage assets identified by RPS research.

- 1.12 An initial high level consultation between Peel Ports, K2 and English Heritage in relation to Built Heritage was undertaken on 6th July. Consultation between the above and the RPS Historic Environment Team will take place in due course ahead of the Environmental Impact Assessment and any mitigation recommendations.
- 1.13 Similarly consultation with the Historic Environment Team at Kent County Council, Archaeological Advisors to Swale Borough Council will take place following the submission of this baseline report.
- 1.14 In any desk-based assessment a degree of uncertainty is attached to the baseline data sources. This includes:
- The HER can be limited because it depends on random opportunities for research, fieldwork and discovery.
 - Lack of dating evidence for sites.
 - Documentary sources are rare before the medieval period, and many historic documents are inherently biased. Older primary sources often fail to accurately locate sites and interpretation can be subjective.
 - The extent of truncation caused by previous development impacts and landscaping works can not be fully ascertained. In some cases it may be greater than anticipated and in others less than anticipated.

2 DEVELOPMENT PROPOSALS

2.1 Port of Sheerness is a major port on the east coast of England and is ideally located as a base for Wind Turbine Manufacturers (WTM) who are looking to capitalise on the areas of Off Shore Wind Farms allocated by the Crown Estate. A number of WTM's have approached the port to investigate the feasibility of locating their production, assembly and supply chain facilities at the port. This will involve:

- Strengthening existing Quays and suspended decks
- Infilling behind Quays
- Creating new Quays (option)
- Demolition and relocation of existing buildings
- Ground Improvements
- On site access routes, roads and car parking
- Upgrading incoming services
- New site entrance road (option)
- Direct rail connection (option)
- Relocation of the car import storage facility to the Whiteways site (option)

2.2 This project represents a major investment by Peel Ports into Sheerness with an overall project value expected to be in the region of £250m.

2.3 The proposed development involves the redevelopment of some 68.4ha of land in the southern part of the Port area, encompassing the land to the east of Berth No.1 and Royal Bridge, Berths Nos. 2 to 7 and the land behind these and also the northern part of the Lappel Bank area to provide a wind turbine manufacturing & assembly facility. It is anticipated that the facility would be operated by Vestas.

2.4 The development site excludes Berth No. 1, Royal Bridge and the car terminal to the south of Berth No. 7. The site also excludes the southern part of Lappel Bank, which would be used by VAG for vehicle storage.

2.5 The main elements of the development comprise of:

- Blade production building and associated loading and parking areas.

- Blade storage area.
 - Nacelles assembly and offshore buildings and associated loading and parking areas.
 - Nacelles storage area.
 - Tower storage area.
 - Tower erection area and rig.
 - Berthing and assembly areas (including works to existing berths).
 - New finger quay and travelling crane jetty (within the vicinity of existing Berth No. 3).
- 2.6 The development would require the demolition of a number of existing buildings, including cold stores and most significantly Building 26, which is Grade II* listed. Some of the existing vehicle storage would also need to be relocated off-port.
- 2.7 Vehicular access to the wind turbine facility would be through the existing controlled port entrance and via a new 8m wide internal access road that would run southward from the internal Port road along the eastern side of the Port boundary. It is understood that this road would also be used by VAG to transport cars off the Port.
- 2.8 Construction would commence in 2013, with the facility first becoming operational in late 2015. The facility would be fully operational by 2020 and at that point it is estimated that there would be in the region of 1,500 employees on site.

3 LEGAL & POLICY FRAMEWORK

a) Legal Framework

3.41 The Garrison Point Fort is a 19th century Scheduled Ancient Monument located **XX** m to the north of the northern extent of the Site (National monument no. **XX**), Further SAM's comprise 'The Indented Lines', Minster Bastion, Centre Bastion and No. 1 Bastion and No. 2 Bastion to the N and NE of the Site (National Monument nos. **XX**). NB No. 3 and No. 4 Bastions are demolished but the western extent of No. 4 Bastion may have extended up to the eastern area of the Proposal Site. .

i. Ancient Monuments and Archaeological Areas Act 1979

3.41 Chapter 46 describes the purposes of the Act as to make provision for the investigation, preservation and recording of matters of archaeological or historical interest and (in connection therewith) for the regulation of operations or activities affecting such matters.

3.41 Monuments deemed to be of such significance that they require this level of statutory protection are placed on the Schedule; i.e. they become designated as Scheduled Ancient Monuments or SAMs. All Scheduled Ancient Monuments are of national significance.

3.41 The Act identifies a number of activities that are not permitted, predominantly those that would have the effect of demolishing, destroying, damaging, removing, repairing, altering, adding to, flooding or covering up the monument. If work is proposed that would have any such effect on a designated monument, written consent is required from the Secretary of State. Class consents are in force that enable owners to proceed with certain specified works without an application for consent.

3.41 For the purposes of the Act the site of a Scheduled Ancient Monument "includes not only the land on which it is situated but also any land comprising or adjoining it which appears to the Secretary of State or a local authority ... to be essential for the monument's support and preservation" (61.9).

b) National Planning Policy

i. Planning Policy Statement 1: Delivering Sustainable Development' (2005)

3.41 PPS1 'Delivering Sustainable Development' (2005) sets out the overarching planning policies for the delivery of sustainable development through the planning system. The guidance within PPS1 is based upon a number of key objectives, including social cohesion and inclusion; protection and enhancement of the environment; the prudent use of natural resources and also sustainable economic development. PPS1 also confirms that development plan policies should seek to promote and encourage, rather than restrict, the use of renewable resources, for example, through the development of renewable energy.

- 3.41 In December 2007, the Government issued a supplement to PPS1 entitled 'Planning and Climate Change'. The document sets out how planning should contribute to reducing carbon emissions and stabilising climate change. The introduction to the document states:

“Tackling climate change is a key Government priority for the planning system. The ambition and policies in this PPS should therefore be fully reflected by regional planning bodies in the preparation of Regional Spatial Strategies, by the Mayor of London in relation to the Spatial Development Strategy in London and by planning authorities in the preparation of local development documents. Similarly, applicants for planning permission should consider how well their proposals for development will contribute towards the Government’s ambition of a low-carbon economy and how well adapted they are for the expected effects of climate change. Applicants and planning authorities should bear in mind that the policies in this PPS are capable of being material to decisions on planning applications”. [our emphasis]

- 3.41 Paragraph 11 of the PPS makes clear that Local Planning Authorities should have regard to the PPS Supplement as a material consideration in determining planning applications. Furthermore, that the PPS supplement may supersede the policies in the local development plan, especially where it post-dates these. In short, the PPS will take precedence over outdated policies within a local development plan.

- 3.41 Specifically with regard to the preparation of local development plans, paragraph 19 confirms that in developing these documents, LPA's should provide a framework that promotes and encourages renewable and low carbon energy generation. Policies should be designed to promote and not restrict renewable and low carbon energy and supporting infrastructure. Paragraph 20 goes on to state:

“In particular, planning authorities should:

not require applicants for energy developments to demonstrate either the overall need for renewable energy and its distribution, nor question the energy justification for why a proposal for such a development must be sited in a particular location;

ensure any local approach to protecting landscape and townscape is consistent with PPS22 and does not preclude the supply of any type of renewable energy other than in the most exceptional circumstances.”

- 3.41 In selecting sites for renewable energy development, paragraphs 23 and 24 confirm that LPA's should take into account a number of factors, including matters such as the extent to which the development will contribute towards energy supply; the effect on biodiversity; and the physical and environmental constraints of the site. Paragraph 25 goes on to state that priority should be given to those sites that perform well against such criteria.

- 3.41 Paragraph 39 provides guidance on the determination of planning applications for renewable and low carbon energy. It confirms that in the interim period before the development plan is updated to reflect the policies in the PPS Supplement, LPA's should ensure development is consistent with the guidance in the PPS and avoid placing requirements on applicants that are inconsistent with the document. Paragraph 40 goes on to state:

“An applicant for planning permission to develop a proposal that will contribute to the delivery of the key planning objectives set out in this PPS should expect expeditious and sympathetic handling of their planning application”.

ii. Planning Policy Statement 5: Planning for the Historic Environment (2010)

- 3.41 In March 2010 the Department for Communities & Local Government introduced new planning policy for the Historic Environment – Planning Policy Statement 5 – Planning for the Historic Environment. Effective as of 1st April 2010, PPS 5 replaces both PPG 15 (Planning and the Historic Environment) and PPG 16 (Archaeology and Planning) with the intention of developing a more holistic approach to the historic environment and planning.
- 3.41 PPS5 is supported by a Vision Statement ‘The Government’s Statement on the Historic Environment for England 2010’ and an explanatory practice guide ‘PPS5 Planning for the Historic Environment: Historic Environment Planning Practice Guide’.
- 3.41 In combining all elements of the historic environment, PPS 5 introduces the concept of a ‘heritage asset’, the significance of which will need to be assessed in support of a planning application. The term ‘heritage asset’ “embraces all manner of features, including: buildings, parks and gardens, standing, buried and submerged remains, areas, sites and landscapes, whether designated or not and whether or not capable of designation” (CLG 2010a, 3.10). Designated heritage assets include Listed Buildings, Scheduled Ancient Monuments and Registered Parks and Gardens.
- 3.41 PPS 5 indicates that “the difference between a heritage asset and other components of the environment is that a heritage asset holds meaning for society over and above its functional utility. It is this heritage significance that justifies a degree of protection in planning decisions. The aim of the policies within the PPS is to conserve these assets, for the benefit of this and future generations. This is done by supporting their maintenance and by requiring that change to them is managed in ways that sustain and where appropriate enhances their heritage significance” (CLG 2010a, 3.11).
- 3.41 The policies in the PPS “are a material consideration which must be taken into account in development management decisions, where relevant” (CLG 2010b, para 3).

3.41 In submitting planning applications that have a Historic Environment dimension to them, applicants will be required to provide a description of the significance of the heritage asset that may be affected and to submit a desk-based assessment, “where an application site includes or is considered to have the potential to include, heritage assets with archaeological interest”. Where desk-based research is insufficient to properly assess the interest of the heritage asset, applicants will be required to submit the results of a field evaluation (Policy HE 6.1). The results of any pre-determination evaluation (if undertaken) “should be set out in the application ...as part of the explanation of the design concept” (Policy HE 6.2). Local planning authorities are advised not to validate applications “where the extent of the impact of the proposal on the significance of any heritage assets affected cannot adequately be understood from the application and supporting documents” (Policy HE 6.3).

3.41 With regard to the determination of planning applications, PPS5 Policy HE7 sets out the principles guiding the determination of applications for consent relating to all heritage assets.

3.41 This Policy and its relevant sub-policies state:

HE7.1 “In decision-making local planning authorities should seek to identify and assess the particular significance of any element of the historic environment that may be affected by the relevant proposal (including by development affecting the setting of a heritage asset) taking account of:

- (i) evidence provided with the application**
- (ii) any designation records**
- (iii) the historic environment record and similar sources of information**
- (iv) the heritage assets themselves**
- (v) the outcome of the usual consultations with interested parties; and**
- (vi) where appropriate and when the need to understand the significance of the heritage asset demands it, expert advice (from in-house experts, experts available through agreement with other authorities, or consultants, and complemented as appropriate by advice from heritage amenity societies).**

HE7.2 In considering the impact of a proposal on any heritage asset, local planning authorities should take into account the particular nature of the significance of the heritage asset and the value that it holds for this and future generations. This understanding should be used by the local planning authority to

avoid or minimise conflict between the heritage asset's conservation and any aspect of the proposals.

HE7.5 Local planning authorities should take into account the desirability of new development making a positive contribution to the character and local distinctiveness of the historic environment. The consideration of design should include scale, height, massing, alignment, materials and use.

3.41 PPS5 defines 'significance' as *'The value of a heritage asset to this and future generations because of its heritage interest. That interest may be archaeological, architectural, artistic or historic'*.

3.41 Policy HE9 sets out 'additional policy principles guiding the consideration of applications for consent relating to designated heritage assets'. It and its associated sub policies state that:

HE9.1 "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 heritage assets of the highest significance, including scheduled monuments, protected wreck sites, battlefields, grade I and II* listed buildings and grade I and II* registered parks and gardens, World Heritage Sites, should be wholly exceptional.

HE9.5 Not all elements of a World Heritage Site or Conservation Area will necessarily contribute to its significance. The policies in HE9.1 to HE9.4 and HE10 apply to those elements that do contribute to the significance. When considering proposals, local planning authorities should take into account the relative significance of the element affected and its contribution to the significance of the World Heritage Site or Conservation Area as a whole. Where an element does not positively contribute to its significance, local planning authorities should take into account the desirability of enhancing or better revealing the significance of the World Heritage Site or Conservation Area, including, where appropriate, through development of that element. This should be seen as part of the process of place-shaping."

3.41 With regard to setting, PPS 5 Policy HE10 sets out the following:

HE10.1 "When considering applications for development that affect the setting of a heritage asset, local planning authorities should treat favourably applications that preserve those elements of

the setting that make a positive contribution to or better reveal the significance of the asset. When considering applications that do not do this, local planning authorities should weigh any such harm against the wider benefits of the application. The greater the negative impact on the significance of the heritage asset, the greater the benefits that will be needed to justify approval.

HE10.2 Local planning authorities should identify opportunities for changes in the setting to enhance or better reveal the significance of a heritage asset. Taking such opportunities should be seen as a public benefit and part of the process of place shaping.”

3.41 The guidance notes (CLG 2010a) issued with PPS 5 provide the following considerations with regard to setting:

“Setting is the surroundings in which an asset is experienced. All heritage assets have a setting, irrespective of the form in which they survive and whether they are designated or not. Elements of a setting may make a positive or negative contribution to the significance of an asset, may affect the ability to appreciate that significance, or may be neutral.

The extent and importance of setting is often expressed by reference to visual considerations. Although views of or from an asset will play an important part, the way in which we experience an asset in its setting is also influenced by other environmental factors such as noise, dust and vibration; by spatial associations; and, by our understanding of the historic relationship between places. For example, buildings that are in close proximity but not visible from each other may have a historic or aesthetic connection that amplifies the experience of the significance of each. They would be considered to be within one another’s setting.

Setting will, therefore, generally be more extensive than curtilage and its perceived extent may change as an asset and its surroundings evolve or as understanding of the asset improves. The setting of a heritage asset can enhance its significance whether or not it was designed to do so. The formal parkland around a country house and the fortuitously developed multi-period townscape around a medieval church may both contribute to the significance.

The contribution that setting makes to the significance does not depend on there being public rights or an ability to access or experience that setting. This will vary over time and according to circumstance. Nevertheless, proper evaluation of the effect of change within the setting of a heritage asset will usually need to consider the implications, if any, for public appreciation of its significance.”

3.24 Policy HE9.4 also advises that:

“Where a proposal has a harmful impact on the significance of

a designated heritage asset which is less than substantial harm, in all cases local planning authorities should:

- (i) weigh the public benefit of the proposal (for example, that it helps to secure the optimum viable use of the heritage asset in the interests of its long-term conservation) against the harm; and
- (ii) recognise that the greater the harm to the significance of the heritage asset the greater the justification will be needed for any loss.”

3.25 Policy HE7.7 advises that:

“Where loss of significance is justified on the merits of new development, local planning authorities should not permit the new development without taking all reasonable steps to ensure the new development will proceed after the loss has occurred by imposing appropriate planning conditions or securing obligations by agreement.”

3.26 Where local planning authorities decide that loss of significance is justified, such loss may be mitigated through ‘preservation by record’. Such recording is addressed under Policy HE12. This Policy advises:

HE12.2 “Where the loss of the whole or a material part of a heritage asset’s significance is justified, local planning authorities should require the developer to record and advance understanding of the significance of the heritage asset before it is lost, using planning conditions or obligations as appropriate. The extent of the requirement should be proportionate to the nature and level of the asset’s significance”

3.27 Sub-policy HE12.1 nevertheless reminds local planning authorities that:

“a documentary record of our past is not as valuable as retaining the heritage asset, and therefore the ability to record evidence of our past should not be a factor in deciding whether a proposal that would result in a heritage asset’s destruction should be given consent.”

3.28 Of particular significance in relation to the Proposed Development are the policies set out in PPS 5 in relation to Heritage Assets and Climate Change. These policies are set out as the opening policy statement in PPS 5 (Policy HE1) and are set out in full, below:

Policy HE1: Heritage assets and climate change

HE1.1 Local planning authorities should identify opportunities to mitigate, and adapt to, the effects of climate change when devising policies and making decisions relating to heritage assets by seeking the reuse and, where appropriate, the

modification of heritage assets so as to reduce carbon emissions and secure sustainable development. Opportunities to adapt heritage assets include enhancing energy efficiency, improving resilience to the effects of a changing climate, allowing greater use of renewable energy and allowing for the sustainable use of water. Keeping heritage assets in use avoids the consumption of building materials and energy and the generation of waste from the construction of replacement buildings.

HE1.2 Where proposals that are promoted for their contribution to mitigating climate change have a potentially negative effect on heritage assets, local planning authorities should, prior to determination, and ideally during pre-application discussions, help the applicant to identify feasible solutions that deliver similar climate change mitigation but with less or no harm to the significance of the heritage asset and its setting.

HE1.3 Where conflict between climate change objectives and the conservation of heritage assets is unavoidable, the public benefit of mitigating the effects of climate change should be weighed against any harm to the significance of heritage assets in accordance with the development management principles in this PPS and national planning policy on climate change.

iii Planning Policy Statement 22 'Renewable Energy' (2004)

3.29 PPS22 'Renewable Energy' (2004) sets out the Government's planning policies for renewable energy, which LPA's should have regard to when preparing local development plans and determining planning applications. The PPS reiterates the Government's desire to actively encourage renewable energy projects to reduce carbon emissions and maintain the security of the UK's energy supplies.

3.30 Paragraphs 9 and 10 of PPS 22 relate to internationally designated sites and state:

'Planning permission for renewable energy developments likely to have an adverse effect on a site of international importance for nature and heritage conservation (Special Protection Areas, Special Areas of Conservation, RAMSAR Sites and World Heritage Sites) should only be granted once an assessment has shown that the integrity of the site would not be adversely affected.'

3.31 If the renewable energy development would have an adverse effect on the integrity of an internationally designated nature conservation site, planning permission should only be granted where there is no alternative solution and there are imperative reasons of overriding public interest, including those of a social or economic nature.'

3.32 Paragraphs 11 to 12 refer to national designations:

'In sites with nationally recognised designations (Sites of Special Scientific Interest, National Nature Reserves, National Parks, Areas of Outstanding Natural Beauty, Heritage Coasts, Scheduled Monuments, Conservation Areas, Listed Buildings, Registered Historic Battlefields and Registered Parks and Gardens) planning permission for renewable energy projects should only be granted where it can be demonstrated that the objectives of designation of the area will not be compromised by the development, and any significant adverse effects on the qualities for which the area has been designated are clearly outweighed by the environmental, social and economic benefits.'

3.33 Small-scale developments should be permitted within areas such as National Parks, Areas of Outstanding Natural Beauty and Heritage Coasts provided that there is no significant environmental detriment to the area concerned.

3.34 Paragraph 14 states:

Regional planning bodies and local planning authorities should not create "buffer zones" around international or nationally designated areas and apply policies to these zones that prevent the development of renewable energy projects. However, the potential impact on designated areas of renewable energy projects close to their boundaries will be a material consideration to be taken into account in determining planning applications.'

3.35 Paragraph 15 refers to local designations:

'Local landscape and local nature conservation designations should not be used in themselves to refuse planning permission for renewable energy developments. Planning applications for renewable energy developments in such areas should be assessed against criteria based policies set out in local development documents, including any criteria that are specific to the type of area concerned.'

c) Local Planning Policy

i. *Swale Borough Local Plan (Adopted February 2008)*

3.36 The Local Plan contains the following introduction in relation to the Historic Environment:

The Historic and Built Environment

The Borough has a rich architectural and historical heritage reflecting its naval and maritime history, its Roman and medieval legacy and its industrial heritage and archaeology. With over 1,800 listed buildings, including one of the best surviving medieval farmsteads in the country and the earliest multi-storey iron framed building in the world, this amounts to

four times the national average. Some 976 hectares (2.3%) of the Borough are designated as conservation areas; the 49 areas range from the outstanding time-span of buildings present within Faversham, the former royal naval dockyard at Sheerness to the numerous villages and hamlets. Such a legacy requires special attention by the Local Plan and the objective must be to preserve or enhance the character and appearance of conservation areas, and to preserve the special architectural and historic interest of listed buildings and historic parks and gardens.

Although the most important of our buildings and areas are listed or designated for their architectural or historic interest, others possess character which merits recognition, and which could be vulnerable to unsympathetic alterations that do not need the Council's permission. In some areas, in addition to the policies presented in the Local Plan, the Council may make a direction under The Town and Country Planning (General Permitted Development) Order 1995 to prevent alterations being made to the external appearance of buildings that would otherwise be harmful to the character of the building or area.

3.37 In relation to listed buildings the Local Plan includes the following text and policy:

Development Involving Listed Buildings

English Heritage compiles a List of Buildings of Special Architectural or Historic Interest (more commonly known as listed buildings). They are a finite resource and Government guidance is that they should be preserved. They are provided with special statutory protection and procedures requiring consent to alter them in a way that affects their character as a building of special architectural or historic interest.

In accordance with Government planning guidance, Policy E14 provides a general presumption in favour of the preservation of a Listed Building except where a convincing case can be made for alteration (or demolition). The Council will normally expect applicants to prepare a design statement (see Appendix 3) for any proposals for Listed Building Consent, and to justify their proposals, demonstrating why works that would affect the character of a listed building are desirable or necessary. They will normally be expected to assess the likely impact of their proposals on the special interest of the site or structure in question. In all cases the Policy seeks to safeguard the character and setting of listed buildings.

Two particular aspects of development involving a Listed Building are highlighted as follows:

- ***Extensions and alterations:*** Extensions and alterations should be sympathetic and not dominate the listed building in scale, material, or situation. Often a building's immediate setting is important to its character so gardens, yards, other spaces, and boundary details are of value in their own right. Proposals to allow car parking can also frequently be damaging to the character or appearance of the building; and

- **Changes of use:** The best use for a Listed Building is usually the use for which it was originally designed, but the overriding consideration is securing the future upkeep and preservation of the building. Thus the Council supports necessary and appropriate changes in use. Particular attention will be paid to ensuring that the proposed use will not be harmful to the character of the building and its surroundings, including any alterations to the building associated with its change in use.

The Council will prepare a Supplementary Planning Document relating to Listed Buildings, but in the meantime the Council's Supplementary Planning Guidance notes entitled *Listed Buildings: A Guide for Owners and Occupiers*, and *The Conservation of Traditional Farm Buildings* remain material considerations to the determination of some proposals.

Policy E14

Development Involving Listed Buildings

Proposals, including any change of use, affecting a Listed Building, and/or its setting, will only be permitted if the building's special architectural or historic interest, and its setting, are preserved. Proposals will pay special attention to the:

- design, including scale, materials, situation and detailing;
- appropriateness of the proposed use of the building; and
- desirability of removing unsightly or negative features or restoring or reinstating historic features.

The total or part demolition of a Listed Building will be wholly exceptional, and will only be permitted provided convincing evidence has been submitted showing that:

- all reasonable efforts have been made to sustain existing uses or viable new uses and have failed;
- preservation in charitable or community ownership is not possible or suitable; and
- the cost of maintaining and repairing the building outweighs its importance and the value derived from its continued use.

If as a last resort, the Borough Council is prepared to consider the grant of a listed building consent for demolition, it may, in appropriate circumstances, consider whether the building could be re-erected elsewhere to an appropriate location. When re-location is not possible and demolition is permitted, arrangements will be required to allow access to the building prior to demolition to make a record of it and to allow for the salvaging of materials and features.

3.38 In relation to Conservation Areas the Local Plan includes the following text and policies:

Development Affecting a Conservation Area

Legislation makes provision for the designation of conservation areas, which are areas of special architectural or

historic interest, the character, or appearance of which it is desirable to preserve or enhance. The diverse historic character of the Borough has produced equally diverse conservation areas. Detailed maps showing each conservation area are included in Appendix 2.

The character of conservation areas can be fragile, and their distinctive quality and character can be damaged by new development, or by other more subtle means such as increased traffic, car parking, signs and noise, or piecemeal changes to doors and windows. They are not, though, areas where change will not occur. New development within, or adjacent to, a conservation area is expected to be both of an appropriate use, of a very high standard of design, and to respond positively to the grain of the historic area by preserving or enhancing the character or appearance of the place. The Council will normally expect applicants to prepare a design statement (see Appendix 3:) for any proposals in or adjoining a conservation area that will additionally assess the likely impact of their proposals on the special architectural or historic interest of the area in question.

Three particular aspects of development affecting a conservation area are highlighted as follows:

- **Spaces:** The spaces around and between buildings and other features, together with views to and from the area, are frequently as important as the buildings themselves. They should be protected from unsympathetic changes and, where possible, enhanced;
- **Non-listed buildings:** Many buildings and features in a conservation area are not listed as being of special architectural or historic interest. Nevertheless, they may make a valuable contribution to the character of a conservation area individually, or as part of a group. If so, their demolition is only permitted in exceptional circumstances. In so deciding, the Council will examine the cost of maintaining and repairing the building or feature in relation to its importance and the value derived from its use, the adequacy of efforts to continue the building in an acceptable use, and the merits of alternative proposals for the building. These must demonstrably preserve or enhance the area in a way that the former building did not. Fundamentally, consent will normally only be given for demolition when a detailed scheme for redevelopment has been agreed. Planning conditions or legal agreements will ensure that demolition does not take place without timely redevelopment; and
- **Highway features:** Bridges, retaining walls, signs, footpaths, kerb lines, and milestones are part of the Borough's history. Unsympathetic highway or traffic management works, including signage and alterations to traffic flows, can have adverse impacts. Those carrying out such works will ensure the protection of the character and setting of these features, together with conservation areas, historic buildings, and ancient monuments.

The Council will prepare a Supplementary Planning Document relating to Conservation Areas, but in the meantime the Council's Supplementary Planning Guidance note entitled *Conservation Areas* remains a material consideration to the determination of some proposals. In addition, a rolling programme of review of all the Borough's conservation areas is being undertaken, and the Council has prepared a number of conservation area appraisals to support this that should be considered. The Council will formulate proposals for the preservation and enhancement of conservation areas and prepare Management Plans for individual conservation areas where this is seen to be the best means of achieving these objectives.

Policy E15

Development Affecting a Conservation Area

Development (including changes of use and the demolition of unlisted buildings or other structures) within, affecting the setting of, or views into and out of a conservation area, will preserve or enhance all features that contribute positively to the area's special character or appearance. The Borough Council expects development proposals to:

- 1 respond positively to its conservation area appraisals where these have been prepared;
- 2 retain the layout, form of streets, spaces, means of enclosure and buildings, and pay special attention to the use of detail and materials, surfaces, landform, vegetation and land use;
- 3 take into account the current or likely resulting ambience provided by the mix of land uses or traffic;
- 4 remove features that detract from the character of the area and reinstate those that would enhance it; and
- 5 retain unlisted buildings or other structures that make, or could make, a positive contribution to the character or appearance of the area.

Scheduled Ancient Monuments and Archaeological sites

The Borough is rich in historic and archaeological interest. Details of known archaeological sites, and information on the likelihood of archaeological interest, are maintained by the County Archaeologist who keeps The County Sites and Monuments Record. Some sites are included in the Schedule of Ancient Monuments maintained by the Department of Culture Media and Sport and are, by definition, of national importance where the priority for their protection is high. They are shown on the Proposals Map. Scheduled Ancient Monument consent is required from the Department of Culture Media and Sport to carry out any works affecting a Scheduled Ancient Monument. Policy E16 affords protection to these sites, together with other nationally important monuments or archaeological sites not scheduled.

The Policy also sets out the Council's approach to dealing with development proposals that may affect known, or potentially important, archaeological sites and maritime remains. The

Council will consult with the County Archaeologist and, in certain cases, a developer may be required to supply information that will help the archaeological evaluation of the site. Where necessary, and in accordance with Government advice, the Council will specify the standard of, and the methodology for obtaining, such information as will be needed for determining a planning application. In certain cases this may involve field evaluation.

The Council seeks to avoid harmful or physically destructive development on important archaeological sites, and there is a preference for the preservation of important remains in situ. Where this is not possible, and the Council considers that the need for the development is such that important remains would be damaged or destroyed, appropriate archaeological investigation and recording shall take place with publication of the results. Planning conditions, or in appropriate circumstances, legal agreements, will be used as required.

Within the central areas of Faversham, Sheerness, Sittingbourne, Queenborough and Milton Regis, the 'Kent Historic Towns Survey' and the 'County Council Supplementary Planning Guidance on urban area archaeology' will provide a more detailed interpretation of Policy E16.

- 3.39 In relation to Scheduled Ancient Monuments and archaeology the Local Plan includes the following policy:

Policy E16

Scheduled Ancient Monuments and Archaeological sites

Development will not be permitted which would adversely affect a Scheduled Ancient Monument, as shown on the Proposals Map or subsequently designated, or other nationally important monument or archaeological site, or its setting.

Whether they are currently known or discovered during the Plan period, there will be a preference to preserve important archaeological sites in-situ and to protect their settings. Development that does not achieve acceptable mitigation of adverse archaeological effects will not be permitted.

Where development is permitted and preservation in-situ is not justified, the applicant will be required to ensure that provision will be made for archaeological excavation and recording, in advance of and/or during development.

- 3.40 In relation to Historic Parks and Gardens the Local Plan includes the following policy:

Policy E17

Historic Parks and Gardens

The Borough Council will seek to protect registered Historic Parks and Gardens, as shown on the Proposals Map, or which

are registered during the Plan period. Development that would adversely affect the landscape character, layout and features of a Historic Park and Garden, or its setting, will not be permitted.

3.41 In relation to Area of High Townscape Value the Local Plan includes the following text and policy:

Area of High Townscape Value

3.61 Outside the designated conservation areas, parts of the Borough may become of sufficient value in the future to be worthy of conservation area designation and the Council has a programme of reviewing these areas. Within the urban areas, development pressures are more immediate and one such area is considered to warrant recognition by its identification as an Area of High Townscape Value. The Council's objectives in this area are to encourage a high standard of design of new development, the retention and reinstatement of original features and the preservation of the spaces between buildings, landscaping and parks.

Policy E18

Area of High Townscape Value

Within and adjacent to the Area of High Townscape Value, as defined on the Proposals Map, the Borough Council will not grant planning permission for development proposals unless they provide for the conservation or enhancement of the local historic and architectural character, together with its greenspaces and landscaping.

3.42 It should be noted that the adoption of the Swale Borough Local Plan pre-dates the publication of PPS5 by two years. The above historic environment policies thus need to be read in conjunction with more recent national policy.

ii. Sheerness Royal Dockyard and Blue Town Conservation Area Boundary Review - Character Appraisal and Management Strategy (November 2010)

3.43 In line with its commitment to review all of its conservation areas (para 5.5, above), Swale Borough Council has published a public consultation draft of its review of the former Sheerness Royal Dockyard Conservation Area, entitled 'Sheerness Royal Dockyard and Blue Town Conservation Area Boundary Review - Character Appraisal and Management Strategy'. This was published in November 2010 and is thus written with regard to current national policy.

3.44 This proposes a significantly enlargement of the former Conservation Area, including for the first time, operational port land. Whilst the Character Appraisal has not yet been adopted, it remains a material consideration in the planning process.

3.45 The Character Appraisal includes the following summary of significance:

“The Significance and special interest of the sheerness Royal Naval Dockyard and Blue Town Conservation Area can be summarised as:

- **Site of 16th century fort and evidence of extensive fortifications controlling the water and headland, dating from the 17th century until 1945**
- **Exceptional example of an extensive planned dockyard scheme of buildings and formal landscape; first constructed for the Royal Navy in the early 19th century, and later 19th and early 20th century developments, by the renowned engineer John Rennie and his collaborators and successors. Key elements of the original scheme and later phases of development survive within the dockyard, including buildings which are of national or international significance in terms of their technological innovation.**

Example of a civilian maritime town built to service the dockyard in Blue Town, with 18th and 19th century origins.”

3.46 The document emphasises that the current extent of the Conservation Area ‘represents only a very small element of the rich architectural and historic legacy of this part of Sheerness’ and advocates a substantially enlarged area termed “Sheerness Royal Naval Dockyard and Blue Town Conservation Area” (ibid, 10). Section 4.11 states:

“To the west the proposed conservation area meets the river Medway at the surviving dockyard wall to the early 19th century boat basin and docks (North Chamer). From these docks expansive views are afforded across the water channel to the low-lying isle of Grain and the distinctive industrial landscape beside the power station. Being able to appreciate open views from the river from the docks is a key part of its significance and illustrates the historic and continuing strong relationship between the dockyard and the river and sea beyond.”

3.47 The Sheerness Royal Naval Dockyard and Blue Town Conservation Area Boundary Review Character Appraisal and Management Strategy (Swale Borough Council Nov. 2010, 17) contains the following archaeology summary:

5.25 The area of sheerness Docks, defences and Blue Town lie within an area of archaeological potential for finds associated with the historical development of military defences, the dockyard and its settlement on the island from the 16th century to the Second World War. The marine areas beyond the shore also present a potentially rich archaeological resource.

5.26 A number of sites of interest are identified within this area on the Kent Historic Environment Record, largely comprising standing structures associated with the defences and dockyard, as well as sunken wrecks and a small number of pre Medieval finds. The Kent Historic Towns Survey (2004) notes

“...very few archaeological data exist for Sheerness town or its environs and there has been virtually no archaeological work”.

5.27 Garrison Point Fort and the Sheerness Defences in the north and east of the proposed conservation area are designated as a scheduled ancient monument. The site is significant as a key strategic military site which was built to defend naval anchorage and dockyards at Sheerness, Chatham, the River Medway and later the River Thames and the city of London from seaborne attack, from the 16th century through to the end of the Second World War

5.28 Substantial evidence of these defences survive both above and below ground from all phases, and there is potential to reveal further archaeological evidence of the defensive perimeter of the dockyard and Blue Town at the headland and Sheerness as a whole.’

d) Additional Policy Considerations

- 3.48 National policy strongly promotes the delivery of renewable energy, in particular offshore wind. This is viewed as important not only in assisting the UK in meeting its carbon reduction obligations but also to improve the security of energy supplies by reducing the nation’s increasing reliance on imported fossil fuels. It also makes clear that in order to deliver offshore wind projects there will be the need for support infrastructure.
- 3.49 National policy also recognises the importance of ports to the UK economy. It promotes the effective use of existing ports and recognises the important role that they can play in supporting the delivery of renewable energy by providing facilities to service the construction of offshore wind farms.
- 3.50 The forthcoming planning application submission will highlight these policy themes and the fact that the proposed development would be in the national interest as it would support the delivery of offshore wind. It would also bring significant economic benefits both nationally and locally.
- 3.51 Local policy in the form of the Swale Local Plan (2008) makes reference to the Port of Sheerness. The Local Development Framework (this will eventually replace the Local Plan) is at an early stage and can only be afforded very limited weight at this stage.
- 3.52 Although the Local Plan does not contain any policies that relate directly to the Port, paragraph 4.39 does recognise that it is an important employer in the Borough, both directly and indirectly and is one of the nation’s major deep water ports, being particularly important for the importation of cars, timber and fresh fruit. The Local Plan also refers to the Port as being identified in the Kent Minerals Local Plan as having a strategic role to play as a minerals import facility.

3.53 The Local Plan notes that pressures for growth and expansion at the Port remain strong. It goes on to state that the LPA considers that these can be dealt with by making more intensive use of land within the confines of the existing Port area, for example through the use of the Lappel Bank area for 'value added processes' and by making use of sites identified on the Proposals Map of the Plan for employment development. The Local Plan goes on to state that any expansion will, though, be dependant upon completion of the A249 improvements and making more use of rail for the movement of freight. The proposed development broadly accords with the Local Plan in that it would make more intensive use of land within the Port.

DRAFT

4 TOPOGRAPHICAL AND GEOLOGICAL BACKGROUND

4.1 The Proposal Site at the headland at Sheerness is located 11km north of Sittingbourne and 3km north of Queenborough on the Isle of Sheppey, Kent. The town of Sheerness was originally known as Mile Town and is located mainly south-east of the Proposal Site.

a) Topography and Geology

4.2 The port is situated at the north-west headland of the Isle of Sheppey at the point that the Thames Estuary meets the mouth of the River Medway. The Proposal Site is situated on the southern bank of the mouth of the River Medway and partially overlays reclaimed land formerly within the river. The Isle of Grain to the north forms the northern side of the mouth of the Medway. As such the Proposal Site is just above sea level situated upon alluvial deposits of former tidal flats and marshland. The topography of the Proposal Site is therefore substantially artificial, although it remains generally flat (especially in the southern area) with variations in height in concert with the facilities.

4.3 The British Geological Survey (Sheet 272, BGS 1974) shows the geology prior to reclamation of the southern area of the Proposal Site. The historic dockyard area of Proposal Site Sheerness (as far south as the former pier) is shown as Alluvium. The former mudflats of the central and southern area of the Proposal Site are shown as such and labelled 'The Lappel'.

b) Existing Geotechnical Data

4.4 A borehole survey was conducted for the Lappel Bank reclamation in 1984 with series of sections extending from the former Lappel Bank inter-tidal zone into the River Medway to the south of the historic dockyard (Fig. 29). The sections demonstrate the bank at up to 2.2m OD and sloping gently to the river. The upper strata are described as soft silty clay and is up to 6m in thickness to -4mOD. Below is c.6m of 'firm brown clay' above an unspecified thickness of 'stiff clay'. By c.35m into the river the water depth is c.6m. The alluvium at the river bed is described as 'soft silty clay' close to shore and 'silt/sand below the deeper water. The sequence off shore at the western extent of the sequence comprises 'sand' from -6mOD top 14mOD, above 'soft sand' to -16mOD, above 'grey silty sand' to c.-19mOD, above soft silty brown clay' to -23mOD above firm brown clay' to -28mOD above 'stiff clay'. These descriptions do not appear to indicate peat but the borehole logs themselves indicate timber within two boreholes.

5 HISTORICAL BACKGROUND

5.1 Sheerness is a small market town and a dockyard of seventeenth century origin. It is situated on the north-west coast of the Isle of Sheppey at the confluence of the rivers Medway and Thames. It is some 37.5km east of London, 17.5km north-east of Rochester and 16km north-west of Faversham. Its situation commands both the mouth of the river Medway and the mouth of the river Thames. The settlement occupies an area of very low marshy land at about 2m OD, consisting of riverine alluvial deposits laid down by the Medway in the distant past. Today, much of the surrounding marshlands consists of low-lying rough grassland, protected from flooding by an elaborate system of dykes and sea defences. Very little is known about its pre-military history.

a) Roman to Post-Medieval History

5.2 The island is likely to have been occupied during the Roman period given its reference as Insula Ovinium (the island of the sheep) in the period (Woodthorpe 1951, 7). The close proximity to the estuary mouth and the coast and the associated advantages for communication and trade and for economic resources such as fish, shellfish (there is evidence for Roman oyster beds at Shellness), fowl, nutrient rich pastures of the coastal plain, will have made the location attractive to visit and possibly to settle in the periods leading up to the major post-medieval developments. Despite this potential historical sources are relatively silent on the use of the vicinity of the Proposal Site prior to medieval period and in particular prior to the 16th century. For the earlier periods it is the archaeological evidence alone that hints at the early use of the marshes and dry land of the peninsula. This information is provided within Section 7 below.

5.3 The Isle of Sheppey was known as Ovinia or Sceapige by the Saxons according to Hasted (1798, 207) whilst place name Sheerness is derived from the Old English (Anglo-Saxon) as 'clear headland' or 'bight headland'. Queenborough also has Saxon origins. The Saxon settlement was known as Cyningburh, meaning 'King's Borough'.

5.4 Sheppey was incorporated into the Saxon hundred of Milton in the wider Lathe of Scray (Tyler, 2). Sexburga, wife of the Saxon King Ecombert, built the original abbey east of Minster at Sheppey after his death and named it Monasterrum Sceapeiae (dedicated AD 675).

5.5 In AD 832 the Danes landed on the island and wintered there in AD849, AD851 and again in AD854 due to the good quality of the grazing land. The abbey was destroyed and the nuns put to the sword. The Danish prince Hoestan built forts at Minster ('Scipe' -Shurland) and at Queenborough (ibid, 3). He was defeated by Alfred on two occasions and retreated back to Sheppey each time. The Danes were bribed by the 'Danegeld' tax to leave the country in 991 but those that failed to leave Sheppey were massacred. King Cnut is alleged to have avenged on behalf of the Danes in 1014. Earl Godwin, father of the Saxon King Harold II is said to have finally seized the island of Sheppey (ibid 4). There are a number of barrows around the aptly named 'Barrow Hill' on the London Clay which Hasted (1798) has suggested may be the graves of Viking

leaders. However these may equally be of Bronze Age date.

b) Medieval

- 5.6 Following the Battle of Hastings William divided Sheppey (at Domesday Sheppey was listed as one of the private possessions of Harold) between several Norman barons. Although the Saxon nuns of the abbey were expelled the abbey was restored again by the 12th century.
- 5.7 A fortress, called Sheppey or Queenborough Castle, to the south of the Proposal Site, was constructed by command of King Edward III between 1361-1377 by J.H. Yevele. King Edward III and his wife are believed to have resided there at one stage (ibid, 5). The fortress was built to guard the passage of ships along the Swale upon the command of, during the Hundred Years' War with France. It was built on the site of a much earlier, but smaller castle. This later fortress was a round, symmetrical one with 70 rooms, modeled on French-style chateaux of the period.
- 5.8 King Edward III had the town renamed after his Queen, Philippa of Hainault, and conferred upon it the rights of a free borough, with a governing body of a mayor and two bailiffs. He granted Queenborough a charter in 1366 and two years later bestowed the duties of a Royal Borough upon it.
- 5.9 During this period, Queenborough, on the Isle of Sheppey was an important town for the export of wool, a significant Crown Revenue. By Royal Decree, from 1368 the Wool Staple was transferred from Canterbury to Queenborough, which, together with Sandwich, became one of the only two places in Kent through which all the exported wool was compulsorily directed. (Source Wikipedia)
- 5.10 The 1363 church at Queenborough was stimulated by the castle, as was the associated shipping port. Queenborough's trading was based on the wool trade whilst the settlement later included a very early chemical works manufacturing sulphate of iron by 1579.
- 5.11 The castle has several historical links including its attack during Jack Cade's rebellion of 1450. It regained importance in the 16th century under Thomas Cheney, when it is thought to have influenced the construction of nearby Deal Castle and Walmer Castle. The castle was demolished during Cromwell's Protectorship in 1650.
- 5.12 In the medieval period north Kent was divided by open waters and marshes stretching inland. The safest navigation to the open sea was then the route from the Thames into the Yantlet Creek (separating the Isle of Grain from the rest of Hoo Peninsula), and thus into the Swale from the Medway estuary, around the leeward side of the Isle of Sheppey into the Wantsum Channel, navigating past the Isle of Thanet to Sandwich and only then into the open waters of the English Channel. It was thus an easily defensible planned-town centre for the wool trade.

5.13 Exploitation of the riverine resources in the medieval period is demonstrated by salt-works and oyster fisheries from prehistoric to medieval date in the vicinity. These include documentary references to an oyster fishery at Queenborough that was established by the 14th century (HER TQ 97 1002). The record indicates that 'oyster cultivation and dredging probably took place on a small scale until the creation of the Borough in 1368' and are referred to in Borough correspondences of 1452-3. The subsequent growth of Queenborough in the 17th and 18th centuries was principally due to the oyster fisheries although the discovery of local government corruption led to a 19th century decline.

5.14 There are no clear signs that the promontory was occupied before 1545-47, when the fort was established (see below) although HER TQ97 NW120 refers to Sheerness as a medieval town named Shurnasty.

c) Post-medieval

i. The Sixteenth to Eighteenth Centuries

5.15 Sheerness' strategic significance at the confluence of the Thames (the southern approach to the Thames Estuary) and the River Medway was recognised during Henry VIII's reign during the French wars of 1539-1547, when the mouth of the Medway was first used as a naval anchorage. A blockhouse was built at Garrison Point on the unoccupied promontory, with two more between Sheerness and Minster, to protect the mouth of the Medway and the royal dockyard at Chatham. The Sheerness fort was constructed during the French Wars in 1545 and it was further strengthened in 1574. It was still subordinate to Queenborough however, as the High Admiral of Queen Elizabeth, Lord Howard of Effingham gathered part of the fleet to intercept the Spanish Armada on the Medway at Queenborough rather than Sheerness (RCHME 1995, 1).

5.16 Queenborough managed to retain its maritime and commercial importance. Matthias Falconer of Brabant established the first copperas factory in England at Queenborough in 1579. King Charles I had Queenborough re-incorporated under the title of the 'mayor, jurats, bailiffs and burgesses of Queenborough', during which time the population was chiefly employed in the local oyster fishery. Having protected the Swale and Medway estuaries for 300 years, Queenborough Castle failed to realise its function as a garrison, and recorded no active military history. After being seized by Parliamentarians in 1650, and being considered unsuitable for repair, it was demolished during the Interregnum.

5.17 Sheerness's maritime, rather than purely defensive, importance dates to 1665, the first year of the Second Dutch War, when the Navy Board ordered Chatham dockyard to equip Sheerness with the requisites for cleaning ships' hulls and to supply a workforce. £700 was authorised to fit out an elementary dockyard on 1½ acres of land, with a 26-gun battery at the point.

- 5.18 Sir Bernard Gomme constructed a new fort during the Second Dutch War, following a visit of Charles II accompanied by the High Lord Admiral and Samuel Pepys of 18th August 1665 (RCHME 1995, 1). In June 1667 the Dutch fleet attacked the Thames and Medway. Sheerness fort (then under construction) offered little resistance and it and the dockyard were captured and burnt. The 1667 action is famous as the first episode of loss of territory to a foreign force in mainland England since 1066 (Sheppey Heritage Trust, undated). The Dutch Admiral De Ruyter had led his fleet of 67 ships into the River Medway to engage the British fleet (capturing two British warships) whilst a squadron of 800 men led by Captain Van Brakel sacked the fort and the embryonic Sheerness, destroying the former with explosives (Sheppey Heritage Trust, undated, 10).
- 5.19 The Dutch also invaded Queenborough. The occupation lasted only a few days. Though the Dutch caused widespread panic, they were unable to maintain their offensive, and withdrew having captured the Royal Charles and burnt numerous other ships in the Thames and Medway. Following this raid on the Medway much-needed attention was given to the improvement of the naval defences of the Medway, which at length helped strengthen the economy of Queenborough and Sheppey. Within months, work was resumed on rebuilding Sheerness fort and dockyard on a greater scale, under the direction of Bernard de Gomme. The fort was equipped with 30 guns and was surrounded by a large bastioned earthwork, latterly referred to as the 'Indented Lines'.
- 5.20 The De Gomme defences included extensive earthwork fortifications that followed the coast and ran across the peninsula east-west (Fig 11). These defences abutted the dockyard of the period at their western extremity.
- 5.21 As the dockyard lay within the bounds of the sixteenth century defences it was very limited in size and was principally used as a repair yard, supplementing the nearby yard at Chatham. In order to allow expansion, land was reclaimed by sinking hulks to form breakwaters on the mud flats in front of the dockyard wharves, with the ground behind being in-filled and raised. Further hulks were used as storehouses, offices, and accommodation for workers at the yard. In the 1680s the first house was built for labourers, and in 1692 lodgings (resembling military barrack blocks) for shipwrights and other artificers were provided within the fort. The hulks, however, continued to be used for accommodation, although at this time many of the dockyard labourers were still obliged to live elsewhere, some travelling daily from Chatham.
- 5.22 The yard built its first named ship (the 20-gun *Peregrine Galley*) in 1700, but it remained principally a repair yard, only 20 named ships being constructed throughout the following century. Thus in 1712 c. 234 men including 60 shipwrights were employed in the dockyard, an increasing number of whom resided at Sheerness. Initially there was still little accommodation for families apart from the White Horse Inn, also the local brothel. In 1724 Sheerness was reported to be 'a kind of town' with several streets for the inhabitants who were virtually all connected with the fort and dockyard. Shortage of accommodation remained a problem throughout the eighteenth century, especially in

times of war.

- 5.23 The early dockyard comprised of wooden and mud docks with the first dry dock completed in 1708. A series of former wooden warships (hulks) were anchored beside the yard as breakers against storm damage and were used as accommodation for dock workers. They were linked by a series of wooden walkways in such that John Wesley commented that the hulks comprised a floating town, and that he had '*never seen anything to resemble it!*'. In his journal of 1767 he added; '*such a town as many of these live is scarce to be found again in England. In the dock adjoining the fort there are six old 'Men of War', these are divided into small tenements, forty, fifty, or sixty to a ship, with little chimneys and windows; and each of these contain a family...to this aquatic village were many convenient entrances from the land side and handsome bridges from the main deck of one ship to another. They had their King Street, Queen Street, George Street and Prince's Street and many others...Hundreds of children had been born on these breakers, and seven-tenths of the workmen of His Majesty's dockyard are not ashamed to own their aquatic birthplace.*' (cited by Tyler undated).
- 5.24 In 1794 the 'Great Alleys' barracks were constructed for workmen near Garrison Point although it is reported that the hulks were preferred as they refused to leave them in 1802 following an order from the Admiralty (ibid, 28).

ii. *The eighteenth to twentieth centuries*

The Fort/Defences and Dockyard

- 5.25 The De Gomme defences were slightly reduced and altered in extent by 1813 with the road from the fort to Blue Town now severing them with a moat still shown to the west of the road (Fig. 14 – 'Plan of His majesty's Dockyard at Sheerness as it existed in the Year 1813 previous to any alterations'). The east-west section of the De Gomme defences was further eroded by Rennie's dockyard in the early 19th century, and had all but disappeared by 1889 with the expansion of dock facilities and Sheerness to the north of Blue Town.
- 5.26 The dockyard and developing town of Sheerness were further protected by defence schemes which were implemented during the 1780s. The Board of Ordnance purchased land encircling Blue Town on its landward side and a second line of bastioned defences was constructed across the peninsular, to cover the land-ward approach. These defences, which evolved between c.1780 and c.1870, came to be known as the 'Sheerness Lines'. This second line included four bastions (Nos.1 and 2 of c.1794 and Nos.3 and 4 of c.1797) and a continuous curtain wall (1813, heightened 1816). Elements of the Sheerness Lines survive to the east of the docks as SAM KE172. However the rebuilding of the dockyard in the early 19th century resulted in the destruction above ground of defences in the western and southern areas of the later Dockyard with the defences now concentrated and rebuilt with new bastioned defences (the Indented Lines SAM)

along the northern shore).

- 5.27 In the eighteenth century the Dockyard grew steadily, but by 1808 a Commission looking into its condition reported on its defective state. Sir John Rennie was instructed to prepare schemes for the complete reconstruction of Sheerness Dockyard (as a repair yard), together with the construction of a brand new ship-building yard at Pembroke Dock and new victualling yards at Plymouth and Portsmouth. This coincided with a period where the Royal Navy was not only by far the largest employer of industrial labour in the world, but was also embarked on a series of technological improvements that put it at the cutting edge of the industrial revolution. John Rennie thus devised an extraordinarily ambitious and coherent programme for the complete reconstruction of Sheerness Dockyard employing the latest ideas of rationalised production, whilst the new buildings designed by Edward Holl were highly significant for their precocious use of cast iron framing. Work was begun in 1815, the new yard was officially opened in 1823 and finished by 1830. With engineering works in granite and buildings of iron and brick, it was functionally organised around the south quay and three basins. It covered about 64 acres and had five docks and a slipway, mast- and boat-houses, smithery and covered saw pits, all contained within high walls, with large cast-iron gates.
- 5.28 This reorganisation entailed the demolition and levelling of the whole of the earlier dockyard and the western half of the De Gomme's fort, as well as the annexation and demolition of those parts of the developing settlement of Blue Town that lay to the north of the High Street. The remaining north-eastern part of de Gomme's fort and 'Indented Lines' were redesigned and extended along the Thames shore to link with No.1 Bastion of the Sheerness Lines. The works allowed not only the necessary expansion of the dockyard, but also the construction of new residences for military officers and dockyard workers to supplement housing in the developing communities of Blue Town and Mile Town.
- 5.29 Naval development, particularly the use of structural iron and steam propulsion, led to the yard being re-equipped from the 1840s onwards, with existing buildings being adapted to new uses and new buildings being constructed, notably mechanised saw mills, a greatly expanded smithery and a large boat store, all designed by Col. G. Greene. The Boat Store of 1858-60 is celebrated as one of the first multi-storeyed iron structures in England. The dockyard chapel was rebuilt after a fire in 1888 and the frigate and graving dock were extended westwards in last years of the 19th Century. Whilst primarily a repair yard, Sheerness had been equipped by Rennie as a building yard also. With its up-to-date metal-forming facilities and small docks and slipways, the yard developed a strong specialism in the construction of smaller naval vessels, particularly those of composite iron and timber construction. Thus between 1832 and 1903, the yard constructed 64 vessels, the largest being the 4,360 ton cruiser *Charybdis*, built in 1893. The final wooden warship to be constructed at Sheerness was 'The Diamond' (a 1,970 ton ship) launched in 1874 (Sheppey Heritage Trust, undated, 21).

- 5.30 The dockyard defences were not neglected during this period. In the c1860s a massive defence programme was instigated along the Thames estuary. Sheerness was provided with a massive new two-tiered, casemated stone fort, Garrison Point Fort, built on the tip of the promontory and completed in 1872. A further defensive line (the 'Queenborough Lines') was developed at the same time, cutting across the peninsular and enclosing the dockyard and the dockyard communities of Blue Town, Mile Town and Marine Town that had developed in the preceding half-century. The coastal defences were further strengthened through the building of an experimental Brennan torpedo station at garrison Point Fort in 1884 (improved in the 1890s) and through a process of continually up-rating the coastal batteries. By the start of the 20th Century, large breech-loading guns of long range were being installed. The defences were greatly augmented in the First War, when Sheppey was viewed as a likely location for a German invasion.
- 5.31 Gradually the dockyard lost its significance, due to its restricted site and small size. The yard had built its last warship in 1903. The yard was reassigned as a purely refitting facility, primarily dedicated to torpedo boats and torpedo boat destroyers. Significant reinvestment in new facilities followed, including the lengthening of the two dry docks in the Boat Basin to allow the largest torpedo boat destroyers to be docked. Decline again followed peace and the dockyard was proposed for closure in 1928. This was arrested by the rise of Fascism and by 1939 the yard was back to full strength. The yard emerged from the Second War unscathed by bombing and remained busy through the early Cold War with refitting work on frigates and submarines. Complete closure was announced in 1958. Within a year the garrison had been decommissioned. The dockyard closed on 31st March 1960. The yard and garrison land has subsequently functioned as a general port.
- 5.32 This change of use has entailed the infilling of the Small Basin and the Grade II* Great Basin and dry docks 1 to 3 (1977) as well as the demolition of a large number of important 19th-century buildings, most notably Holl's Grade II* Quadrangle Store (demolished 1980 after a Public Inquiry). The former defences have also suffered. In 1960 Sheerness was one of only two towns in Britain to retain a complete trace of bastioned 18th-century defences (the other being Berwick on Tweed). The construction of a steelworks in 1971 and a supermarket in the 1990s has removed much of what remained.

Mile Town

- 5.33 There had been a small settlement at 'Mile Houses' from the early eighteenth century, but it began to grow after 1815 when many of its inhabitants were clerks and artificers displaced when the Blue Town houses were demolished. The track linking the dockyard with Mile Houses was built up on each side, becoming the High Street of Mile Town, and other small houses were constructed to the south. They were built of wood (ship-board houses) and arranged in courts without water or sanitation.

- 5.34 Sir Edward Banks, the owner of the land on which Mile Town was built, became closely involved with its development; part of it became known as Banks Town and he gave land for the construction of Holy Trinity Church. He also attempted to develop Sheerness into a seaside resort by introducing a steamboat service from London and paying for the restoration of the pier. From the 1820s onward Mile Town grew steadily from a small hamlet into a small town and, as its westward expansion began to encroach on the defences, the government purchased land in 1827 in order to form a buffer zone and curtail further expansion.
- 5.35 Mile Town houses the church of Holy Trinity, built in 1836 in an austere brick style with a narrow west tower. It acquired parochial status when Sheerness became an Urban District in 1888.

Marine Town

- 5.36 After Mile Town ceased to grow, Marine Town was established to its north-east. This was short-lived however, for in 1862 the dockyard defences were again expanded by building the Queenborough Lines, a huge rampart and ditch running south-eastwards from the coast, east of Marine Town, to the river Medway. The Queenborough Lines delimited the triangular area containing Blue Town, Mile Town and Marine Town, which merged to become the present town of Sheerness.
- 5.37 By 1860, the town of Sheerness had a railway, a pier, a steamboat passenger service, a church, a bandstand, an open-air swimming pool, bathing machines on the beach, a theatre, and an abundance of public houses, two newspapers, a flourishing dockyard, a modern garrison and a growing population. Nevertheless, there was still a lack of sanitation and a prevalence of disease, particularly malaria, cholera and typhoid, among the overcrowded population. On the whole, conditions were no better than they had been in 1849 when an inspection by the Public Health Authority issued a damning report of the squalor of Blue Town and Mile Town.

Queenborough

- 5.38 With the silting up of the Yantlet creek and the Wantsum channel and improved navigation through the Thames estuary to London, Queenborough began to lose its importance, becoming something of a backwater. Daniel Defoe described it as 'a miserable and dirty fishing town (with) the chief traders ... alehouse keepers and oyster catchers'. Queenborough parish church was overhauled during 1690 to 1730, and a number of houses added to the growing town during the 18th century. With the general prosperity of the colonial and mercantile trades of the age, Queenborough thrived. The Royal Navy eventually became less prominent on the River Medway as the Dutch treat receded and other dockyards facing France and the Atlantic became more important. The naval ships that had moored in the Medway were largely replaced by prison hulks which would frequently dispose of their dead charges on a salt marsh at the mouth of The Swale, which was subsequently known as 'Dead Man's Island'. The new fort and harbour developments completed at

Sheerness by this time further replaced Queenborough by being better positioned at the mouth of the Medway. By the mid 19th century Queenborough 'was a very sorry place indeed; broken down and almost lawless', the Corporation was bankrupt, and Parliament was called upon to act. Following an Act of Parliament, much of the town's business was in the hands of trustees who were able to refinance the economy by selling land, property and the ancient oyster fishery. The oyster trade having been corrupted by smuggling and the bribery of the island's Members of Parliament, it lost its franchise in the Reform Act of 1832.

- 5.39 Industrial development and the arrival of the railway aided the town's recovery. Queenborough became a continental ferry port in 1876 when a branch was built to a new pier from just north of the station. Services were operated by the Stoomvaart Maatschappij Zeeland (SMZ - the Zeeland Steam Ship Company) between 1876 and 1927, when services transferred to Harwich. By 1933, maps show glue works, chemical works, glass works and a steel rolling mill in the vicinity of the railway at Queenborough and four separate branches connected the Sittingbourne-Sheerness railway to various wharfs and piers in Queenborough. The port was used by the Admiralty in the Second World War as a base for Thames minesweepers and the waters off Queenborough were chosen as an assembly point for the Dunkirk 'little ships' in 1940.

¹The above text is edited from KCC / EH, Kent Historic Towns Survey, Sheerness, Archaeological Assessment Document, Sept 2003, 1-5 and various web sources

d) Cartographic Background

- 5.40 Map evidence provides the following information regarding the site.

Map	Information
Ancient map of Great Britain dated AD 1325-50	Shows the Island of Sheppey but no detail
1572 Map (Fig. 9)	Good quality map of 'Shepy'. Shows castle at Queenborough on the Medway and ships docked there and at the mouth of the Medway. No detail at Proposal Site although a mark could represent the block house.
1667 Dutch Map (Fig. 10)	Shows South-Eastern England's coast including Sheppy island with separate detail of Sheppey and the Medway with Dutch Fleet sinking two British ships.
Sheerness Fort and Dockyard as laid out under the direction of Sir Bernard De Gomme in 1665-9 (British Library, ADD MS 16370, f.57) (Fig. 11)	Labelled 'The new fortifications if Shirenesse'. Shows the northern area of the fort labelled 'the Great platform' occupying the apex of the promontory with a simple U-shaped defensive circuit open on the south side. To the south 'The Yard' is depicted as a walled area with barrack blocks against the N,E,S and W walls and a ?chapel in the NE corner. The remainder of enclosed promontory was occupied by a square 'parade place' linked by paths. The eastern coast of the promontory is defended by indented defences along the coastline whilst a bank is labelled against the waterside further to the south. Similar indented defensive lines are apparent on the Medway coastal (western) perimeter. The dock area is a poorly defined

Map	Information
	but an inlet is shown through the ?mud flats. The landward (south) side of the fortification was defended by a series of angular defensive ditches, banks and gun platforms. The map pre-dates land reclamation on the west side (River Medway) and most of the Proposal Site (?other than the western extent of the defensive lines) was therefore within the intertidal zone and formerly open water.
1668 Map of Medway and Sheppey	Shows the De Gomme defences and dockyard area with ?reclaimed yard flanking the west side of their defences and 4 pier-like projections into a dashed foreshore zone. A rectangular structure appears to be represented at the dockyard at the west extent of the defences. 'Pible' beach on east side of the fully enclosed defended promontory.
Sheerness Garrison and Dockyard in 1755 (BB94/19032) (Fig. 12)	Demonstrates the outer indented line defences around the promontory and a series of internal rectangular barracks and 'Garrison' buildings in detail. Also detail of the defensive circuit, in particular those flanking the south side which include a moat a projecting fortress corner adjacent to the 'ordnance wharf'. The plan provides the earliest detailed layout of the 'Dock Yard' including various wharfs/jetties, docks and dockyard structures. Clusters of 4 and 5 hulks are depicted on the inter-tidal mud flats either side of the main inlet whilst the 'mud basin' with two dry docks is shown in the same place as the later (reworked) 'Boat Basin' built by Rennie. The dock yard now contains at least 21 structures within the reclaimed area of the dockyard. The southern area of the later dock still comprised mud-flats, flanked by a timber pound on the landward side. It is probable that the SW extent of the projecting defences, and (inner and outer) moats and ordnance wharf were situated in the extreme NE area of the Proposal Site and were possibly overlaid by the 19 th century Quadrangle. 'Powder Monkey Bay' (the bay adjacent to the Ordnance Wharf where ship fitting and ordnance loading will have taken place) is in the approximate location of the later 'Small Basin'
A Plan of His Majesty's Dockyard 1770 (Fig. 13)	More detail of dockyard showing a slip at N end of dockyard with the 'mud dock' to the south including another slip, and the two dry docks as 'old dock' and 'new dock'. Moving south were several sheds, a single ship and the natural inlet leading to the ordnance wharf and then a 12 named ships on the inter-tidal area to the south of the inlet around a 'slip proposed'.
Hasted's Map of Sheerness c.1798 (English Heritage)	Demonstrates the highly stylised promontory fort layout including nine internal rectangular structures/barracks encircled by bastioned defences on NE, NW and SW sides. The shore line and intertidal zone is shown around the fort, the mouth of the Medway, Thames coastline and the Swale. Blue Town is shown to the SE of the fort on the east side of a road that runs south linking the fort with Queenborough. A second road leads southeast
'No.1 Plan of His Majesty's Dockyards at Sheerness as it existed in the year 1813 previous to any alterations'. Ordered by the House of Commons (printed 16 th March 1826, fig 164) (Fig. 14)	Plan of Sheerness Dockyards, defences and the Blue Town in 1813 (Parliamentary Papers 1826). Shows the layout immediately prior to Rennie's Dockyard. There is additional detail of the docks on this plan including a dock 'slip' to the south of the fort north of a 'Mid Dock' with various inlets shown and with two hull shaped dry docks on its east side. A further harbour/inlet to the south is labelled 'Powder Monkey Bay' and is surrounded by a series of sheds and working structures on the dry land between it and the dock to the north. Similarly a

Map	Information
	series of buildings are located on the reclaimed dock land on the south side of 'Powder Monkey Bay'. Two of these appear to be ship shaped and may be hulks landlocked by reclamation. One of these is labelled 'Admirals Office'. These structures are located on a promontory projecting west from the dry land SW of the De Gomme defences and NW of Blue Town into a large expanse of water labelled as the 'Mast Pond'. The lower lying (dredged) pond was flanked on its west side by the Low Water mark and to the south by Blue Town Pier extending west from the dry land (prior to reclamation) at Blue Town. About 60 structures are shown in total with two ships or hulks shown moored off the coast.
'No.3 Plan of His Majesty's Dockyards at Sheerness showing the whole of the alterations 7 improvements determined upon the Year 1824. Ordered by the House of Commons (printed 16 th March 1826, fig 164) (Fig. 15)	<p>Rennie's Dockyard layout showing building numbers. Main structures layout with numbered facilities. Blue Town Pier remains at the south side of the dockyard assisting direct comparison with the 1813 layout. The area formerly occupied by the mast pond is now reclaimed with the southern area opposite (N of) the pier occupied by a suite of structures forming the southern extent of the dockyard. These include no.26 'Working Mast and Boat House' (which remains extant) to the SW of a much restricted rectangular mast pond. A tunnel running NE/SW is marked 'Tunnel to Mast Pond' and extends from the quayside at 'The High Water Mark' to run beneath the Working Mast and Boat House. This tunnel is now blocked but remains at least partially extant. The large rectangular 'Great Basin' (37) is shown linking the keyside to the NW of the Mast House. Three boat shaped dry docks (29) are shown linked on the east side. These former cut structures are now in-filled and covered by modern structures. Moving NW up the dockyard the next structure is a store house (36) on the south side of a rectangular 'Small Basin' (28) linked to the High Water mark by an inlet. Again the basin was subsequently in-filled. The next structures NW along the dock comprise the Officers office (27) and other structures on the SE side of a 'Boat Basin' (42) (on site of former 'mud dock'). The Boat Basin links the waterfront and includes an Ordnance Basin and Gun Wharf (35 on the NW side and a Dry Dock (29), 'Gararing Slip' (30) and Steam Engine House (33) connecting on the NE side. These structures remain in modernised form today as 'Lower Chamber', 'Gun Wharf,' Docks 4 and 5' and a 'Slipway' to the north of the Proposal Site.</p> <p>Other structures of note shown in the eastern area of the dockyard including Archway House (Grade II*) and Culvert (40). Various small structures such as 'Suppling Boilers' (19), store cabins etc are also shown and catalogued. Also shows the boundary wall (41) separating the fort area from the dockyard.</p>
Plans and sections in Rennie's Treatise (Figs 16-18)	Series of design plans and sections including a plan showing Mast Tunnel/Mast House (Fig 16), the Pump House showing mechanism (Fig. 17) and the Quadrangle showing pile and arch foundation design (Fig. 18).
1840's Plan of Dockyard	No major changes from above
1858 Plan (Fig. 19)	Useful layout of the dockyard.
1864-5 1 st Edition OS 1:10,560 (Fig 20)	Shows layout of the Sheerness Lines with Bastion 4 against the sea wall and by now crossed by the railway (The Sittingbourne and Sheerness Railway). Shows Blue Town and the dockyard with Sheerness Pier on the south side. Further south is 'mud' of 'The Lappel' flanked by the sea wall. Sheppey Gas works are

Map	Information
	<p>shown at West Minster. The 'Whiteways site' area is edged by the sea wall ('labelled Queenborough Wall' here) and was at this time crossed N-S by the 'Which Way' to West Minster on the west side of the stream. A sluice for the stream is shown at the sea wall.</p> <p>Good detail of the dockyard but no major changes, although various facilities such as 'Ships Gun Battery' to N of the Great Basin are labelled. .</p>
Plan of Sheerness Dockyard, Defences and Blue Town in 1889 (PRO, WO 78/S116 pt 4)	Shows the layout with only minor variations but good detail. The Grade I listed Boat House shown
1899 2 nd Edition OS 1:10,560	Shows Sheerness pier and Blue Town but the labelled Royal Dockyard and defences are not depicted are left blank for security reasons.
1899 Ordnance Survey 1:10,560	The area of the dockyard and defences is blank on this map for security purposes with the area simply labelled 'Royal Dockyard'. Blue Town is shown in detail as is the remainder of Sheerness.
c.1900 plan of 'Sheerness H.M. Dockyard' (Fig. 21)	Detailed layout plan, Boat House, Quadrangular Store House, Small Basin, Great Basin with Docks No's 1-3 and Shipwright Machine Store (Mast House) labelled. Details of crane positions and all buildings/facilities labelled.
1908 3 rd Edition 1:2,500 (Fig. 22)	The dockyard and defences are still blank on the 3 rd Edition OS. Sheerness Pier shown with a Timber Pound on the mud flat zone on the west side of the sea wall. The road within the Whiteways Site is now gone but the line remains a U.D. boundary. A series of earthwork banks are now shown on the west side of the stream. One is linear in form running NE/SW but the area to the north comprises a rather amorphous bank. Function unknown possibly dumps of dredged material or red-hills from salt-works.
1933 3 rd Edition 1:2,500	No major changes for main Proposal Site but useful detailed layout of Sheerness Lines and the indented Lines. The Whiteways Site includes the earthworks shown in 1908 in addition to an L-shaped bank which appears to follow the line of the NE/SW aligned Queenborough Lines (originally dug in 1792) before kinking NW within 'Whiteways' to the sea wall. This may be a flood defence following the earlier alignment.
1953 Plans within 'General Information for the use of C.C. Department Officers' (Fig. 23). Doc 2008.0060.29	Detailed Plans and sections of all dockyard facilities including the 'pumping and flooding arrangements to docks' which shows the 12 inch iron pipe from Dock No.4 of the Boat Camber via the Store House (Quadrangle) linking Docks 1-3 of the Great Basin to the Electrical Fitting Shop and Foundry (pump house ?). Shows valve positions for flooding and draining the docks. Also shows measured plans of No's 1-5 Docks, Great Basin, Small Basin (showing swing bridge), Boat Camber (Boat Basin), disposition of yard cranes, and general layouts.
1954 Admiralty Map (Fig. 24)	Shows layout of wider area including Whiteways site which has 5 structures in SW area. The Lappel is shown with label 'Caution after banks to southward of Sheerness Pier are covered an eddy sets to the Northward along the shore during the Flood.' Also shows the sewer outfall. Main dockyard structures labelled.
1971 Admiralty Map	No major changes to dockyard but southern arm of the

Map	Information
	Sheerness Lines now largely destroyed.
1974 Admiralty Map (Fig. 25)	Pier now demolished with new berths (Berths No.2, 3, 6, 7) now constructed. Small Basin appears to have been filled in.
1977 Medway Ports Authority map (Fig. 26)	Shows that the 'Small Basin' (28) has been in-filled and the former Rennie structures on its NW side removed (the area is here overlaid by 'Shed 1' and 'Shed 23'). The Great Basin and associated dry docks are still extant as are the Boat basin and its associated docks etc. Building 25 (Mast House) and 78 (Boat House) remain as does Archway House but many other smaller structures such as store houses have by now been demolished. Quadrangle is demolished and overlaid by sheds. Also shows levels of dredging along the Medway against the berths
2000 Lappel Bank Reclamation (Fig. 27)	Shows reclamation sequence between late 1970's and 2000.

DRAFT

6 BUILT HERITAGE BASELINE ASSESSMENT

6.1 The following Section sets out the built heritage baseline in relation to the Proposal Site as follows:

6.2 Central to the operation of the historic dockyard at Sheerness were its dry docks, slipways and basins. Dry docks were originally sealed against the tides with temporary dams of timber, sealed with stones, props and clay. Design advances made in Royal Navy yards included hinged gates (Dummer, late 17th Century) and submersible floating dams called caisson gates (Bentham 1798). By the early 19th Century the Navy Board was employing the great names in the new field of civil engineering, and from this time onwards the works carried out in the naval yards were generally consequent of the works being carried out by these engineers in the civil field. The sole exception was in the application of powered pumps to drain the docks. This first took place under Dummer at Portsmouth, where a horse-gin was employed under a plan produced in 1698. Bentham first employed steam power on a limited scale at the same site in 1799, whilst Rennie was the first to introduce large, purpose-built steam-powered dock pumping stations at Chatham (1821) (II*) and Sheerness (1823) (NL). These preceded any steam pumping stations in the civil field in any contexts excepting mine drainage, excepting Smeaton's water-supply engine inserted into the Lendal Tower, York in 1756(I) and his purpose-built steam pumping station at New River Head, London (1768)(II).

a) Extant Historic Docks and Basins within the Working Port Area

6.3 For the period after 1800, 'the significance of ... dock works is enhanced if they have a direct functional relationship to significant groups of naval (or civil) buildings'. In this context, the oldest dry dock at Chatham (Rennie's No.3 Dock) (1821) (II*) is of particular note because of its relationship with Rennie's important and remarkably complete Dock Pumping Station (1821) (II*). Rennie was working on the reconstruction of Sheerness at the time. Here his Great Basin was capable of fitting-out 9 'ships of the line' (74-gun plus), whilst still permitting access to the three dry docks that were large enough to dock the largest 120-gun ships. These (formerly II* and SAM) have been buried, but the surviving Boat Basin complex (II*) includes a slipway, dry dock and a graving dock, all in a remarkable state of preservation, in close proximity to Greene's Boat Store (I) and two smaller boat-builder's sheds (Bldgs 84 (II*) and 86 (II)). The cast iron gates of one of the two docks are the only examples of their type to have survived in any British dock, with the exception of the later Grade II*-Listed dry dock Laird's Old Yard, Birkenhead.

6.4 Wet docks or basins for fitting-out ships were also an invention of British naval engineers, the first being Dummer's wet docks at Devonport and Portsmouth (Grade I), both built in the 1680s. Again, these long preceded similar developments in the civil field (Rotherhithe (1697-1700), Liverpool (1709) and Sea Mills near Bristol (1710)).¹ As with dry dock construction, the Navy Board was employing the great names in the new field of civil engineering by the early 19th Century. Thus,

¹ EH, 2003, 34

from this time onwards the works carried out in the naval yards were generally consequent of the works being carried out by these engineers in the civil field, most notably the construction of vast wet docks (or 'floating harbours') being constructed in the great civil ports of London, Bristol, Liverpool and elsewhere.²

- 6.5 Slipways continued to be built of timber long after dry docks were built of stone and consequently only one complete 18th-century slipway has survived, the No.1 Covered Slip at Devonport (1774) (II*), one of four built during the post 1760s expansion of the yard. A fifth much-altered slipway (No.4 Slip), dates from 1816-21 (NL). The only other complete pre-1850 example in an English dockyard forms part of the Boat Basin complex at Sheerness (II*) (**RPS 153**), although four complete examples also survive of the original 13 at Pembroke Dock.³ After these, the technology employed in naval yards was similar to, and generally consequent on, developments in the civil field. After this the most important development was the introduction of covered slipways for building first-rate ships, commencing c.1839. Sheerness was provided with only two such covers, one over No.1 Slipway off the Boat Basin and one over No.2 Dry Dock off the Great Basin. Both covers (which were of timber) were removed in 1912 when the yard was reassigned as a refitting yard, with no further new construction anticipated. Only one timber cover survives (at Chatham), built to the designs of the Surveyor to the Navy Board, Sir Robert Seppings, in 1838. Chatham is also unique in retaining iron-framed covers over four further slipways, built 1847 and 1855 to designs by George Baker and Col. G.T. Greene.
- 6.6 It will be noted from the above that the basins, dry docks and slipways at Sheerness all date from after the period when the great developments in technology were occurring with the naval yards. The published view of English Heritage is however that the Boat Basin, graving dock, dry dock and slipway (II*) form an important and remarkably complete assemblage, with intact relationships to neighbouring and functionally-related buildings (Greene's Boat Store (Bldg 78)(I), North Saw Pits (Bldg 84) (II*) and Bldg 85 (II)). This assemblage includes the second oldest intact slipway in England and one of the oldest dry docks, complete with the earliest cast-iron dry dock gates in Britain. This assemblage is complimented by the un-Listed Rennie Pumping Station (1823) (NL) (**RPS253**), which is the third oldest surviving steam pumping station in England (outside of a mining context).

i. Potential Direct Impacts

6.7 RPS 59: Walls of the Great Basin & 3 dry docks (LB no. N/A)

Original Function: Ship fitting and repairing docks

² EH, 2003, 33, 34, 36, 37 & 38

³ EH, 2003, 35-36 & 40

Date: c.1814

Designer: J.Rennie Senior

Current Grade: N/A (In-filled) (formerly SAM and Grade II LB)

Current Condition: In-filled 1977 and built over

Significance: Formerly the epicentre of Rennie's planned model dockyard and formerly 'a good example of a Royal Naval docks of the early C19'⁴. Remains largely intact beneath sand infill and modern sheds.

Two great modern and rational dockyards were constructed during the Napoleonic era. These were Sheerness (used mainly for ship repair and refitting) with four dry docks, a graving dock and a single slipway, and Pembroke Dock (for new ship construction), with 13 slipways and a graving dock. The Great Basin at Sheerness was capable of fitting-out 9 'ships of the line' (74-gun plus), whilst still permitting access to the three dry docks that were large enough to dock the largest 120-gun ships.⁵ Whilst formerly a very good example of rational dock engineering from the 'Heroic Age', the engineering of the Great Basin and the dry docks was generally reflective of early 19th-century civil-engineering developments elsewhere. Survival of civil (i.e. non-military) examples has been fragmentary and patchy however.⁶

Whilst the Great Basin and associated dry docks were de-Listed and de-Scheduled in 1999 following infilling in 1977, they remain substantially intact, having been in-filled with sand so as to permit their future re-excavation, if required. The below-ground remains have a direct functional relationship and physical connection to the Grade II* Listed Walls & Gates of Boat Basin, Nos. 4 and 5 Dry Docks and No.1 Slipway (RPS 153), via both the dock and sea walls and via a series of underground culverts connected to the Rennie pumping station (**RPS253**). The remains lie within the historic setting of the various Listed buildings / structures within the former dockyard and within the same curtilage of all of the Listed Buildings in the docks.

Setting: The setting of this buried feature has been greatly eroded through demolition of historic buildings, infilling of the nearby Small Basin and Mast Pond and through the construction of large modern sheds over and around its site. The former extents of the Great Basin and its dry docks are nevertheless still discernible, due to modern Building 2 having much the same footprint and due to the survival of the Rennie pump house (**RPS253**), Former Working Mast House (Building 26 – **RPS 147**) and vestiges of the former entrance lock.

⁴ List Description

⁵ EH, 2003, 38

⁶ EH, 2003, 37-8

6.8 RPS253: Pumping Station (No bldg number) (LB no. N/A)

Original Function: Pumping Station

Date: 1823

Designer: J.Rennie

Current Grade: N/A (Not Listed)

Current Condition: Deteriorating condition with work required to roof, rainwater goods, windows and pointing. Interior retains original plasterwork, doors, staircases and loft. Original boiler house to N and later water tank on roof removed in recent years. Still in occasional use for pumping, using c.1940 electric pumps

Significance: Rennie's dry docks were drained by the first purpose-built steam powered dock pumping stations in the world (Chatham (1821) & Sheerness (1823)).⁷ The Sheerness pumping station was virtually identical to that at Chatham but is considered to be less complete than that at Chatham.⁸

Whilst the Sheerness pumping station is not Listed, it has a direct functional relationship and physical connection to the Grade II* Listed Walls & Gates of Boat Basin, Nos. 4 and 5 Dry Docks and No.1 Slipway (**RPS 153**). It may thus be regarded by some as being Listed by virtue of physical annexation. It is also within the historic setting of the various Listed buildings / structures within the former dockyard and within the same curtilage of all of the Listed Buildings in the docks. Under the provisions of PPS5, Listed Building Consent may thus be required for its removal or alteration. The Sheerness pumping station has nevertheless lost much of its context since the infilling of the Great Basin and dry docks formerly adjacent.⁹ The importance of its 'twin' at Chatham (formerly a SAM) has been recognised through the recent re-designation of that pumping station as a Grade II*.Listed building

Setting: The setting of the Rennie pump house has been similarly eroded through the infilling of the Mast Pond, Small Basin, Great Basin and associated dry docks, the demolition of historic buildings and through the construction of large modern sheds over most of the southern portion of the historic dockyard. The former extents of the Great Basin and associated dry docks are nevertheless still discernible in the footprint of modern Building 2, whilst the pump house does also still retain a positive relationship with the nearby Grade II-Listed Dockyard Wall (**RPS223**) and the Grade II* Archway House (**RPS150**).

⁷ EH, 2003, 35

⁸ EH, 2003, 39

⁹ EH, 2003, 39

*ii. Potential Indirect Impacts***6.9 RPS 153: Walls & Gates of Boat Basin, Nos. 4 and 5 Dry Docks and No.1 Slipway (LB no. 5/111)**

Original Function: Ship maintenance / repair docks and ship-building slipway

Date: c.1814

Designer: J.Rennie Senior

Current Grade: Grade II* LB (and in proposed Conservation Area)

Current Condition: Slipway and Boat Basin only still in use. Mostly very complete and in reasonable condition, but all structures lack maintenance. The important iron gates to Dock 4 are corroding badly, as is the entrance caisson to Dock 5. Associated capstans, bollards and late-19th-century cast-iron lamp standards survive in rusty and neglected condition.

Significance: 'A good example of a Royal Naval docks of the early C19'¹⁰ and a key element of Rennie's model dockyard'. Consisting of a boat basin, a graving dock, a ship-building slipway and a dry dock for shop repair, this group represents an un-rivalled palimpsest of ship-building and ship-repairing engineering structures in microcosm. High group value with adjacent buildings (Bldgs. 78, 84 and 86).

Dock no.4 is of very high significance as the last such dock in a naval yard with its original cast-iron gates.¹¹ These gates will be the earliest surviving in the world. The ship-building slipway is of significance today as the second-earliest intact ship-building slipway in England.¹² Nevertheless, whilst containing a superb slipway and two excellent and differing examples of dry docks, two of the dry docks were extended in 1906 and the group generally lacks the technical prowess (and thus the international significance) of Docks 1-6 at Portsmouth (1690-1798) and Docks 1-4 and Basin no.1 at Devonport (1758-1840s). The Sheerness examples are nevertheless regarded as being generally reflective of contemporary civil-engineering development, although survival of civil (i.e. non-military) examples has been very fragmentary and patchy.¹³ Other notable examples are listed in the table below.

As noted above, the surviving Boat Basin and its associated dry docks and slipway have a direct functional relationship and physical connection the dock and sea walls and a series of underground culverts connected to the Rennie pumping station (**RPS253**) and the in-filled dry

¹⁰ List Description

¹¹ EH, 2003, 38

¹² EH, 2003, 40

¹³ EH, 2003, 37-8

docks that were accessed via the in-filled Great Basin. The physical continuity of the dock and sea walls may be argued to lend a degree of protection to the former sea wall, which remains visible despite the various post-1960 extensions to the dock area. The surviving dock and sea walls lie within the historic setting of the various Listed buildings / structures within the former dockyard and within the same curtilage of all of the Listed Buildings in the docks. Under the provisions of PPS5, Listed Building Consent may thus be required for removal or alteration or burial of such remains, even if not specifically Listed.

Setting: The immediate historic setting of the Boat Basin and associated dry docks and slipway remain largely intact, due to the survival of the historic buildings immediately surrounding it. This group forms a historic cluster of very high value. The cluster, which includes the Grade I Boat Store (Bldg 78 - **RPS144**) is nevertheless overwhelmed and dominated by the very large modern sheds that lie to the immediate west and south of Greene's iconic Boat Store.

b) Extant Historic Dockyard Structures within the Working Port Area

- 6.10 Despite the widespread demolitions that have occurred since 1960, Sheerness Docks retain a significant number of historic dockyard structures. Virtually all of those within the working dockyard area (as opposed to the Officers' Residential Area to the east) make extensive use of structural iron.
- 6.11 Despite the unique scale of manufacture and the numbers of people employed in the naval yards, the methods of building construction used in the dockyards in the late seventeenth and early 18th centuries were typical of mainstream building practice of the period. Large covered spaces were generally constructed using multiple timber roofs with rows of timber columns beneath the roof valleys. Many dockyard structures of the period were ephemeral and intended for a short life. These were often constructed using reused ships timbers (e.g. the Mast House and Mould Loft at Chatham (1753-5) (II*), the adjacent Wheelwright's Shop (c.1780) (II*), No's 5 & 7 Boathouses at Portsmouth (mid C19) (II) and the Lower Boat Store at Chatham (1844) (II*)¹⁴.
- 6.12 By the mid 18th century, with a more planned programme of construction in the yards after admiralty reforms, larger dockyard buildings, notably warehouses and those containing processes with an associated fire risk, were being constructed of brick or stone. Further fire-proofing might be provided by cladding timber beams with fireproof materials such as tin (e.g. The Ropery at Chatham (1770s) (i)). The construction of larger and more specialised buildings during the industrial revolution led builders, in both the civil and military fields, to experiment increasingly with cast iron as a structural medium, led by the desire to render buildings increasingly impervious to fire. This led to a revolution in constructional systems between 1780 and 1850. During this time, iron went from a material used in particular specialised conditions, such as textile mills, to one

commonly used in buildings and structures of many types. The impetus provided by the growth of the railways from 1830, with the need for large bridges and wide-span sheds is well known.¹⁵

- 6.13 The important contribution made by the military, notably the Navy Board and the Royal Engineers, in the development of large, iron-framed structures has only recently started to be assessed in detail. It is only now becoming clear quite how important that the British Royal dockyards were as one on the most fertile seed-beds for the development of iron as a structural medium. It was thus at Sheerness Dockyard in 1856 that over half a century of experimentation by Admiralty architects and engineers came together in what is now recognised as one of the most significant buildings in constructional history. The Sheerness Boat Store, with its rigid joints and multi-storey iron frame, is regarded as the immediate precursor of the modern structural steel frame, and thus of the skyscraper. In recognition of its importance, it is listed Grade I.¹⁶
- 6.14 The earliest developments occurred in the civil field, initially in Shropshire with the Iron Bridge (1777) (I) and Bage's huge flax mill at Ditherington (1796-7) (I), the latter with its complete internal, cast-iron, multi-storey frame and masonry exterior walls stand out as key structures of high international significance. Further important civil examples of the internal cast iron frame are represented by Jedediah Strutt's North Mill, Belper (also first iron roof) (1803-4), Barracks Mill, Whitehaven (1809) (II*), Armley Mill, Leeds (1810) (II*) Stanley Mill, Stroud (also first wrought-iron roof) (1813)¹⁷ Carr Mills, Leeds (1824) (II*) and Pildacre Mill, Ossett of 1826.¹⁸
- 6.15 John Rennie, then a consultant to the Navy Board, had first suggested the use of structural iron to the Navy Board 'upon the plan of the cotton and flax mills lately erected at Derby, Leeds, Manchester and Glasgow' in 1807. The Board was apparently reluctant to pursue such a suggestion and it was not until 1808 that the Navy first experimented with cast iron columns (Bentham's now-demolished North Smithery at Devonport in 1808). The earliest naval building with such columns to survive is now the Vulcan Store on the Portsmouth Gun Wharf (1811-14) (II). Nevertheless, by 1812, the Navy was in the throws of the great modernisation that from 1813 came to involve the creation of the brand-new or completely reconstructed yards at Pembroke and Sheerness and the building of the great Royal Clarence and Royal William Victualling Yards at Portsmouth and Plymouth respectively. The planning of these facilities enabled John Rennie (Snr) (until his death in 1821) and the Navy Board's Surveyor, Edward Holl (until his death in 1824), to harness and develop the latest thinking in structural engineering and in the rational organisation of production. They thus embark on a massive building programme, completed under Rennie's sons John (Jnr) and George, and Holl's successors George Ledwell Taylor and William Miller, which put

¹⁴ EH, 2003, 17-18

¹⁵ EH, 2003, 18

¹⁶ EH, 2003, 18-19

¹⁷ EH, 2003, 20-21

¹⁸ RCHME, 1995, 5

the navy into the forefront of new developments in iron construction.¹⁹

- 6.16 Holl's earliest essays in multi-storey iron framing are the Chatham Sawmill (1812-14) (I), The Ropery and Spinning House at Devonport (1812-17) (I) and the Lead and Paint Mills at Chatham (1817-19) (I). The s importance attached to these structures is revealed by their all being Listed at Grade I, whilst the prodigious length of the Devonport Ropery (1200 feet) greatly exceeded that of any industrial structure of its age. Holl would appear to have been an almost uniquely fanatical exponent in the early structural use of iron. There are at least 14 dockyard buildings with significant quantities of structural iron for which he was directly responsible between 1812 and his death in 1824. His almost evangelical zeal in the use of iron as a structural medium is revealed by the use of cast-iron components throughout the four senior officer's houses he built at Pembroke Dock in 1817-18.²⁰
- 6.17 Of Holl's surviving iron-framed buildings, two survive at Sheerness, with a third by his successor W.Miller also being pure Holl in conception and detailing. The two directly attributable to Holl are the Working Mast House (Bldg 26) (1823-6) (II*) and Archway House (Bldg 23) (II*), the latter built in 1825, immediately following Holl's death in 1824. The third building is the North Saw Pit Cover (Bldg 84) (1828) (II*), which whilst erected four years after Holl's death, but it is pure Holl in conception and execution. The huge Quadrangle Storehouse at Sheerness is also attributed posthumously to Holl. This was one of four Great Storehouses built by Holl (2 at Devonport (1814), one at Pembroke (1822) and one at Sheerness (late 1820s).²¹ All of these have been lost, excepting that at Pembroke Dock. The Sheerness Quadrangle Storehouse (formerly II*) was demolished as recently as c.1980 after a Public Enquiry. Both Archway House and the Working Mast House have well-developed cast-iron columns, floor beams, joists and roof members, similar to those pioneered in Holl's Chatham Lead and Paint Mills (1818-19) (I). In addition the Working Mast House has cruciform raking struts rising from the columns and connecting to the first-floor beams and composite wrought- and cast-iron roof trusses. These columns with diagonal struts were a very rare and remarkably early response to the problem of achieving wide uninterrupted floor spans with cast iron.²² This form of construction was pioneered on the Skin Floor of the New Tobacco Warehouse in London (1811-13) (I), but it nevertheless is a remarkably early and well preserved manifestation of a structural next met with at Robert Stephenson's Forth Street Works, Newcastle (c.1830) (I).
- 6.18 The North Saw Pits building at Sheerness (Bldg 84) (1828) (II*), whilst built four years after Holl's death, has a very similar form of construction to the Working Mast House and it may even have been built with left-over castings from it. Whilst probably erected by Holl's successor, W.Miller, this

¹⁹ EH, 2003, 19 & 21

²⁰ EH, 2003, 21-22

²¹ EH, 2003, 22

²² EH, 2003, 23

building has a single outstanding attribute. Being built as a light-weight saw pit cover, its iron frame is entirely free-standing, originally supported without the aid of masonry exterior walls, excepting at its narrow ends. It is thus a high-tech essay on a very traditional theme.²³ As a free-standing frame, it builds on the arched glasshouses that developed from Repton's now-demolished Garden Hall at Carlton House (1803) and, more importantly, John Rennie (Snr)'s Anchor Forge, originally erected at the Woolwich Dockyard (1814-16). This was also constructed as a wholly self-supporting iron frame, with iron columns bolted to arched girders and iron trusses. This building is regarded as the first of its type in the world, and in its re-erected state at the Ironbridge Gorge Museum it is today displayed as an open-sided structure. Rennie's Woolwich building was nevertheless originally constructed with brick outer walls, which both weather-proofed and buttressed the structure when in use as a heavy forge.²⁴ In contrast, the North Saw Pits building at Sheerness managed to dispense with even the pretence of masonry curtain walling on its two longest sides. It is Listed Grade II* in recognition of the fact, despite now having closed-in sides and having been shortened from 10 bays to 7. The List Description describes the building as 'an example of the experimental iron construction developed by Rennie and Holl and pioneered in the dockyards... (and)...an important example of a free-standing iron frame'. It would appear that the Sheerness building may in fact have a claim to be the world's earliest genuinely free-standing iron-framed building, and it is certainly the oldest to survive on its original site. In many ways it is thus the direct progenitor of the internationally-significant Sheerness Boat Store nearby.

- 6.19 Holl's work at Sheerness, Pembroke and other naval yards was closely paralleled by John Rennie (Jnr)'s work at the Royal William and Royal Clarence Victualling Yards. In these yards the use of iron was similar to that of Holl, but in the Clarence Store at the Royal William Yard (c.1830) (I) Rennie borrowed from his father's Anchor Forge at Woolwich (1814-16) and from the Stanley Mill in Stroud (1813) (I), by using arched girders rigidly bolted to iron columns in order to achieve a structurally-static frame, one of the key developments in metal construction. This work on arched beams was itself paralleled at Charles Fowler's Hungerford Fish Market (1835), where spandrel brackets were used to similarly form a rigid brace between the column and beam.²⁵
- 6.20 These experiments of the early 1800s formed the basis for the following phase of important naval constructions exploiting the structural potential of iron. Within the naval dockyards two parallel strands of development occur. One strand was the construction of masonry buildings of increasing size using internal iron structures and roofs, most notably the enormous new engineering facilities needed following the navy's decision during the 1830s to abandon Woolwich as its main yard for its steam-powered ships in favour building new steam-servicing facilities at Portsmouth and Devonport. The other strand was the construction of large, free-standing iron frames, prompted by

²³ EH, 2003, 23

²⁴ EH, 2003, 20

²⁵ EH, 2003, 24

the need for huge covers over the navy's ship-building slipways, as capital ships, often taking over 5 years to construct, were often already starting to rot when launched.

- 6.21 Key buildings in the first strand are Capt. James' No.2 Ship Shop (1846-9) (II*) and contemporary Brass Foundry (II) at Portsmouth, Greene and Scamp's massive 'Quadrangle' at Devonport (1852-61) (I).²⁶ Apart from the very mature wrought iron roofs of James' Portsmouth buildings (developing a theme pioneered by Stephenson / Fox & Henderson at Euston Station (1835-9), these all used relatively simple cast-iron structural elements only, albeit on a massive scale. In the No.2 Ship Shop Greene used girders with a parabolic lower flange and rigid connections to relatively conventional iron columns. At the Devonport 'Quadrangle' he used cast-iron arched girders with rigid connections to H-section columns. A further key building is Andrew Murray's Iron Foundry at Portsmouth (c.1857-61) (II*) where riveted wrought-iron beams, developed in the 1840s were used for the first time in a naval context.²⁷ The other important masonry-walled naval buildings of this genre are Greene's sawmills at Devonport and Sheerness (1856-1859) (II* and II) and accompanying smitheries. Here Greene again used cast-iron beams with parabolic lower flanges with rigid end connections. Otherwise the sawmills were not particularly radical in their use of iron. In the contemporary Devonport smithery (c.1857) (II*) Greene employed H-section columns however, connected at the top using rectangular open lattice girders, as he had on his No.7 Slip roof at Chatham (I) in 1852. Like the arched girders mentioned above, this was another precursor to beams with rigid bolted end connections.²⁸
- 6.22 The other thread of structural development was that of the building slipway cover. By definition these had to be free-standing frames of enormous size. The navy built its first slip covers of timber, to designs by its chief naval architect Sir Robert Seppings, in the period c.1813-1838. Three survive, two at Devonport (c.1814) (both II*) and one at Chatham (1836) (I). The Chatham roof was almost certainly the last to be built of wood, iron-framing being introduced in the 1830s, starting with a series of covers erected over the building slips at Pembroke Dock. Eventually seventeen were built, the last (at Woolwich), by Greene and Scamp, in 1857. Six survive at Chatham, four in-situ (all Grade I) and two moved from Woolwich in the late 1860s (both II*). A further two altered examples survive at the site of the former Deptford Dockyard in London (both II). These were at the time the largest-span roofs in Britain and they are easily the equal of the great railway station roofs being developed at the same time. Unlike the railway roofs, the arched form was not applicable to ship-building and the significance of these enormous naval structures lies not so much in their gigantic size, but in how they finally proved 'the principle of rigid (portal) framing, so as to provide large open spaces of uniform height without the encumbrance of heavy masonry walls'.²⁹ The collection of slipway roofs at Chatham, spanning the period 1836 to 1857,

²⁶ EH, 2003, 25-27

²⁷ EH, 2003, 26

²⁸ EH, 2003, 27

²⁹ EH, 2003, 28-9

form a remarkable group. It is claimed that in them 'the development of free-standing iron frames – a development of international significance in terms of construction history – can be traced. The pinnacle of this strand of evolution is regarded as being Greene's roof over the No.7 Slip roof at Chatham (1852) (I). Here he married together rigid jointing, simple H-section columns and rectangular cast-iron open lattice girders, the latter element being borrowed from Paxton / Fox & Henderson's Crystal Palace (1850-1).³⁰

- 6.23 These strands of evolution came together in Green and Scamp's Sheerness Boat Store (1858-9) (I). Here Greene married together H-section columns and rigid end connections in a multi-storey building for the first time. With the rigid end connections, capable of resisting tension in the upper part of the beam as well as the lower, Greene realised that the parabolic lower flange, arched girder and lattice girder forms were no longer needed, and equal flanged, riveted, wrought-iron I-beams could be used for the first time. It is for this reason that that this building is considered to be 'the direct progenitor of all the rigid metal framed buildings used throughout the world today'.³¹
- 6.24 It will be seen from the above why English Heritage and others attach considerable importance to the iron-framed naval buildings of Holl, Rennie and Greene. It is true that the work of these engineers and architects in the developments in structural iron framing parallels similar and contemporary developments in the civil sphere in Britain, and thus in the world. The contribution made by the Navy Board's architects, surveyors and consultant engineers in the period 1812 to 1859 is nevertheless at least the equal of the contribution made by the civil pioneers such as Bage, Fairbairn, Fox and Henderson. What makes the naval dockyards so exceptional has been the high rate of survival of the buildings concerned, compared with their civil counterparts, and their concentration in a mere handful of sites in Plymouth, Portsmouth, Pembroke and Sheerness. Of all of the naval yards, it is only at Sheerness where such an evolution can be traced on a single site. Here, in a few minutes, it is possible to view Rennie and Holl's important early masonry-walled structures (Bldgs 23 & 26), pass through the free-standing North Saw Pits building (Bldg 84), inspect Greene's Saw Mill (Bldg 105-7) with its parabolic beams and rigid joints and end up at Greene's internationally-renowned Boat Store (Bldg 78).

i. Potential Direct Impacts

- 6.25 **RPS 147: Former Working Mast & Boat House (Bldg 26) (LB no. 6/10004)**

Original Function: Mast-Making and Boat Storage (after c.1900 Shipwright's Machine Shop)

Date: 1823-6

Designer: J.Rennie & E.Holl

³⁰ EH, 2003, 28-9 & 41

Current Grade: Grade II*

Listing Description Mast and boat house, now store. 1821-26, by Edward Holl, architect for the Navy Board, and John Rennie Snr, engineer. Yellow stock brick with slate hipped roof and internal iron frame. Rectangular open plan. EXTERIOR: 2-storey; 14x10-window range. North and east fronts have a ground-floor arcade of round arches with rubbed brick heads and iron fanlights, most altered or replaced, and rubbed brick flat heads to first-floor windows, larger hoist doors to the N side, 8112-pane metal tilting casement to the E; S front has ground-floor round-arched openings within recesses, blocked to the ends. E elevation obscured by later building, has wide flat-headed openings with large cast-iron lintels dated 1825, some containing double doors with small-paned lights above. Plat band, cornice and parapet. INTERIOR: contains an internal frame of ground-floor cast-iron columns with diagonal cruciform struts supporting longitudinal beams with parabolic bottom flanges, with lateral beams bolted along the sides, all with curved top profiles, with sockets in the sides holding joists, supporting timber boards. Upper floor has similar columns and braces bolted to valley beams, with 5-bay roof with trusses of cast-iron ties and struts with king and princess rods; 2 central bays have glazed ridges and the central area of first floor opened, all probably C20. A stair in the rear leads down to the culvert with iron gates formerly leading to the mast pond. HISTORY: one of two matching buildings used for constructing and storing masts and small boats, either side of a central mast pond, the second store and the pond now demolished and filled in. Built above a mast tunnel culvert leading from the river to underground vaults for storing masts under water, the latter also apparently filled in. The frame is part of an important strain in the early C19 development of metal and fire-proof structural systems, devised by Holl and used at the Devonport Ropery (1815), Chatham Lead Mills (1818) and subsequently Archway House, Sheerness (1825). The 1813 New Tobacco Warehouse, London (II*), used a similar system of diagonal cast-iron braces though to a timber roof. One of the last surviving dock buildings from Rennie's planned dockyard, and one of only two examples of a once-common naval building type.

Current Condition: In use as warehouse for finished forest products. Reasonable condition. Gutters relined and some temporary repairs to wired glass in roof 2000-2003, but roof, (plastic) rainwater goods, windows and pointing still require attention.

Significance: The layout and construction of this building displays Rennie's 're-thinking of the organisation of the yard to try and improve the efficiency of its operation, forming part as it did of a complex of working mast and boat houses, mast stores, ponds and locks, linked to the yard

³¹ EH, 2003, 27

pumping station, and built to a unitary plan from repetitive prefabricated iron units.³² Inserted riveted stanchions and runners of overhead gantry crane (c.1900) are of lesser importance.

Formerly used for mast-making (and boat storage), this building also forms 'part of (the) unrivalled woodworking complex' at Sheerness, consisting of Miller's Archway House (Bldg 23 – **RPS 150**) and North Saw Pits (Bldg 84 – **RPS 154**), Greene's Saw Mill & Smithery (Bldg 105-7 – **RPS 225**) and probably Bldg 86 (**RPS 228**)³³. Formerly one of a pair of near-identical buildings set over a large mast pond and connected to river by a mast tunnel with a lock. The rationality and symmetry of the complex has been largely lost to view through the infilling of the mast pond and the demolition of the matching Mast Store in 1980.³⁴ The underground 'mast tunnel' canal and lock connecting to the sea are thought to survive below ground.

This building is 'one of the last surviving large industrial buildings from Rennie's planned dockyard, and one of only two (possibly three) surviving examples of a once-common dockyard building type.'³⁵ The other examples elsewhere are both traditional timber-framed buildings, notably the Mast House & Mould Loft at Chatham (1753-5) (Grade I) (and possibly also the Wheelwright's Shop (also a former mast house) (c.1780) (Grade II*), also at Chatham). Similar early timber-built structures that served as sail-era boat houses or boat stores include Nos.5 & 7 Boathouses at Portsmouth (mid 19C) (II) and the Lower Boat Store at Chatham (1844) (II*). Beatson's No.6 Boathouse at Portsmouth (1845-48) (II*) is the only other surviving sail-era boat store or mast house with an iron frame. These are listed in the table below.

The frame is part of an important strain in the early 19th century development of metal and fire-proof structural systems, devised by Holl and used at the Devonport Ropery (1815), Chatham Lead Mills (1818) and subsequently at Archway House (q.v.), with bifurcating struts rising from the columns to support timber trusses as at the remarkable New Tobacco Warehouse of 1813 at London Docks.³⁶ The iron roof is considered to be 'of national significance, in view of (its) rarity and the world importance of Britain in pioneering new constructional forms'.³⁷

The Former Working Mast House remains physically connected to the still-exposed sea wall in Rats Bay by the in-filled mast tunnel and lock. The blocked entrance arch in the sea wall is still visible. Whilst the sea wall is not specifically Listed, it may be argued to be physically annexed to the Grade II* Former Working Mast House.

Setting: The Former Working Mast House still retains a tangible visual relationship with Rennie's still-exposed dockyard sea wall when viewed from the south and a physical relationship to the

³² EH, 2003, 61

³³ EH, 2003, 61

³⁴ RCHME, 1995, 5-8

³⁵ List Description

³⁶ EH, 2003, 61 and List Description

³⁷ EH, 2003, 25

blocked entrance arch to the mast tunnel to the west. Railway tracks still visible set into nearby hard standings also still lend some historic ambiance to the building's setting. Otherwise, the setting of the Former Working Mast House has been greatly eroded through the infilling of the Mast Pond, Great Basin and associated dry docks and the Small Basin and through the demolition of all nearby historic buildings, including the corresponding East Mast House and Quadrangular Storehouse. Its setting is further damaged by the large modern sheds that have been constructed since the 1970s over most of the southern portion of the historic dockyard, including adjoining and abutting both the east and west sides of the building, the latter extension covering the former site of the mast pond. The Former Working Mast House is thus almost entirely isolated and divorced from the remainder of the historic dockyard.

ii. Potential Indirect Impacts

6.26 **RPS 150: Archway House (Bldg 23) (LB no. 2/107)**

Original Function: Integrated Carpentry Shop (Seasoning Sheds, Sawpits and Stores)

Date: 1825

Designer: E.Holl / W.Miller

Current Grade: Grade II* LB (and in proposed Conservation Area)

Current Condition: Mostly in use as offices and miscellaneous stores. Better condition towards N end. Generally in reasonable condition, but roof coverings, rainwater goods, windows, parapets and pointing require attention. Some remedial works to roof carried out 2000-2003 and programme of window repair and replacement commenced.

Significance: Originally an integrated carpentry shop with mould loft, seasoning sheds, sawpits and stores, this building is regarded as a 'part of (the) unrivalled woodworking complex' that has survived at Sheerness. This complex includes Rennie's Working Mast House (Bldg 26 – **RPS 147**), Miller's North Saw Pits (Bldg 84 – **RPS 154**), Greene's Saw Mill & Smithery (Bldg 105-7 – **RPS 225**) and probably Bldg 86 (**RPS 228**)³⁸. Forms a central part of a unique planned early C19 dockyard'.³⁹ Another outstanding example of Edward Holl type early iron-framed construction,⁴⁰ 'of considerable interest as a fire-proof integrated timber workshop within Rennie's plan for the rebuilt

³⁸ EH, 2003, 61

³⁹ List Description

⁴⁰ EH, 2003, 61

yard.⁴¹ The iron roof is considered to be 'of national significance, in view of (its) rarity and the world importance of Britain in pioneering new constructional forms'.⁴²

This building and Bldg 84 (below) are probably the last manual saw pit buildings constructed in a naval yard.⁴³ This building is also regarded as 'the only building constructed to house Saw Pits to have survived nationally in easily-recognisable form'⁴⁴ and 'now the most complete and unaltered workshop for forming timber in any of the (naval or civil) dockyards'.⁴⁵ Forms part of an important cannon of sail-era woodworking buildings, including the Clock tower Building (1723) and the Brunel / Bentham / Holl (steam) Saw Mill (1812-14), both at Chatham). These buildings are listed in the table below.

Setting: The setting of Archway House has been similarly compromised through the infilling of the Mast Pond, Great Basin and associated dry docks and the Small Basin and through the demolition of nearby historic buildings, including most notably the Quadrangular Storehouse and Holl's Smithery. Its setting has also been further damaged by the large modern sheds that have been constructed since the 1970s over most of the southern portion of the historic dockyard. Archway House nevertheless retains a tangible visual relationship with the Grade II Listed Dockyard Wall and Blue Town beyond, the un-Listed Rennie pump house and the pre-1960 buildings on Main Road to its east (Bldgs 55, 56, 104, 105, 106 and 107). The surviving railway sidings still visible set into the hard standings to the immediate west of Archway House also still lend some historic ambiance to the building's setting.

6.27 **RPS 144: Former Boat Store (Bldg 78) (LB no. 5/113)**

Name: Former Boat Store (Bldg 78) (LB no. 5/113)

Original Function: Former Boat Store

Date: 1856-8

Designer: Col. G. Greene

Current Grade: Grade I (and in proposed Conservation Area)

Current Condition: Ground and first stories in partial use as a storage area for miscellaneous building maintenance and dock stores. Much work carried out to roof cladding, gutters, downpipes and drains 2000-2003, but work still required to outer slopes of spans one and three. Roof flexing

⁴¹ List Description

⁴² EH, 2003, 25

⁴³ EH, 2003, 56

⁴⁴ EH, 2003, 61

⁴⁵ EH, 2003, 56

is still leading to breakage of glass panels in roof. Secondary corrugated steel cladding and windows to outer walls require maintenance and repair. Many of the principal stanchions are broken on the ground storey due to lorry impact damage. Most have some form of repair and these breakages do not appear to be putting the building in immediate danger of collapse. On EH 'Building at Risk' Register for many years

Significance: 'Forms part of a group with the boat basin (**RPS153**) and Bldgs 84 & 86 (**RPS 154 and 228**)⁴⁶ and stands at the conclusion of the innovative series of important iron-framed buildings that survive at Sheerness'. As a boat store, 'the Sheerness store is remarkable for its size and efficient storage and handling arrangements, and also for its innovatory structural system...' ⁴⁷ as such, it forms the most modern of the important collection of five boat houses that survive in the naval dockyards. The others include the traditional timber-built Lower Boat Store at Chatham (1844) (II*) and the Nos.5 & 7 Boat stores at Portsmouth (mid 19c) (II), the Working Mast & Boat House at Sheerness (1823-6 – RPS 147) (Rennie & Holl) (II*) and the iron-framed No.6 Boathouse at Portsmouth (1845-48) (Beatson) (II*) (see table below).⁴⁸ Even more importantly, it is 'of international significance as the world's earliest surviving multi-storey fully iron-framed building. It was the first structure to depend for its stability entirely on (its portal framing and) the rigidity of its joints. It stands at the conclusion of an evolution of iron structures within the dockyards, and prefigures the development of (the skyscraper and) modern architecture'.⁴⁹

Setting: Greene's Boat Store forms an iconic and discrete group with the boat basin, dry docks and slipway (**RPS153**) and with Bldgs 84 & 86 (**RPS 154 and 228**). This group is separated from Garrison Point Fort (**98 / 230 / 245**) and the Indented Lines (**RPS 108 / 244**) by the historic Dockyard Wall (**RPS 229**). The setting of this group, and the Boat Store in particular, has been significantly compromised through the infilling of the Small Basin, through the demolition of nearby historic buildings, including most notably the Quadrangular Store and by the large modern sheds that have been constructed since the 1970s over the sites of the Small Basin and the Quadrangular Store..

6.28 **RPS 154: Former North Saw Pits (Bldg 84) (LB NO. 5/10001)**

Original Function: Open-sided, cast-iron saw pit cover

Date: 1828

Designer: E.Holl / W.Miller

⁴⁶ List Description

⁴⁷ List Description

⁴⁸ EH, 2003, 69

⁴⁹ EH, 2003, 69 & List Description

Current Grade: Grade II* LB (and in proposed Conservation Area)

Current Condition: Originally 10-bays long, truncated in mid 20th Century. Currently in use as offices and miscellaneous stores. Reasonable condition, but roof cladding, parapet, windows and pointing require attention.

Significance: Originally an open-sided, cast-iron saw pit cover, this building is regarded as a 'part of (the) unrivalled woodworking complex' that has survived at Sheerness. This complex includes Rennie's Working Mast House (Bldg 26), Miller's Archway House (Bldg 23), Greene's Saw Mill & Smithery (Bldg 105-7) and probably Bldg 86.⁵⁰ Forms part of a unique early C19 dockyard'.⁵¹

This building and Bldg 23 (above) are probably the last manual saw pit buildings constructed in a naval yard.⁵² Together they form part of an important canon of sail-era woodworking buildings, including the Clock tower Building (1723) and the Brunel / Bentham / Holl (steam) Saw Mill (1812-14), both at Chatham).⁵³ These buildings are listed in the table below. Another example of the early iron-framed construction developed by the Rennie's and Edward Holl, this building is 'outstanding in a national and typological context for (its) free-standing iron-frame with rigid, unbraced end connections'.⁵⁴ The iron roof is considered to be 'of national significance, in view of (its) rarity and the world importance of Britain in pioneering new constructional forms'.⁵⁵

Setting: As above, the Former Saw Pits Building forms an iconic and discrete group with the boat basin, dry docks and slipway (**RPS153**) and with Bldgs 78 & 86 (**RPS 144 and 228**). This group is separated from Garrison Point Fort (**98 / 230 / 245**) and the Indented Lines (**RPS 108 / 244**) by the historic Dockyard Wall (**RPS 229**). The setting of this group has is compromised by the large modern sheds that have been constructed since the 1970s over the sites of the Small Basin and the Quadrangular Store.

6.29 RPS 228: Building 86 (LB NO. 5/10002)

Original Function: Not known

Date: c.1889-1900 (Components reused from earlier buildings)

Designer: Not known

Current Grade: Grade II (and in proposed Conservation Area)

⁵⁰ EH, 2003, 61

⁵¹ List Description

⁵² EH, 2003, 56

⁵³ EH, 2003, 55-62

⁵⁴ EH, 2003, 61

⁵⁵ EH, 2003, 25

Current Condition: Poor condition but still in partial use as a storage area for miscellaneous stores by marine engineering dept. Roof claddings, rainwater goods, windows and pointing all requiring extensive attention.

Significance: Three phases, all with iron framing, two phases with iron roofs. Most elements apparently reused from earlier buildings.⁵⁶ Forms a less important element of the important group of iron-framed buildings at Sheerness. 'A later dockyard building within Rennie's planned layout, with group value with the other (nearby) Listed structures' (Rennie's docks, Boat Store and Bldg 84).⁵⁷

Setting: As above..

6.30 Also in the working port area, but at a slightly greater distance from the Proposal Site, are a number of further historic buildings whose settings might be affected by the Proposed Development. These would include:

6.31 **Building 49 (LB No. N/A)**

Original Function: Dockyard School

Date: 1893

Designer: Not known

Current Grade: N/A (Not Listed) (In proposed Conservation Area)

Current Condition: Good condition and in use as offices.

Significance: Not Listed. A school for dockyard apprentices was first set up in the dockyard in 1843. Apart this building and Bldg. 103 opposite, there would appear to be no other surviving purpose-built naval dockyard schools, excepting Holl's pioneering 'School for Superior Apprentices' (now 'Former Naval School of Naval Architecture') at Portsmouth (c1816)(II).⁵⁸ Group value with the other (nearby) Listed and un-Listed structures (Bldgs.55-6, 101 and 103-107).

Setting: The un-Listed Dockyard School (Building 49) and Buildings 55, 56, 101, 102 and 103, together with the Grade II Listed Former Pay Office (Building 104 – **RPS 224**) and Greene's Former Sawmill (Building 105 / 106 / 107 – **RPS 225**) form another group of historic dockyard buildings lining Main Road. Whilst this group is relatively screened from the Proposed Development by Archway House (Building 23 – **RPS 150**) and some large modern sheds, the view

⁵⁶ RCHME, 1995, 3

⁵⁷ List Description

⁵⁸ Pers. Com. J.Coad, EH Inspector

west along Main Road towards the Medway is blocked and compromised by the large modern sheds built on the sites of the Small Basin and Quadrangular Store.

6.32 **Buildings 55 And 56 (LB Nos. N/A)**

Original Function: Workshops and Stores

Date: c.WWII (possibly with earlier elements)

Designer: Not known

Current Grade: N/A (Not Listed) (In proposed Conservation Area)

Current Condition: Good. In use as workshops & stores.

Significance: Altered c.WWII sheds. Group value with the other (nearby) listed and un-listed structures (bldgs.49, 101 and 104-107)

Setting: as above

6.33 **Building 101 (LB No. N/A)**

Original Function: Fire Station

Date: c.WWII (with earlier fragments)

Designer: Not known

Current Grade: N/A (Not Listed) (In proposed Conservation Area)

Current Condition: Fair. In use as workshops.

Significance: Group value with the other (nearby) listed and un-listed structures (bldgs.49, 55-6 and 104-107)

Setting: as above

6.34 **Name: Building 103 (LB No. N/A)**

Original Function: Dockyard School

Date: n.d.

Designer: Not known

Current Grade: N/A (Not Listed) (In proposed Conservation Area)**Current Condition:** Fair. In use as offices.

Significance: Apart this building and Bldg.49, there would appear to be no other surviving purpose-built naval dockyard schools in the UK, excepting Holl's pioneering 'School for Superior Apprentices' (now 'Former Naval School of Naval Architecture') at Portsmouth (c1816)(II).⁵⁹ 'A rare surviving dockyard school, functionally related to bldg.49' and 'a later dockyard building within Rennie's planned layout, with group value with the other (nearby) listed and un-listed structures (bldgs.49, 55-6 and 101 and 104-107)'.

Setting: as above6.35 **RPS 224: Former Pay Office (Bldg 104) (LB No. 2/10004)****Original Function:** Pay Office**Date:** 1828**Designer:** W.Miller**Current Grade: Grade II LB (and in proposed Conservation Area)**

Current Condition: Good. In use as offices. Upper storey largely destroyed by fire in 1980. Building then rebuilt and extended.⁶⁰ Extended again in 1987.⁶¹

Significance: Sole surviving naval dockyard pay office incorporating cast-iron elements as part of Holl's 'fireproofing' system. Ironically the upper storey was largely destroyed by fire and the building extended in 1980.⁶² Group value with Col.Green's steam sawmill (Bldg 105-7 -LB no. 2/10003) and historic (but un-Listed) buildings nos.49 and 101-103.

Setting: As above.6.36 **RPS 225: Former Sawmill (Bldg 105-7) (Lb No. 2/10003)****Original Function:** Formerly combined sawmill, smithery, boiler house and engine house**Date:** 1856-8**Designer:** Col. G.Green⁵⁹ Pers. Com. J.Coad, EH Inspector⁶⁰ RCHME, 1995, 1

Current Grade: Grade II (and in proposed Conservation Area)

Current Condition: In partial use. Bldg 105&106 - Much work carried out to roof and gutters 2000-2003. Removed windows to Bldg 105 still require replacement. Bldg 107 has localised impact damage and broken windows. Roof, rainwater goods, windows and pointing require attention.

Significance: Originally an integrated, mechanised, iron-framed steam sawmill. This building forms part of the nationally significant series of woodworking buildings within the naval dockyards of Britain (see table below), although of the surviving three surviving purpose-built mechanised naval sawmills, the Sheerness example is considered the least significant in itself. The other purpose-built sawmills are Brunel, Bentham & Holl's (steam) Saw Mill at Chatham (1812-14) (I) and Greene's South Sawmills at Devonport (c.1860) (II*). Greene's sawmills at Devonport and Sheerness were remarkably similar and both were constructed in tandem with enlarged or rebuilt smitheries, largely to facilitate the building of composite ships (timber planking on iron frames). Whilst the Sheerness sawmill was built in brick, the Devonport mill is of granite ashlar. Unlike the Sheerness example, the Devonport South Sawmill retains its contextual relationships with both the South Smithery and adjacent Composite Shipbuilding Shop.⁶³

This building is regarded as a 'part of (the) unrivalled woodworking complex' that has survived at Sheerness. This complex also includes Rennie's Working Mast House (Bldg 26), Miller's 'Archway House' and North Saw Pits (Bldgs 23 & 84) and probably Bldg 86⁶⁴.

The building is slightly earlier than Greene's Boat Store at Sheerness (below) and in its use of rigid end connections and parallel beams it forms a direct precursor to this internationally significant building.⁶⁵ It thus also forms part of the innovative series of important iron-framed buildings that survive at Sheerness.

Group value with Col. Greene's steam sawmill (Bldg 105-7 -LB no. 2/10003), W. Miller's former Pay Office of 1828 (Bldg 104, LB no. 2/10004) and historic (but un-Listed) buildings nos.49 and 101-103.

Setting: As above.

c) Extant Historic Structures beyond the Working Port Area

- 6.37 There are a number of further historic structures that lie beyond the working port area, but within the former naval dockyard and garrison. All lie outside of the Proposal Site and none will be

⁶¹ List Description

⁶² RCHME, 1995, 1

⁶³ EH, 2003, 58-61

⁶⁴ List Description and EH, 2003, 61

⁶⁵ EH, 2003, 27

subject to direct physical impacts.

i. Potential Direct Impacts

6.38 None.

ii. Potential Indirect Impacts

6.39 The proposed development may result in minor positive or negative effects on the setting of some or all of the following:

6.40 **RPS 151: Former St Paul's Parish Dockyard Church, Wall & Railings (LB no. 2/87)**

Date: 1828, reb 1884

Designer: G.Taylor

Current Grade: Grade II* and within Conservation Area

Current Condition: Derelict burned out shell.

Significance: Part of the complete and little-altered eastern corner of Rennie's model layout, containing dockyard wall, entrance gate, church, four ranges of officer's accommodation and officer's stables. Part of a unique planned early C19 dockyard.⁶⁶

Setting: The Former Dockyard Church forms part of a discrete and important group of historic buildings within the historic residential quarter of the historic dockyard. This group is defined and encompassed within the present Sheerness Dockyard Conservation Area. Forming an enclosed group lying at some distance from the Proposals Site and separated from it by a number of large modern sheds that are to be retained.

6.41 **RPS 148: 1-8 Naval Terrace, Railings, Coach Houses & Stables (LB nos. 2/88 & 2/89)**

Original Function: Senior Officer's Quarters

Date: 1824-7

Designer: G.Taylor

Current Grade: Grade II* and within Conservation Area

⁶⁶ List Description

Current Condition: Almost fully occupied, with refurbishment of some houses being carried out Jan 2004. Some houses still deteriorating. Grade II* Listed Coach Houses have been on EH 'Building at Risk' for many years ('Immediate risk of further rapid deterioration or loss of fabric; no solution agreed').

Significance: Formerly the residences of the more senior dockyard officers, this row still forms an important part of the complete and little-altered eastern corner of Rennie's model layout at Sheerness, containing dockyard wall, entrance gate, church, four ranges of officer's accommodation and officer's stables. This row is regarded as an important element of 'the most complete and unaltered part of Rennie's model layout'⁶⁷ and of 'this unique planned early C19 dockyard'.⁶⁸

This terrace forms part of an important series of surviving naval dockyard officer's terraces (see table below), some of which are of high-national or even international significance. Holl's work at Pembroke and Taylor's near-contemporary work at Sheerness are not as grand as that at the older yards, but the provision of officer's housing at Sheerness was more comprehensive than elsewhere on account of the site's isolated location.

Setting: As above

6.42 RPS 149: 1-15 Regency Close & Railings and Wall to North (LB nos. 2/90 & 2/92)

Original Function: Inferior Officer's Quarters

Date: 1829-33

Designer: G. Taylor

Current Grade: Grade II* and within Conservation Area

Current Condition: On EH 'Building at Risk' Register for many years ('Slow decay'). Now undergoing repair and refurbishment.

Significance: Formerly the residences of 45 of the more junior dockyard officers, this row still forms an important part of the complete and little-altered eastern corner of Rennie's model layout at Sheerness, containing dockyard wall, entrance gate, church, four ranges of officer's accommodation and officer's stables. This row is regarded as an important element of 'the most

⁶⁷ EH, 2003, 78

⁶⁸ List Description

complete and unaltered part of Rennie's model layout⁶⁹ and of 'this unique planned early C19 dockyard'.⁷⁰

(Clock tower to the immediate west is the original clock from the Quadrangle Storehouse, re-erected here c.1980)

Setting: As above

6.43 **RPS 151: Dockyard House & Wall enclosing Garden to South (LB nos. 2/94 & 2/93)**

Original Function: Commissioner's House

Date: 1820s

Designer: G.Taylor

Current Grade: Grade II* and within Conservation Area

Current Condition: On EH 'Building at Risk' Register for many years ('Slow decay'). Now undergoing repair and refurbishment.

Significance: Formerly the Commissioner's residence, Dockyard House was the most important of the dockyard officer's houses designed by Taylor at Sheerness. It still forms an important part of the complete and little-altered eastern corner of Rennie's model layout at Sheerness, containing dockyard wall, entrance gate, church, four ranges of officer's accommodation and officer's stables. It is regarded as an important element of 'the most complete and unaltered part of Rennie's model layout'⁷¹ and of 'this unique planned early C19 dockyard'.⁷²

Setting: As above

6.44 **RPS 222: Dockyard Cottage, Garden Wall & Railings (LB no. 2/97)**

Original Function: Boatswain's House

Date: c.1826

Designer: G.Taylor

Current Grade: Grade II and within Conservation Area

⁶⁹ EH, 2003, 78

⁷⁰ List Description

⁷¹ EH, 2003, 78

⁷² List Description

Current Condition: In use as offices until recently. Fair condition.

Significance: Formerly the Boatswain's residence, this building still forms an important part of the complete and little-altered eastern corner of Rennie's model layout at Sheerness, containing dockyard wall, entrance gate, church, four ranges of officer's accommodation and officer's stables.⁷³

Setting: As above

6.45 **RPS 221: Name: Former Stables to rear of Dockyard Cottage (LB nos. 2/98)**

Original Function: Officer's Stables and Carhouse

Date: c.1826

Designer: G.Taylor

Current Grade: Grade II and within Conservation Area

Current Condition: In use as offices until recently. Fair condition. Interior largely remodelled in late C20.

Significance: Formerly Officer's stables and a carhouse, this building still forms an important part of the complete and little-altered eastern corner of Rennie's model layout at Sheerness, containing dockyard wall, entrance gate, church, four ranges of officer's accommodation and officer's stables.⁷⁴

Setting: As above

6.46 **RPS 226 and 227: Nos.1&2 South Gate House (LB no. 2/10009) and North Gate House (LB no. 2/99)**

Original Function: Main Gate, Guard House & Offices

Date: c.1826

Designer: G.Taylor & J.Rennie

Current Grade: Grade II (Formerly II*) and within Conservation Area

⁷³ List Description

⁷⁴ List Description

Current Condition: North Gate House in use as offices. Nos. 1&2 South Gate House currently out of use. Former linking granite wall, arch and colonnade has been lost. Generally good condition, but with some evidence of structural movement. Roof, pointing and external joinery/decoration require some attention.

Significance: The surviving gate lodges are a key element of the well-preserved dockyard wall at Sheerness and a typical feature of all naval (and many civil) dockyards. They are marred by the loss of former granite gateway, wall and colonnade that formed the actual gateway itself however. The surviving flanking lodges and piers are nevertheless regarded as of historic importance and as an important element of the complete and little-altered eastern corner of Rennie's model layout at Sheerness, containing dockyard wall, entrance gate, church, four ranges of officer's accommodation and officer's stables.⁷⁵

Setting: The North and South Gatehouses and Dockyard Wall (see below) also form part of the discrete residential quarter of the historic dockyard, defined by the present Sheerness Dockyard Conservation Area. In enclosing this group, the Gatehouses and the part of the Wall enclosing the north side of the historic dockyard also address the lorry parks etc that lie on the site of the one-time garrison who's buildings formerly lay between the northern Dockyard Wall and the Sheerness Lines. This part of the setting does not benefit from the areas of hard standing, parked lorries and enclosing modern palisade fencing.

6.47 **RPS 223 and 229: Wall from Main Gate round S and E sides of Dockyard (LB no. 2/116) & Wall from Main Gate along N and NE sides of Dockyard (LB no. 2/10008)**

Original Function: Dockyard Wall

Date: 1824-31

Designer: J.Rennie

Current Grade: Grade II and largely within Conservation Area

Current Condition: Generally good but pointing requires attention in areas.

Significance: Well-built high wall of buttressed yellow brick with granite plinth and coping, a typical feature of all naval (and many civil) dockyards. It is regarded as of historic importance and as an important part of the complete and little-altered eastern corner of Rennie's model layout at

⁷⁵ List Description

Sheerness, containing dockyard wall, entrance gate, church, four ranges of officer's accommodation and officer's stables⁷⁶

Setting: Generally speaking, the setting of large parts of the historic Dockyard Wall benefits from the wall's close relationships to the historic dockyard residential area (see above) and from its relationship to the Blue Town High Street. As stated above, the setting of the part of the Wall enclosing the north side of the historic dockyard does not benefit from the lorry parks etc that lie to its north. Similarly, the setting of the part of the wall running south from Archway House has been compromised by the demolitions and new construction that has taken place since the 1970s in the southern part of the historic dockyard.

6.48 **RPS 108 / 244 (inc RPS 89 / 90 / 91 / 92 / 93, 105, 106 and 107): Albermarle Battery and Indented Lines Nos. 1, 2 & 3 Bastions) (SM no. KE 172)**

Original Function: Northern side of de Gomme's fort and defences

Date: 1667 and 1670s

Designer: Sir Bernard de Gomme

Current Grade: Scheduled Monument (and in proposed Conservation Area)

Current Condition: The 17th century indented line survives as two faces with the return for a third (RPS 105 / 106 / 107) (nos.1-3 from west to east). The revetted faces are in Portland ashlar, much patched with brick. At the two angles are corbelled bases of *echauguettes*, also in Portland stone. The beach has encroached on the revetment so that the shingle level is close to the base of one of the corbelled *echaugette*. To the rear of the Line, the rampart is revetted in brick with a row of blocked openings to rooms within the rampart. On top are the intact but dilapidated remains of Albermarle Battery (RPS 92), with two pairs of QF emplacements with collapsing battery control structures in between (RPS 89 / 90 / 91). Ruinous remains of machine-gun position below (RPS 93), although roof and one wall are demolished. The Indented Lines are now in a mutilated and eroded condition, with only fragmentary remains of the buildings and other batteries it once contained. Western *echaugette* (corner tower) buried beneath rock boulders. This area was generally complete in 1979, but recent landscaping and levelling have destroyed many buildings and features. On EH 'Building at Risk' Register for many years

Significance: The prime importance of this part of the dockyard defences lies in it being the sole surviving portion of the de Gomme's 17th century Sheerness Fort. Albermarle Battery (RPS 92) itself is an example of the reinforcement of the East Coast defences from c.1900 in the face of the

⁷⁶ EH, 2003, 78

German naval threat. The battery was built for 4 x 12pdr quick-fire guns (QFs) and was completed in 1913 as part of the enhancement of the East Coast defences against the German naval threat. By 1918, there was a 'ravelin' or machine-gun emplacement on the beach in front of the battery. Two of the 12 pdr QFs in 1920 were mounted with each gun resting on a concrete beam with a reinforced floor and concrete covers. Its role was the close defence of the Medway. By 1931, there were only two QFs in place. The battery was abandoned in 1956.⁷⁷

Setting: The setting of the Albermarle Battery and Indented Lines does not benefit from the former ferry terminal, areas of hard standing and enclosing modern palisade fencing that lie on the site of the one-time garrison that lay between the coastal defences and the dockyard wall. Their setting is further compromised by the more distant large modern sheds that have been built since the 1970s within the historic dockyard.

6.49 **RPS 102 / 243 (inc RPS 77 / 78 / 79 / 81 / 82 / 83 / 84 / 85 and 86): Sheerness Lines (North) (Centre (or 'Martello') Bastion and 'Curtain Battery') (SM no. KE 172)**

Original Function: Northern side of early-19th-century dockyard defences

Date: Mostly c1813 and c.1832, with later additions

Designer: Board of Ordnance

Current Grade: Scheduled Monument (and in proposed Conservation Area)

Current Condition: Now lying behind the modern concrete sea wall, the bastion has a wet moat which is brick revetted with the steeply battered earth rampart of Centre Bastion (**RPS 81**) containing the remains of multi-period emplacements. In front of the curtain are the remains of a tenaille. Most prominent are the Martello-like towers of a large coastal defence battery (**RPS 85**) comprising an elevated fire-control building and two circular Martello-like concrete towers for elevated gun emplacements, built in c.1913, with each tower mounting a single gun in an open emplacement. The eastern tower now has a WW2 observation post built over the gun emplacement and the western tower carries an Extended Defence Officer post of the same date. This has a cupola containing an observation slit with the chart room below. The chimney on the earlier fire control building appears to have been a dummy for camouflage together with the hipped roof. To the west of Centre Bastion is a controlled minefield post with a heavy concrete roof (**RPS 82**), whilst to the east are the remains of a Curtain Battery. On the tenaille is a searchlight position. The bastion as a whole is in a derelict and neglected condition within the confines of the Medway Ports vehicle storage area. Significant re-landscaping and earth-moving has been carried out since 1979, removing or burying a number of features on the south and east parts of Centre Bastion and

⁷⁷ RCHME , March 1995, 19-26 and KCC / EH Kent Defences KD 192

parts of the Curtain Battery to the east. The towers are still roofed but derelict. The ditch and rampart are intact though the ditch is somewhat diminished in width by the modern seawall and its eastern end has been largely in-filled by modern dumping. On EH 'Building at Risk' Register for many years.

Significance: Until the 1960s Sheerness retained a complete 18th-century bastioned trace and apart from Berwick upon Tweed was the only town in England where such a continuous trace survived more or less completely. The original bastions were connected by a continuous wall added c.1813. The Centre (or 'Martello') Bastion was added c.1832 as part of a strengthening of the late-18th century 'Sheerness Lines'. This northern part of the former defences is notable for the very rare surviving elevated gun towers for quick-fire (QF) guns and associated fire control building (**RPS 85**). The Sheerness examples are now only paralleled by similar towers in the approaches to the Humber. They were part of the strengthening of the east coast defences in anticipation of a German naval threat. Originally there was a tenaille in front of the curtain between the Centre Bastion and the No.1 (North East) Bastion (**RPS 72**) to the east. In 1845 the bastion mounted three 8in SBs and twenty 32pdrs on traversing platforms. By 1895, there were two 10in breech-loading guns (BLs), two 7in rifled breech-loading guns (RBLs) and two 64pdr rifled muzzle-loaders (RMLs). The two circular concrete towers (built to carry one 4.7in QF gun each) were adapted during the WW2 to create an Extended Defence Officer post commanding the controlled minefield to the north of the Medway.⁷⁸

Setting: In common with the Indented Lines (above), the setting of the northern Sheerness Lines is marred by the areas of lorry parking and enclosing modern palisade fencing that lie on the site of the one-time garrison. The setting is also compromised by the more distant large modern sheds that have been built since the 1970s within the historic dockyard. The closest of these sheds lie outside of the Proposals Site.

6.50 **RPS 102 / 242 (inc RPS 52 / 61 / 63 / 69 / 70 / 71 / 72 / 74 and 76: Sheerness Lines (East) (No.1 (North East) & part No.2 Bastions) (SM no. KE 172)**

Original Function: Eastern side of late 18th-century dockyard defences

Date: 1783-1816, with later additions

Designer: Board of Ordnance

Current Grade: Scheduled Monument (and in proposed Conservation Area)

Current Condition: The remains of the Sheerness eastern land front consists of two bastions and

⁷⁸ RCHME, March 1995, 1-18 and KCC / EH Kent Defences KD 193

a curtain pierced by the entrance into Blue Town and the Dockyard. There is a wet moat in front of the curtain with remains of a ravelin (**RPS 61**) (built in 1816) in the moat covering the entrance. The lower scarps of the ditch are revetted in brick. The curtain and bastions are now cut-down earthworks, whilst the northern end of the moat was filled in between 1953 and 1955. The moat to the west was filled in by 1973, although part of the bank was reconstructed c.1979 as a sound barrier for the steelworks. The Grand Magazine of 1801, converted to troop accommodation in 1804, formerly stood (until at least 1955) on No.1 Bastion (**RPS 72**), although all traces have been removed and the site is now a car park. The former dockyard hospital survives on No.2 Bastion (**RPS 52**), in use as offices for the steelworks. A number of further features (gun emplacements etc) have been lost or demolished since 1979. The entrance bridge retains much of the original bridge, with new handrails added 1991. The north side of the defending ravelin remains together with a loopholed brick musketry parapet (**RPS 61**). The ravelin has otherwise been much mutilated by recent road works associated with the supermarket and the early-20th-century 9.2in BL Ravelin Battery outside the line to the east has been destroyed or buried beneath the supermarket car park. The seaward face of the No.1 (North East) Bastion (**RPS 70**) had emplacements for two 7in RBLs, first listed in 1895 and a 6in BL. These were replaced by emplacements with brick and concrete gun houses over them for two WW2 6in BL guns (**RPS 69**). There is also a concrete shelter for a searchlight (**RPS 73**). Apart from No.1 (North East) Bastion the ramparts are greatly denuded and unkempt. The ditch remains at its original width but only the northern side of the ravelin (**RPS 61**) remains together with the loopholed musketry wall. The interior of the No.1 (North East) bastion lies within the Medway Ports security zone, whilst all of the former No.2 Bastion lies within the steelworks. On EH 'Building at Risk' Register for many years ('Slow decay').

Significance: Until the 1960s Sheerness retained a complete 18th century bastioned trace and apart from Berwick upon Tweed was the only town in England where such a continuous trace survived more or less completely. The surviving eastern part of the former defences is notable for the entrance front, which survives with a protecting musketry wall and the ghost of its former ravelin.⁷⁹

Setting: The setting of eastern Sheerness Lines has been greatly compromised by the large Tesco supermarket, petrol station and car park that have been constructed to the immediate east and by the steelworks and relief road that lie to the south-west. The historic defences are separated and visually screened from the Proposals Site by the historic dockyard residential area (the present Sheerness Dockyard Conservation Area).

6.51 **RPS 102 (inc RPS 43 and 44): Sheerness Lines (South) (No.3 Bastion and No.4 Demi Bastion)**

⁷⁹ RCHME , March 1995, 1-18

Original Function: South side of late 18th-century dockyard defences

Date: 1797-1816

Designer: Board of Ordnance

Current Grade: N/A (Not Scheduled)

Current Condition: The remains of the southern portion of the 'Sheerness Lines', formerly Nos.3 Bastion (**RPS 43**) and No.4 Demi Bastion (**RPS 44**) and connecting walls have been largely destroyed since 1955. A section of the moat survives within the steelworks, now used as cooling ponds or effluent lagoons. It was not studied as part of this survey.

Significance: Until the 1960s Sheerness retained a complete 18th century bastioned trace and apart from Berwick upon Tweed was the only town in England where such a continuous trace survived more or less completely. This southern portion incorporated the incomplete remains of Fort Townsend (**RPS 48**), a star-shaped fort planned in 1780, but still not commenced 1782.⁸⁰ The defences were not as formidable as on the north and east sides, but there were gun emplacements on each angle.⁸¹

Setting: The setting of the fragmentary remains of the southern Sheerness Lines is entirely compromised by the steelworks that lies on its site.

6.52 **RPS 98 / 230 / 245 (inc RPS 96 and 100): Garrison Point Fort (SAM no. KE 172) (SAM and Grade II LB)**

Original Function: Fort and Artillery Battery

Date: 1860-72

Designer: Royal Commission

Current Grade: Grade II LB and Scheduled Monument

Current Condition: The fort is in the form of an irregular semi-circle with a parade in the centre and an enclosed gorge. The two-tiered casemated front is faced in granite with the south-eastern face in Kentish Rag. The entrance has a round arch with granite rusticated voussoirs. The interior of the fort is brick-faced and the casemates have brick vaults. Inside the western arc of the fort interior is a mass-concrete traverse which was built by 1889. The basement contained the

⁸⁰ RCHME , March 1995, 1-18 and KCC / EH Kent Defences KD 80

⁸¹ RCHME , March 1995, 1-18 and KCC / EH Kent Defences KD 80

magazines. Barrack rooms were arranged behind the guns with officers' quarters to the rear. The fort was self-defensible with loopholes and gun ports in the flanks.

The fort appears structurally sound in its broad mass but there is much decay at roof level. The reinforcement of the WW2 gun houses has rusted dangerously and one of the Brennan iron observing stations has corroded badly. The ground floor is largely given over to storage. The first floor has the walkway to the former passenger ferries forced through a casemate but the casemates as a whole still retain many detailed fittings.

The first floor is now disused and the roof emplacements are becoming derelict. The interior is now stripped out but there are remains of original fittings. For a time during the 1980s the interior was converted as a terminal for a ferry service now defunct. Some of features on the roof have been replaced by a modern navigational control tower. The former Admiralty signal station remains. The 6in BL emplacements which were built by 1918 are generally in good condition along with associated war shelters containing some with their fittings. Towards the eastern end, the emplacements were given gun houses in the WW2. Outside the fort is a twin 6pdr. position (**RPS 100**) and a WW1 searchlight emplacement. Adjacent is a WW1 Brennan torpedo station (**RPS 96**), comprising two iron observing stations near the top of the casemated face (later converted for machine-guns), torpedo workshop and a length of the launching rails. These rails continue, in a much-corroded condition, on the foreshore. The fort is within the limits of Medway Ports.

Significance: A battery existed at the tip of the Sheerness promontory at the entrance to the Medway from Tudor times. Its site was included within Sheerness Fort built in the 1660s and 70s and the Half Moon and Cavalier Battery continued in existence into the mid-19th century. The Royal Commission Report of 1860 recommended a powerful casemated work in their place to protect the narrow entrance of the Medway and the Isle of Grain and for the defence of the dockyard against a *coup de main*. The result was a massive, casemated, granite-fronted fort for 36 heavy guns protected behind armoured iron shields. Preparations were made for two turrets on top but these were not built. The fort was completed by 1872 and was armed with 9in and 10in RML guns. In 1880, there were 9in, 10in, 11in and 12.5in RMLs behind iron shields. Garrison Point was the location of an experimental Brennan Torpedo Station, constructed in 1884 and in use until c.1906. By 1909, there were two 6in BLs on top of the fort and four 12pdr.QFs in a lower tier. During WW2, two twin 6pdrs were mounted one on top and the other (**RPS 100**) outside the granite front. They remained operational until 1956.

Garrison Point Fort was one of only two double-tiered coastal forts to be built in England on the recommendation of the Royal Commission on the Defences of the United Kingdom 1860. It is now

much the best preserved of the two. The considerable remains of the Brennan Torpedo Station (RPS 96) are an exceptional rarity and of very high significance.⁸²

Setting: Garrison Point Fort has two relationships of particular note. The first is across the Medway to Grain Fort and associated batteries (RPS 246 to 251) on the west side of the Medway estuary (below). The second is with Sheerness dockyard. The first remains intact, albeit that the fortifications on Grain are now dwarfed by the Grain power station. The relationship between the fort and the Sheerness dockyard is compromised by the former ferry terminal buildings, areas of hard standing and enclosing modern palisade fencing that lie on the site of the one-time garrison. The relationship is further compromised by the large modern sheds that have been built since the 1970s within the historic dockyard.

6.53 RPS252: Queenborough Lines

Original Function: 19th-century town and dockyard defences

Date: 1860s-70s

Designer: Royal Commission

Current Grade: N/A (Not Scheduled)

Current Condition: Good.

Significance: In the c1860s a massive defence programme was instigated along the Thames estuary. As part of this programme, which included the new Garrison Point Fort (RPS 98 / 230 / 245), a further defensive line was built, cutting across the peninsular and enclosing the dockyard and the three dockyard communities of Blue Town, Mile Town and Marine Town that had developed in the preceding half-century.

Setting: Originally the Queenborough lines cut directly across low-lying, open country. In the 20th Century, Sheerness has expanded right up to the defensive line, but not beyond it. The western end on the line has been separated from the Medway since the 1990s by the reclamation of the Lappel Bank for car storage.

d) Isle of Grain Defences

i. *Potential Direct Impacts*

6.54 None.

⁸² RCHME , March 1995, 27-47 and KCC / EH Kent Defences KD 79

ii. *Potential Indirect Impacts*

6.55 The proposed development may result in minor positive or negative effects on the setting of the group of 19th and 20th-century defensive structures built on the western bank of the Medway to mirror Garrison Point Fort and the Sheerness coastal defences, thus defending the entrance to the Medway to defend the entrance to the River Medway and the dockyards at Sheerness and Chatham:

6.56 **RPS 246 / 247 / 248 / 249 / 250 and 251: Coastal Artillery Defences on the Isle of Grain, immediately South and east of Grain Village (SM No. 34297)**

Date: 1848-1855, 1861-1868, 1867-1869 1895, 1900 and, with later additions

Designer: HM Government / Royal Commission

Current Grade: Scheduled Monument (SM No. 34297 and 1204555)

Current Condition: Damaged and declining

Significance: Comprises: i) Grain Tower, a 19th century Martello-type artillery tower (built 1848-1855) built on the tidal mudflat in the Medway channel and associated causeway, used in WWI as the anchor point for a boom across to Sheerness and in WWII as an Anti-motor torpedo boat site; ii) Isle of Grain Fort, a free-standing D-shaped brick fort and earthworks (built 1861-1868); iii) Grain (or Dummy) Battery, a coastal defence battery (built 1867-1869); iv) Grain Wing Battery, another coastal artillery battery (built 1895); v) Grain Battery, another coastal defence battery (built 1900); vi) an electric searchlight emplacement for coast artillery (in existence by 1911) and later features including WWII anti-tank obstacles on the foreshore.

Several of the batteries have suffered excavation and infilling of features, but the group remains an evocative group, commemorating the one-time strategic importance of River Medway. The anti-tank defences are an important and rare survivor. Three different kinds of anti-tank obstacles were used to create the defensive line: cubes, pimples (a flat-topped pyramid often referred to colloquially as 'dragon's teeth') and caltrops. The latter are a nationally rare type of asymmetric concrete obstacle. Although there are many surviving examples of anti-tank obstacles nationally, the obstacles at Grain are of special interest as an evocative and visually striking group of Second World War anti-invasion defences, including different and unusual forms of obstacles and which, at nearly 600m in length, form a particularly impressive linear defence.

Setting: The Grain fortifications similarly have visual and functional relationships with Garrison Point Fort (98 / 230 / 245) on the east side of the Medway estuary (above) and with the Sheerness dockyard. Both relationships remain intact despite the changes that have occurred since the closure of the Naval dockyard and the abandonment of the Sheerness garrison.

e) Other Historic Areas outside of the Dockyard

i. *Potential Direct Impacts*

6.57 None.

ii. *Potential Indirect Impacts*

6.58 **Blue Town, Sheerness (inc. 8 Grade II Listed Buildings, RPS 205, 207, 208, 211, 212, 213, 214 and 215)**

Original Function: Dockyard Civilian Accommodation

Date: post-1830

Designer: None

Current Grade: Proposed Conservation Area, inc 8 Grade II Listed Buildings

Current Condition: Following post- 1950 demolitions, when virtually all of the remaining timber-built houses were demolished, the former dockyard community has been reduced to little more than a handful of isolated properties, straggling along the south side of the old High Street.

Significance: No private houses were built in Sheerness until c. 1738, by which time the dockyard had been in existence for 60 years. The original Blue Town was reputedly constructed with timber taken from the dockyard as the labourers' perquisites. These were planks less than 6 ft long, all painted in dark grey-blue dockyard paint, hence the name 'The Blew Houses', and Blue Town. Blue Town grew rapidly in the second half of the eighteenth century, with sixteen houses in 1754 and 130 in 1792. After 1800 Blue Town continued to expand to its maximum extent. In 1827 and 1830 about three-quarters of the timber houses in Blue Town were destroyed by fire. The remainder were demolished shortly afterwards and the town was largely rebuilt, with alleys, small dwellings and innumerable public houses. When Blue Town was rebuilt after the 1827 and 1830 fires, a new Market Place for a Saturday market was laid out in its High Street, and this continued until the 1960s. Despite the attrition of the later 20th Century, High Street retains a tangible feel of the historic community lying in the shadow of the great dockyard wall on the north side of High Street. It is thus proposed for incorporation in an expanded 'Sheerness Royal naval Dockyard and Blue Town Conservation Area'.

Setting: Generally speaking, the setting of Blue Town benefits from the settlement's close relationships with the Dockyard Wall that forms the north side of the High Street. The setting of the proposed conservation area on its south side, which formerly was with the southern fortifications of the Sheerness Lines has been entirely compromised by Sheerness Relief Road / Blue Town

Bypass and the steelworks that has been built over the former fortifications.

i. Potential Indirect Impacts

6.59 **Mile Town, Sheerness (inc. 13 Grade II Listed Buildings, RPS 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 210 and 238)**

Original Function: Dockyard Civilian Accommodation and Failed Resort

Date: post-1815

Designer: None

Current Grade: Conservation Area and 13 Grade II Listed Buildings

Current Condition: Moderate to Good

Significance: Mile Town developed after 1815 when many of the inhabitants of Blue Town were displaced by the expansion of the Dockyard. The early houses (all demolished) were built of wood (ship-board houses) and arranged in courts without water or sanitation. Sir Edward Banks, the owner of the land on which Mile Town was built, attempted to develop Sheerness into a seaside resort by introducing a steamboat service from London. From the 1820s onward Mile Town grew steadily from a small hamlet into a small town and, as its westward expansion began to encroach on the defences, the government purchased land in 1827 in order to form a buffer zone and curtail further expansion. After Mile Town ceased to grow, Marine Town was established to its north-east. In 1862 the dockyard defences were again expanded by building the Queenborough Lines, a huge rampart and ditch running south-eastwards from the coast east of Marine Town to the river Medway. The Queenborough Lines delimited the triangular area containing Blue Town, Mile Town and Marine Town, which merged to become the present town of Sheerness.

Setting: The setting of the Mile Town Sheerness Conservation Area has, like that of the east Sheerness Lines, been greatly compromised by the large Tesco supermarket, petrol station and car park that have been constructed between the historic settlement and the Sheerness Lines, and by the steelworks that has been built over the south Sheerness Lines. The Proposals Site is well screened from the conservation area by the historic dockyard residential quarter, Blue Town and the steelworks.

ii. Potential Indirect Impacts

6.60 **RPS 236: Queenborough Conservation Area (inc. 1 Scheduled Monument (RPS 101 / 240), 1 Grade II* Listed Building (RPS 146) and 21 Grade II Listed Buildings (RPS 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179 and 180)**

Original Function: Planned town, wool export port and castle

Date: Medieval

Designer: None

Current Grade: Conservation Area, Scheduled Monument, 1 Grade II* Listed Building and 21 Grade II Listed Buildings

Current Condition: Good

Significance: Queenborough Castle was built by King Edward III between 1361-1377 to guard ships on the Swale during the Hundred Years' War with France. The proto-town grew into a prosperous, planned, wool export town, gaining a charter in 1366 and royal borough status in 1368. After being seized by Parliamentarians in 1650 the castle was demolished. Queenborough began to lose its importance, becoming something of a backwater, largely dependent on oyster catching. Queenborough parish church was overhauled between 1690 and 1730, and a number of houses were added to the growing town during the 18th century, reflecting the general prosperity of the colonial and mercantile trades of the age. Nevertheless, decline followed the growth of Sheerness in the early 19th Century. The historic core has retained an atmosphere of a historic fishing village, but the wider environment has suffered from the town being a continental ferry port from 1876 to 1927 and through later 19th and 20th-century industrial development, including glue works, a glass works and the present chemical works on the north side of the village.

Setting: The setting of the Queenborough Conservation Area has been marred by the industrial development that has occurred around the village during the later 19th- and 20th Centuries. Views towards the historic dockyard are thus compromised in particular by the chemical works that lies directly between the conservation area and the historic dockyard.

Building Significance Table

Western Residential Cluster

Building Type	Sheerness	Date	Designer	Listing Grade	Other Examples	Significance
Dockyard Church	Former St Paul's Parish Dockyard Church, wall & railings	1828, reb. 1884	G.Taylor (1828)	II*	PORTSMOUTH Church of St Ann (1784) (E.Holl) (II) CHATHAM Royal Dockyard Church (1806-10) (E.Holl) (II*) PENBROKE Dockyard Church (1820s 30s) (G.Taylor) (??)	Whilst built to a relatively standardised design, Sheerness Church is the only one with portico. ⁸³ Roof and much of interior recently destroyed by fire. Part of the complete and little-altered eastern corner of Rennie's model layout, containing dockyard wall, entrance gate, church and officer's accommodation, and part of a unique planned early C19 dockyard. ⁸⁴

⁸³ EH, 2003, 77

⁸⁴ List Description

Western Residential Cluster

Building Type	Sheerness	Date	Designer	Listing Grade	Other Examples	Significance
Officer's Terraces (excluding detached & semi-detached officer's houses)	Nos.1-8 Naval Terrace, railings, front walls, coach house & stables	1824-27	G.Taylor	II*	DEVONPORT Officer's Terrace, walls & railings (South Yard) (Dummer) (1692-6) (Earliest British / European 'Palace Front' terrace – Largely destroyed by bombing) (II*) The Terrace, walls & railings (Morice Yard) (Hawksmoor?) (II*) PORTSMOUTH The Parade & Long Row & walls (1719) (II*) Short Row, walls & railings (1780) (II*) CHATHAM Officer's Terrace & walls (Hawksmoor?) (1722-31) (I) Officer's Gardens (1722-31) (II*) PEMBROKE Master Shipwright & Clerk of Cheque's Semi (c.1820-30) (Holl) (II*?)	The officer's housing at Sheerness is not as grand as at the older yards, 'but they form the most complete and unaltered part of Rennie's model layout there'. ⁸⁵ Part of the complete and little-altered eastern corner of Rennie's model layout, containing dockyard wall, entrance gate, church and officer's accommodation, and part of a unique planned early C19 dockyard. ⁸⁶
	Railings to S. side of green to E. of Naval Terrace	1824-27	G.Taylor	II		
	Nos.1-15 Regency Close	1829-33	G.Taylor	II*		
	Walls encl. Garden to rear of 1-15 Regency Close	1829-33	G.Taylor	II		

Western Residential Cluster

Building Type	Sheerness	Date	Designer	Listing Grade	Other Examples	Significance
Commissioner's House	Dockyard House	By 1830	G.Taylor	II*	CHATHAM Former Commissioner's House (1704) ('Oldest intact building in any dockyard') (I) Garden walls of above (II*) ROYAL CLARENCE YARD Superintendent's House (II) PORTSMOUTH Admiralty House (S.Wyatt) (1789) (II*) PEMBROKE Captain-Superintendent's House (Holl / Taylor) (c.1832) (II*)	Formerly the most important officer's house. The officer's housing at Sheerness is not as grand as at the older yards, 'but they form the most complete and unaltered part of Rennie's model layout there'. ⁸⁷ Part of the complete and little-altered eastern corner of Rennie's model layout, containing dockyard wall, entrance gate, church and officer's accommodation, and part of a unique planned early C19 dockyard. ⁸⁸
	Walls encl. Garden to rear of Dockyard House	By 1830	G.Taylor	II		

Western Residential Cluster

Building Type	Sheerness	Date	Designer	Listing Grade	Other Examples	Significance
Officer's Cottages	Dockyard Cottage, garden wall & railings	c.1826	G.Taylor	II	DEVONPORT ROSE COTTAGE, SOUTH YARD (II) MASTER ROPEMAKER'S HOUSE, SOUTH YARD (II) ROYAL WILLIAM YARD Officer's House No.1 (II*) Officer's House No.2 (II*) ROYAL CLARENCE YARD Residence No.6 (II) Deputy Superintendent's House (II) CHATHAM Former Captain of Dockyard's House (II*) The Cottage & attached garden walls (II) Dockyard Cottage (Medway Docks) (II) DEPTFORD Master Shipwright's Apartment (II) PEMBROKE Master Warden's House (Holl) (1818) (II*?)	Formerly Boatswain's house. The officer's housing at Sheerness is not as grand as at the older yards, 'but they form the most complete and unaltered part of Rennie's model layout there'. ⁸⁹ Part of the complete and little-altered eastern corner of Rennie's model layout, containing dockyard wall, entrance gate, church and officer's accommodation, and part of a unique planned early C19 dockyard. ⁹⁰

⁸⁵ EH, 2003, 78
⁸⁶ List Description
⁸⁷ EH, 2003, 78
⁸⁸ List Description
⁸⁹ EH, 2003, 78
⁹⁰ List Description

Western Residential Cluster

Building Type	Sheerness	Date	Designer	Listing Grade	Other Examples	Significance
Stables	Former Stables to rear of Dockyard Cottage	c.1826	G.Taylor	II	PORTSMOUTH FORMER COMMISSIONER'S STABLES (II) GOSPORT Sheds & Stables (Royal Clarence Yard) (NL) CHATHAM The Stables (II) Stables (N.Range) (II*) Stables (S.Range) (II*) Stables to rear of Dockyard Cottage (Medway Docks) (II)	Formerly Officer's stables and carthouse. Important element of 'the most complete and unaltered part of Rennie's model layout there'. ⁹¹ Part of the complete and little-altered eastern corner of Rennie's model layout, containing dockyard wall, entrance gate, church and officer's accommodation, and part of a unique planned early C19 dockyard. ⁹²

Western Residential Cluster

Building Type	Sheerness	Date	Designer	Listing Grade	Other Examples	Significance
Gatehouse Lodge	The Gatehouse, Main Gate	c.1830	G.Taylor?	II (formerly II*)	DEVONPORT Morice Gate, 2 gatehouses and attached dockyard walls (Morice Yard) (1721) (II*) North Gate and attached dockyard walls (Morice Yard) (II*) Stonehouse (Royal William Yard) Main Gate (Royal William Yard) (c.1830) (Most ornate) (I) Gosport (Royal Clarence Yard) Main gate & 2 lodges (1830-1) (Good group value with officer's houses) (II) PORTSMOUTH Victory Gate & Dockyard Wall (c.1710) (Oldest dockyard gate) (II*) The Unicorn Gate (1779) (II) The Lion Gate (II) Whitley Rooms (North Yard) (mid 19C) (II) Perimeter Walls with gateways (HMS Vernon) (II) CHATHAM Main Gate (Hawksmoor?) (1722) (I) Former Guard House (1764) (II*) North Gate House (II) Guard House West & store (II*) WOOLWICH Police Building at E. of Gate (II) Entrance gateway & abutting walls (II) Former Police Stn (II)	Granite wall, gateway and colonnade linking lodges demolished. Part of the complete and little-altered eastern corner of Rennie's model layout, containing dockyard wall, entrance gate, church and officer's accommodation, and part of a unique planned early C19 dockyard. ⁹³
	Nos.1&2 Main Gate	c.1830	G.Taylor?	II (formerly II*)		

Western Residential Cluster

Building Type	Sheerness	Date	Designer	Listing Grade	Other Examples	Significance
Boundary Wall	Wall from Main Gate round S. & E. sides of Dockyard	e.19C	J.Rennie Snr	II	DEVONPORT Dockyard Wall (South Yard) (1770s) (II) Morice Gate, 2 gatehouses and attached dockyard walls (Morice Yard) (1721) (II*) North Gate and attached dockyard walls (Morice Yard) (II*) Stonehouse (Royal William Yard) Dockyard Wall (Royal William Yard) (c.1830) (II*) PORTSMOUTH Victory Gate & Dockyard Wall (II*) Dockyard Extension Wall (II) Gunwharf Gateway (HMS Vernon) (II) CHATHAM North Tower House and wall to s. (II*) South Tower House (II*) WOOLWICH Police Building at E. of Gate (II) Entrance gateway & abutting walls (II)	Part of the complete and little-altered eastern corner of Rennie's model layout, containing dockyard wall, entrance gate, church and officer's accommodation, and part of a unique planned early C19 dockyard. ⁹⁴
	Wall from Main Gate round N. & N.E. sides of Dockyard	e.19C	J.Rennie Snr	II		

⁹¹ EH, 2003, 78

⁹² List Description

⁹³ List Description

Western Residential Cluster

Building Type	Sheerness	Date	Designer	Listing Grade	Other Examples	Significance
Great Storehouses'	Former Quadrangle Store House (Bldg 19) (Demolished)	1824-29	J.Rennie & E.Holl	N/A (Formerly II*)	STONEHOUSE (ROYAL WILLIAM YARD) GRANNARY & CLARENCE STORES (J.RENNIE JNR.) (C.1822 ON) (I) Melville Storehouse (Last surviving quadrangular storehouse in an English yard) (J.Rennie Jnr.) (c.1822 on) (I) PORTSMOUTH Nos 9, 10 & 11 Stores (c.1780s) (I) Portsmouth (New Gun Wharf) Vulcan Store (1811-14) (earliest iron columns) (II) Gosport (Royal Clarence Yard) Granary, Mill & Bakery (G.Taylor) (c.1827 on) (II*) CHATHAM CLOCKTOWER BUILDING (1723, REB 1802) (II*) Anchor Wharf Stores (c.1780s) (I) PEMBROKE Quadrangular Store (c.1830) (E.Holl) (II*) (Very similar structure to the lost Sheerness storehouse) ROYAL ARSENAL, WOOLWICH Grand Store (1807-14) (J. Wyatt) (II*)	Formerly Listed Grade II*. Demolished c.1980 after Public Enquiry. Clock retained and re-erected to west of 1-15 Regency Close.
Covered Saw Pits	Archway House (Bldg 23)	1825	E.Holl / W.Miller	II*	CHATHAM Clocktower Building (1723, reb 1802) (II*) Originally had saw pits in formerly-arcaded ground storey. Brunel (steam) Saw Mill (Brunel, Benthams & Holl) (1812-14) (Earliest steam sawmill in a naval yard) (I)	Only surviving Saw Pit building in recognisable form. 'Now the most complete and unaltered workshop for forming timber in the dockyards'. ⁹⁵ 'Another outstanding example of iron-framed construction', 'Part of unrivalled woodworking complex'. ⁹⁶

Western Residential Cluster

Building Type	Sheerness	Date	Designer	Listing Grade	Other Examples	Significance
Working Mast & Boat House	Former Working Mast & Boat House (Bldg 26)	1823-6	J.Rennie & E.Holl	II*	PORTSMOUTH Nos.5 & 7 Boathouses (mid 19C) (II) NO.6 BOATHOUSE (1845-48) (BEATSON) (HEAVY IRON FRAME) (II*) CHATHAM Mast House & Mould Loft (1753-5) (I) Wheelwright's Shop (former mast house) (c.1780) (II*) Lower Boat Store (1844) (II*)	Unusual and very early wide-span internal iron frame. Rational approach to construction integrated mast-making complex. Unfortunately the accompanying Mast Store and Mast Pond were demolished / infilled in 1980 ⁹⁷ 'Part of unrivalled woodworking complex' ⁹⁸
Former Apprentice School	Former Dockyard School (Bldg 49)	1893	Unknown	NL	DEVONPORT Former Ropery engine house was referred to as 'Dockyard Lower School' (I) PORTSMOUTH Former Naval School of Naval Architecture (originally School for Superior Apprentices (c1816)(Holl) SHEERNESS Bldg 49 (1893) (NL) Bldg 103 (late-C19th) (NL)	Apart from Holl's Apprentice School at Portsmouth, these two structures are thought to be the only surviving purpose-built dockyard schools. ⁹⁹ A later dockyard building within Rennie's planned layout, with group value with the other (nearby) Listed and un-Listed structures (Bldgs.55-6, 101 and 104-107)

⁹⁴ List Description
⁹⁵ EH, 2003, 56
⁹⁶ EH, 2003, 61
⁹⁷ RCHME, 1995, 5-8
⁹⁸ EH, 2003, 61
⁹⁹ Pers. Com. J.Coad, EH

Western Residential Cluster

Building Type	Sheerness	Date	Designer	Listing Grade	Other Examples	Significance
Workshops/ Stores	Workshops & Stores (Bldgs 55 & 56)	n.d.	Unknown	NL		C20th (naval) dockyard buildings (possibly with earlier elements) within Rennie's planned layout. No great significance but of some group value with the other (nearby) Listed and un-Listed structures (Bldgs.49, 101 and 104-107)
Boat Store	Former Boat Store (Bldg 78)	1858-9	G.Green	I	CHATHAM Lower Boat Store (1844) (II*) PORTSMOUTH Nos.5 & 7 Boatstores (mid 19C) No.6 Boathouse (1845-48) (Beatson) (Heavy iron frame) (II*) SHEERNESS Working Mast & Boat House (1823-6) (Rennie & Holl) (II*)	Earliest surviving multi-storey fully iron-framed building. As a boat store, 'the Sheerness store is remarkable for its size and efficient storage and handling arrangements, and also for its innovatory structural system... The Boat Store was the first structure to depend for its stability entirely on (its portal framing and) the rigidity of its joints... Of international significance... 'standing at the conclusion of an evolution of iron structures within the dockyards, and prefiguring..' the development of (the skyscraper and) modern architecture... Forms part of a group with the Boat Basin and Bldgs 84 & 86 ¹⁰⁰

Western Residential Cluster

Building Type	Sheerness	Date	Designer	Listing Grade	Other Examples	Significance
Covered Saw Pits	Former North Saw Pits (Bldg 84)	1828	E.Holl / W.Miller	II*	CHATHAM Clocktower Building (1723, reb 1802) (II*) Originally had saw pits in formerly-arcaded ground storey. Brunel (steam) Saw Mill (Brunel, Bentham & Holl) (1812-14) (Earliest steam sawmill in a naval yard) (I)	'Outstanding in a national and typological context for their introduction of a free-standing iron-frame' ¹⁰¹ 'Part of unrivalled woodworking complex' ¹⁰²
Unknown Use (Probably ship repair shop)	Bldg 86	1889-1900	Unknown	II		Three phases, all with iron framing, two phases with iron roofs. Most elements reused from earlier buildings ¹⁰³ 'A later dockyard building within Rennie's planned layout. group value with Rennie's docks, Boat Store and Bldg 84' ¹⁰⁴
Fire Station	BLDG 101	n.d.	Unknown	NL	Similar buildings in most naval dockyards	Later dockyard building within Rennie's planned layout. Some group value with nearby Listed and un-Listed structures (Bldgs.49 and 104-107)

Western Residential Cluster

Building Type	Sheerness	Date	Designer	Listing Grade	Other Examples	Significance
School	Former Dockyard School (Bldg 103)	n.d.	Unknown	NL	DEVONPORT Former Ropery engine house was referred to as 'Dockyard Lower School' (I) PORTSMOUTH Former Naval School of Naval Architecture (originally School for Superior Apprentices (c1816)(Holl) SHEERNESS	Apart from Holl's Apprentice School at Portsmouth, these two structures are thought to be the only surviving purpose-built dockyard schools. ¹⁰⁵ A later dockyard building within Rennie's planned layout, with group value with the other (nearby) Listed and un-Listed

¹⁰⁰ EH, 2003, 69 & List Description

¹⁰¹ EH, 2003, 61

¹⁰² EH, 2003, 61

¹⁰³ RCHME, 1995, 3

¹⁰⁴ List Description

¹⁰⁵ Pers. Com. J.Coad, EH

Building Type	Sheerness	Date	Designer	Listing Grade	Other Examples	Significance
					Bldg 49 (1893) (NL) Bldg 103 (late-C19th) (NL)	structures (Bldgs.55-6, 101 and 104-107)
Pay Office	Former Pay Office (Bldg 104)	1828	E.Holl / W.Miller	II	DEVONPORT Dockyard Museum (late-18C) (II*) PORTSMOUTH Former Pay Office (c.1808) (Bentham) (II) CHATHAM Former Cashier's Office (1808) (E.Holl) (II*) Pembroke Former Pay Office (c.1820-30) (E.Holl?) (?)	All three are 'fireproofed' with brick vaulting, but only Sheerness Pay Office has an iron frame and Holl's 'fireproofing' system. Upper storey destroyed by fire and building extended in 1980 ¹⁰⁶

Western Residential Cluster

Building Type	Sheerness	Date	Designer	Listing Grade	Other Examples	Significance
Combined Saw Mill & Smithery	Former Sawmill, Boiler House & Engine House (Building 105-7)	1856-8	T.Greene	II	DEVONPORT SOUTH SMITHERY & SAWMILL (GREENE) (C.1860) (JOINT METAL AND TIMBER WORKSHOP, AS AT SHEERNESS) (SMITHERY & SAWMILL SURVIVE, BOTH IN ASSOCIATION WITH COMPOSITE SHIPBUILDING SHOP) (II*) PORTSMOUTH BLOCK MILLS & NOS.35&36 STORES (BENTHAM & BRUNEL) 1798-1803 (SAW MILLS AND PUMPING STN.) (I) CHATHAM Brunel (steam) Saw Mills (Brunel, Bentham & Holl) (1812-14) (Earliest dedicated steam sawmill in a naval yard) (I)	Smithery demolished. Internal iron frame is precursor to that used in the Sheerness Boat Store ¹⁰⁷ Inlited basement was supposedly a Bending Shop ¹⁰⁸ Less complete than that at Devonport, but nevertheless, 'Part of unrivalled woodworking complex' ¹⁰⁹

Western Residential Cluster

Building Type	Sheerness	Date	Designer	Listing Grade	Other Examples	Significance
Docks & Slips	Walls of the Great Basin & 3 docks (Infilled)	c.1814	J.Rennie Snr	NL (Formerly SAM and II*).	DEVONPORT No.1 Covered Slip (1774-5) (Bentham) (earliest surviving slip ¹¹⁰) (II*) No.4 Slip (1816-21) (Much altered) (NL) Nos.1-4 Dry Docks, No.1 Basin, S.Yard (Second most important group after Portsmouth ¹¹¹) (1690s-1840s) (Dummer & Bentham) (II & II*) PORTSMOUTH N.Wall of No.1 Basin & Upper wet Dock (1680s) (Dummer) (Earliest Wet Dock ¹¹²) (I) Nos.1-6 Dry Docks (1798) (Bentham) (Nos.2&3 are earliest with masonry floors ¹¹³ , 'The finest surviving group of such 18 th century structures in Europe' ¹¹⁴ ; First to use steam for drainage ¹¹⁵) (I) CHATHAM Nos.2 Dry Dock (1856) (II*) Nos.3 Dry Docks (1821) (J.Rennie Snr.) (II*) No.4 Dry Dock (c.1840) (II) WOOLWICH Dry Docks (1843) (Earliest for steam ¹¹⁶) (II) PEMBROKE 4 slips survive of 13 and Graving Dock (1820-45)	'A good example of a Royal Naval docks of the early C19' ¹¹⁷ Group once capable of fitting out 9 ships of the line and permit access to 3 docks large enough for 120-gun ships. ¹¹⁸ Generally reflective of civil developments elsewhere. ¹¹⁹ Infilled

¹⁰⁶ RCHME, 1995, 1
¹⁰⁷ EH, 2003, 27
¹⁰⁸ RCHME, 1995, 2
¹⁰⁹ EH, 2003, 61
¹¹⁰ EH, 2003, 40
¹¹¹ EH, 2003, 38

Western Residential Cluster

Building Type	Sheerness	Date	Designer	Listing Grade	Other Examples	Significance
Docks & Slips	Walls & Gates of Boat Basin, Docks nos 4 & 5 & Slipway	c.1814	J.Rennie Snr	II*		'A good example of a Royal Naval docks of the early C19 ¹²⁰ Basin, Graving Dock, Building Slip and Dry Dock. Dry dock last in naval yard with original cast iron gates. ¹²¹ 2 nd earliest intact slipway ¹²² ; Generally Reflective of civil developments elsewhere. ¹²³
Pump House	Rennie Pumping Station	1823	J.Rennie	NL	CHATHAM Dock Pumping St. South (1821) (Rennie) (Earliest surviving purpose-built steam pumping station in a naval yard. Second earliest nationally ¹²⁴) (II*)	Rennie's pumping station at Sheerness was the 2 nd purpose-built steam pumping station in a naval yard. The Chatham example is better preserved and retains relationship with adjacent dry docks ¹²⁵

Western Residential Cluster

Building Type	Sheerness	Date	Designer	Listing Grade	Other Examples	Significance
Monument	King William Lion Monument 4m W. of Dockyard House	17C		II		Removed from Main Gate of old Garrison Fort Demolished without consent in late 2003 Surviving pieces retained.
Figurehead	Figurehead from HMS Forte (formerly) W. of Dockyard House	19C		NL (Formerly II)		Removed from original location
Figurehead	Figurehead from USS Chesapeake (formerly) S. of Gatehouse			NL (Formerly II)		Removed from original location
Figurehead	Goliath Figurehead (formerly) to S. of Chesapeake figurehead	1842		NL (Formerly II)		Removed from original location
Figurehead	Poitiers Figurehead 50m N. of Dockyard House	19C		II		Until recently the last extant figurehead on site, it disintegrated when its removal was attempted recently. Surviving pieces retained.

¹¹² EH, 2003, 36¹¹³ EH, 2003, 33¹¹⁴ Coad, J, 1989, 97¹¹⁵ EH, 2003, 35¹¹⁶ EH, 2003, 34¹¹⁷ List Description¹¹⁸ EH, 2003, 38¹¹⁹ EH, 2003, 38¹²⁰ List Description¹²¹ EH, 2003, 38¹²² EH, 2003, 40¹²³ EH, 2003, 38¹²⁴ EH, 2003, 39¹²⁵ EH, 2003, 35

7 ARCHAEOLOGICAL BASELINE ASSESSMENT

a) Introduction and Definition of Study Zones

7.1 The following text has been compiled based on the Kent Historic Environment Record and a series of relevant archaeological publications. The aim of the assessment is to provide a baseline of the potential below ground archaeology that lies or has potential to lie, beneath the Proposal Site, to inform subsequent impact assessment (once the full engineering details of the proposal are known). For ease of description the Proposal Site is itself is discussed with respect to four zones as follows;

- The Historic Dockyard Zone (northern area)
- The Late 20th century Reclamation Zone,
- The Whiteways VW Relocation Site, and
- The Marine Dredging Zone.

7.2 A 1.0km radius search of the HER, based on site centred grid reference was undertaken for archaeological sites and other heritage assets in June 2011 (Figs 6 & 7). The full listing of associated sites and finds is provided in tabulated form as Appendix 1. The wider Study Area is discussed in order to provide archaeological context. This area includes the following zones;

- The Dry Land Dockyard Zone (East of reclaimed dockyard)
- The Sheerness Defences (Including Garrison Point Fort, Indented Lines and Sheerness Lines including WWII additions)
- The Southern and South-Eastern Terrestrial Zones, and
- The Maritime Medway to Swale and Thames side Zone.

7.3 The historic background in Section 5 provides the context for the sequence of 16th to 20th century development of the dockyard and for the inter-tidal zone previously. The Historic Dockyard Zone where interfacing with the Proposal Site comprises an area of former inert-tidal zone mud flat. This was developed from the 17th-18th century dockyard and 'floating town' of hulks to Rennie's feat of early 19th century engineering that created the raised terrestrial dockyard and its various facilities. The zone is bordered to the north by the Boat House and Jetty Road, to the west by the riverside Jetty, to the east by Archway House and West Street, and by the southern retaining wall of Rennie's dockyard at Rats Bay to the south. As indicated in Section 6 above the area includes 19th century features including sections of Rennie's retaining walls, The Mast House (Building 26) and Mast Tunnel, the Pump House and fragments of former railway line. The potential for buried archaeology within this zone is discussed by period within the relevant sections below.

- 7.4 The Late 20th century Reclamation Zone is defined by 'Rats Bay' and the southern retaining wall of Rennie's dockyard to the north (just north of the former Blue Town pier alignment), the Sea Wall to the east and the Medway River Jetty to the west. This zone was also formerly comprised of intertidal zone mud-flats but was reclaimed much more recently between the 1970's and 2000 (as shown by Figure 27 'Lapel Bank Stage Developments'). There are no HER references to pre-construction archaeological inter-tidal zone surveys works undertaken prior to the reclamation. The zone is largely comprised of car parks associated with the car import business with the northern area occupied by large warehouses of Sheerness Harbour Estate.
- 7.5 The VW Relocation Site (Whiteways) is located as a stand alone site to the south-east of the main Proposal Site. The site (Fig. 1 & 7) is dissected by a stream known as the Drain and is currently tarmac and concrete slab surfaced. It was formerly used as a car compound and includes a warehouse structure and the footprints of two former 1970's warehouses in the south-west area. Prior to use as a car compound the site was formerly salt marsh. The 3rd Edition Ordnance Survey Maps show various linear earthworks at the site which may have been associated with water management.
- 7.6 The Marine Dredging Zone comprises a linear corridor of dredging to the immediate east of the Jetty line. The dredging would be to c.5m below current sea bed.

b) The Historic Environment Record

- 7.7 The following table refers to sites and finds on the HER that are of direct relevance to the Proposal Site and which are discussed within the following text. SAM's and Listed Buildings have been assessed with in Section 6, above, and are only cross-referred to below where relevant to assessment of below ground remains.

RPS Ref	HER/SAM Ref	NGR	Evidence
HER Entries (assessment of direct impacts)			
2	MKE73684	591000 175000	Iron Age gold coin (within Proposal Site - Historic dockyard)
3	TQ 97 NW 13	591000 175000	Roman bronze ring (within Proposal Site - Historic dockyard)
29	TQ 97 SW 1112	590716 173112	Earthwork West Minster (within Proposal Site - Whiteways)
30	TQ 97 SW 1114	590680 173143	Earthwork West Minster (within Proposal Site - Whiteways)
31	TQ 97 SW 1115	590716 173146	Earthwork West Minster (within Proposal Site - Whiteways)
32	TQ 97 SW 1113	590684 173162	Earthwork West Minster (within Proposal Site - Whiteways)
37	TQ 97 SW 1125	590796 173557	Wharf West Minster (at south end of Proposal Site)
38	TQ 97 SW 92	590828 173581	Sheerness gas works, West minster, Sheppey (at south end of Proposal Site)
42	TQ 97 SW 1011	591092 174513	1725 Mast pond South of Sheerness Dockyard (within Proposal Site - Historic dockyard)
45	TQ 97 SW 1010	591119 174657	Sheerness sea wall (adjacent to E. edge of Proposal Site)

RPS Ref	HER/SAM Ref	NGR	Evidence
48	TQ 97 SW 1092	591414 174827	Earthwork defences of an artillery fort (E of Historic dockyard and Proposal Site)
51	TQ 97 SW 44	590876 174845	Site of former Sheerness Pier (S side of historic dockyard, W of Blue Town)
54	TQ 97 SW 1185	590901 174964	Walls of the Great Basin, walls and stepped sided dry docks (Historic dockyard within Proposal Site)
55	TQ 97 NW 1009	591430 174996	Site of Star Fort – defences of Sheerness Dockyard (located Brielle Way E of Proposal Site)
57	TQ 97 NW 3	591000 175000	Sheerness Defences (within Proposal Site - Historic dockyard)
59	TQ 97 NW 39	590879 175056	Royal naval dockyard great basin/dry docks (within Proposal Site - Historic dockyard)
60	TQ 97 NW 1007	591009 175087	Sheerness Timber Pound – Timber pond (within Proposal Site - Historic dockyard)
62 & 64	TQ97 NW 1027 TQ 97 NW 1023	590848 175141 590944 175152	Sheerness Docks Suite wall (within Proposal Site - Historic dockyard – N side of great basin)
66	TQ97 NW 1079	591004 175205	Former site of Shed Number 19 (within Proposal Site - Historic dockyard)
68	TQ97 NW 123	590819 175233	Sheerness Dockyards cement works (within Proposal Site - Historic dockyard)
75	TQ97 NW 16	591165 175260	Sheerness, Royal navy dockyard boundary wall (HER reference E of Proposal Site)
80	TQ97 NW 1001	590897 175343	Dry Dock no 4 (within Historic dockyard north of Proposal Site)
87	TQ97 NW 1006	590804 175393	Sheerness Dry Dock Basin (within Historic dockyard north of Proposal Site)
88	TQ97 NW 1005	590792 175438	Dry Dock (within Historic dockyard north of Proposal Site)
102	TQ97 NW 109	Various	The Sheerness Lines former location (W terminal is immediately E of Proposal Site - Historic dockyard) line includes various periods of 19 th and 20 th century defensive works including a Ravelin (see RPS 61)
103		Linear	Later 19 th century Isle of Sheppey Railway.
110	TQ97 NW 120	591000 175300	Sheerness – Medieval/Post Medieval dockyard town (within Proposal Site - Historic dockyard) HER reference located at Jetty Road at northern extremity of Proposal Site
132	TQ97 SW 19	590879 174609	Unidentified wreck (S of Historic Dockyard and former pier within the central area of Proposal Site)
133	TQ97 SW 23	590737 174789	Fishermans fastener (S of Historic dockyard and former pier within the central area of Proposal Site)
134	TQ97 NW 1008	590866 175216	Old hulks deliberately sunk in the construction of C18 dockyard (HER reference is located in the N area of beneath Warehouse 1 (south of Boat House). At least partially removed by the Small Basin.
252	No Record	Linear	Queenborough Lines 18 th -19 th century defensive earthwork. Now a canal. West of Whiteways.

RPS Ref	HER/SAM Ref	NGR	Evidence
Scheduled Ancient Monuments (assessment of indirect/setting)			
239	34302	590010 168996	World War II Heavy anti-aircraft gunsite (TS2) 300m east of Chetney Cottages
240	230030	591227 172158	Queenborough Castle (c.1km SE of Whiteways Proposal Site)
241	23026	595629 173011	Nunnery at minster Abbey (4.5km to the east of the Proposal Site)
242	KE 172	591662 174998	Sheerness Defences including Ravelin
243	KE 172	591549 175251	Sheerness Defences – Indented Lines
244	KE 172	591039 175499	Sheerness Defences – Indented Lines
245	KE 172	590819 175549	Sheerness Defences – Garrison Point Fort (0.2km North of Proposal Site)
246	34297	589242 175701	Costal artillery defences on the Isle of Grain – E and SE of Grain village (from 1.5km NW of Proposal Site)
247	34297	589628 176032	Costal artillery defences on the Isle of Grain– E and SE of Grain village (from 1km NW of Proposal Site)
248	34297	589261 176119	Costal artillery defences on the Isle of Grain– E and SE of Grain village (from 1.6km NW of Proposal Site)
249	34297	588970 176405	Costal artillery defences on the Isle of Grain– E and SE of Grain village from 2km NW of Proposal Site)
250	34297	589086 176512	Costal artillery defences on the Isle of Grain– E and SE of Grain village from 2.4km NW of Proposal Site)
251	34297	589193 176555	Costal artillery defences on the Isle of Grain– E and SE of Grain village from 2.2km NW of Proposal Site)

c) Archaeology Baseline by Period

- 7.8 **Palaeolithic:** The earliest archaeological finds in Kent date to the Palaeolithic period (c.500,000 – 10,000BC). Even though Kent was not directly affected by glaciations, peri-glacial conditions and later erosional and despositional processes meant that few finds and activity horizon of hominids and early Homo-sapiens remained *in situ*. Palaeolithic hand-axes and other flint items are occasionally found disturbed within river sediments or terrace gravels but there are no such finds recorded within the Study Area. The rapid coastal zone assessment conducted by Wessex Archaeology (2000) did not identify any Palaeolithic remains within the close vicinity although a Lower Palaeolithic hand axe was recovered from alluvium on Deadman’s Island just beyond Study Area (HER TQ 87 SE 1000). FH Worsfold recovered possible semi *in situ* evidence of Middle Palaeolithic activity at Swalecliffe to the east of the Isle of Sheppey, including Mousterian hand axes and faunal remains. The finds were immediately adjacent to the Swalecliffe Waste Water Treatment Works WWTW where further faunal remains including mammoth tusks and a wholly rhinoceros tooth were found within a former river channel between 1997 and 2000. A level above the above the bone bearing horizon was radiocarbon dated to 25,280 cal BP (Masefield et al 2003, 47). The Middle Palaeolithic fauna represented were able to migrate to southern England via a

land bridge with the continent and it is likely that the Neanderthals that probably made the tools at Swalecliffe had followed these migratory herds.

- 7.9 It is possible, though unlikely, that significant Palaeolithic period strata (e.g. within palaeochannels) survive deeply buried within the alluvium in localised areas beneath the Proposal Site. However, if so their depth means that these would be unlikely to be affected by the development within the currently terrestrial zones. The proposed works within the Marine Dredging Zone could in theory affect deposits of this date, the presence/absence of which may be demonstrated by specialist interpretation of boreholes extracted by the proposed geotechnical investigation.
- 7.10 **Mesolithic** (c.10,000BC - 4,000BC). At the end of the Devensian period of the upper Palaeolithic there was still a land bridge connecting south-east England with the continent but net rise in sea levels since the end of the last glaciation progressively flooded the former land-bridge at by the end of the Mesolithic the coastline and river systems including the Medway had taken a similar appearance to that of today (although there were subsequent sea level rises in later periods). Hunter-foragers of the Mesolithic tended to concentrate their activities in coastal and riverine zones where the food resources of fish, shellfish and fowl were plentiful. Despite the location adjacent to the Medway Thames confluence there are currently no Mesolithic finds currently on the HER within a kilometre of the Proposal. The absence of Mesolithic sites in the region is not simply the result of a lack of investigation, as the rapid coastal zone assessment survey conducted by Wessex Archaeology (2000) failed to identify Mesolithic sites in this vicinity, but is once again more likely to reflect the masking effect of later alluviation and peat development that developed in the Neolithic and Bronze Age periods. Such a situation was evidenced at Erith, on the south side of the River Thames, where a series of late Mesolithic flint working areas were found scattered over a 300 length of former sandy river beach, beneath 2m of peat and a metre of alluvial clay during the construction of the 'Bronze Age Way' section of the A2016. The alluvium had then been sealed below 2 metres of made ground in a similar fashion to the Proposal Site (Bennell 1998). Mesolithic period activity is unlikely to be uncovered by the present development, although it is conceivable that dredging within the Marine Dredging Zone might in theory effect submerged remains of this date, if present, and if not previously removed by earlier dredging. The presence/absence of which may be demonstrated by specialist interpretation of boreholes extracted by the proposed geotechnical investigation.
- 7.11 The first farmers of the **Neolithic** (c.4000BC – 2,000BC) are credited with the establishment of forest clearances for the newly domesticated crops and stock. There are no Neolithic finds or references within the 1km Study Area although a large triple ditches Neolithic enclosure was identified by Wessex Archaeology during 'strip, map and sample' works in 2002 (Wessex Archaeology 2002, 13). Rivers and streams remained of importance for the establishment of (temporary) settlement, whilst settlements are usually located on the lighter geologies such as gravel. In this context the location of the Proposal Site on the gravel on the south side of the major

River Medway suggests the possibility of Neolithic activity near by. Certainly the Medway further west proved an important location for funerary monuments, rare elsewhere in Kent. The importance of access across marshlands and to rivers from the Neolithic onwards is demonstrated by a number of preserved wooden track-ways found within peat deposits in southern England in similarly low-lying environments. These tracks were used to connect dry land with the marshes and to provide access through the marshes possibly for fishing and fowling. Some of the earliest canoes have been found within peat marsh contexts, such as an example from the Erith marshes found associated with a Neolithic polished axe (ibid). It is possible that Neolithic peat may underlay parts of the Proposal Site and may also infill buried palaeo-channels sealed beneath later silt and/or clay alluvial episodes. Neolithic finds may be sealed within or below peat associated with the River Medway and associated feeder channels through the early floodplain. However, such deposits are likely to be sufficiently deeply buried to avoid most impacts from the proposed development (with the possible exception of piling of the currently terrestrial areas of the Proposal Site and possibly by dredging in marine areas if any remains present have not previously removed by earlier dredging). The presence/absence of prehistoric archaeology within alluvial silts may be demonstrated by specialist interpretation of boreholes extracted by the proposed geotechnical investigation. The Whiteways site has some potential to contain prehistoric archaeology preserved beneath the current modern surfacing. However, it is possible that any remains here will be buried beneath alluvium which might act as a buffer for the re-use of this area as a car depot.

- 7.12 **Bronze Age** (c.2000-800BC) evidence from the vicinity is equally sparse despite a proliferation of barrows (often defined archaeologically by their external ring-ditches) of early Bronze Age date and field-systems and settlements of Middle and Late Bronze Age date more generally on the northern coast of Kent. Mid to later Bronze Age ditched field-systems, which are usually found associated dispersed occupation sites (of round-houses) are commonly situated on low lying ground associated with river valleys in southern England. These demonstrate clearances of wide swathes of former forest in Kent for the earliest stable and long-lived farming settlements. Metalwork and other finds are often found to have been deposited close to or within such low-lying farmland and a Middle Bronze Age bronze palstave axe from Sheerness is representative in this area.
- 7.13 The Kent coastline is much eroded, due to sea level rise until the Iron Age. This inundation has submerged many former coastal sites of the Bronze Age, often burying them beneath layers of later alluvium. It has, in turn, placed others, previously distant from the sea, in the intertidal zone or on the dry land just beyond. For example at Swalecliffe, just to the east side of Sheppey, the intertidal zone extends some 500m from the present coast and at the 'Long Rock' mudflats site woodwork associated with prehistoric (later Bronze Age) wattle lined pits has been recorded. A series of similar Later Bronze Age wattle and stake lined wells were found at Swalecliffe Waste Water Treatment Works site in 2000 at c.2m OD metres from the high tide mark. Both sets of features were well preserved due to their low-lying waterlogged locations, but had originally

located on dry land in the Bronze Age as stock watering features on the nutrient rich pastures close to the coast (Masefield et al 2003). The associated settlements were almost certainly adjacent, as indicated by another pit complex of late Bronze Age date, this time within a settlement, found within the inter-tidal zone at Minnis Bay Birchington and excavated by F.H. Worsfold between 1938 and 1940 (ibid). Bronze Age settlement/activity areas are also suggested by finds of axes or other metalwork deposits, for example Late Bronze Age bronze metalworking hoards were found adjacent to the settlement indicated by the Swalecliffe wells (ibid) and at Minnis Bay Birchington. A single palstave axe of the Middle Bronze Age was found in 1964 within the Study Area (RPS 1) and may suggest some form of similar activity, most plausibly farming, in this area.

- 7.14 Other categories of prehistoric and later archaeological remains that were originally located set within the mud flats, or on wetlands immediately adjacent, include former jetties, wooden trackways (to transport stock from dry land to nutrient rich salt-marshes and for access to the rivers for fishing and fowling), wooden fish traps, small craft such as canoes (the Middle Bronze Age 'Dover Boat' found within a former channel linking the coast is a famous example), oyster pits (to keep harvested oysters fresh) and evidence of salt-working (including salt settling pits, 'red mounds' and associated briquetage - fragments of the ceramic small troughs the salt rich solution was processed within and transported). There is evidence of salt-working from as early as the late Bronze Age on the North Kent Coast as salt had by then become a valuable commodity. This evidence includes briquetage fragments from Long Rock, Highstead and Minnis Bay and a salt working pedestal from Swalecliffe WWTW (ibid). The alluvial deposits that underlay the Proposal Site may have potential to contain similar such remains. The Phase II preliminary surveys for the *North Kent Coast Rapid Coastal Zone Assessment* (Wessex Archaeology 2001) did not identify significant findings within the close vicinity of the Proposal Site but trackways and fish-traps were noted within mud flats within the wider area (e.g. ref: TQ 86 NE 109 & TQ 86 NW 11). However, archaeological mitigation on the southern side of Sheppey has found evidence of local prehistoric salt-working (Scott Wilson, 2008, 17 citing Wessex Archaeology 2002, 2). Wessex Archaeology concluded that the salt-making was conducted on slightly higher ground adjacent to the marsh. The work in this area also on Sheppey also recovered Late Bronze Age/early Iron Age settlement activity. Given the alluvial nature of the geology of the north-eastern area of Sheerness (BGS Sheet 272, 1974) it is however, possible that prehistoric permanent prehistoric settlement was largely restricted to the higher areas of London Clay geology to the south around Queenborough and south-east around Halfway Houses and Minster.
- 7.15 Any Bronze Age archaeology or land surfaces that may have been present within the intertidal zone will have been subject to later erosion by the sea level rises and has subsequently been buried deeply beneath modern made ground as part of land reclamation. Truncation will be more extreme in the area of the Royal naval Dockyard due to additional piling and truncation from basin construction. The presence/absence of such remains within the Marine Dredging Zone may be

demonstrated by specialist interpretation of boreholes extracted by the proposed geotechnical investigation.

- 7.16 **Iron Age** (c.800BC – AD43) society seems to have become increasingly territorial, with political power apparently focussed on hill forts. Given the low-lying topography of the Isle of Sheppey no hill forts are found here although other settlement sites, perhaps on the highest available ground, given an increase in overbank flooding from the end of the Bronze Age, are likely to have been present taking advantage of the coastal resources and trade. There is much evidence of late Iron Age activity along the north Kent coastline with a great diversity of sites including enclosed defensive sites and non-defensive settlements, such as the recently excavated the 'Thanet Earth' site on the Isle of Thanet near Ramsgate (Canterbury Archaeological Trust 2010). The area notionally lay within the territory of the Cantiaci in the late Iron Age although the political situation was turbulent and the influence of the Catuvelluani was evident. A single late Iron Age coin recorded as having been recovered from Sheerness by the Portable Antiquaries Scheme at an unknown date (RPS 2 on Fig. 6). The find location is shown within Proposal Site on the HER but it seems highly improbable that this is correct, given that this location was subject to reclamation during several phases of historic dockyard construction, unless the coin was transported here with made ground from elsewhere. It is unlikely that Iron Age occupation would have been situated within this low lying zone with settlement more likely on the London Clay to the south and south-east. However any Iron Age features associated riverside activities such as marsh exploitation may be present within the Proposal Site area although any such assets within the Historic Dockyard and Reclamation Zones will be deeply buried and may therefore not be impacted.
- 7.17 With the **Roman period** (AD43- AD410) came a re-organisation of the settlement system with the establishment of an efficient road network. The further rise of non-agriculturally based professions such as traders and administrators was indicative of a boom in the rural economy. As a result of an increase of wealth, stability and rising population Romano-British sites are common in the area linked by a network of roads and tracks. A bronze Roman ring of late 2nd century type is located by the HER within the Proposal Site (RPS 3). This represents the only Roman find from the Study Area but is somewhat anomalous at this reclaimed land location. It is quite possible that, like the Iron Age coin (RPS 2) was imported with material brought from another location, conceivably from higher ground to the south or east.
- 7.18 The island is likely to have been occupied during the Roman period given its reference as *Insula Ovinium* (the island of the sheep) in the period (Woodthorpe 1951, 7) whilst finds of Roman date from the area include quernstones suggesting some arable farming in addition to the pastoral regime. Again the low-lying areas including the marsh adjacent to the Proposal Site may have been utilised primarily for grazing with occupation sites perhaps on the higher, drier ground. Both oyster pits and salt-working sites were certainly present along the north Kent coastline in the Roman period. The Phase II preliminary surveys for the *North Kent Coast Rapid Coastal Zone*

Assessment (Wessex Archaeology 2001) did not identify significant findings within the close vicinity of the Proposal Site but Roman salt-working was noted within mud flats within the wider area (e.g. HER TQ 86 NE 109). It is possible that such remains, or wooden revetments, moorings or track-ways, of Roman date might be present sealed beneath later alluvium and then by modern made ground at the Proposal Site but again would be unlikely to be substantially impacted by the development.

- 7.19 The **Saxon period** (AD410-AD1066) is marked by the evacuation of the Roman army and administration under Honorius in AD410. Saxons, Jutes and Angles arrived in a gradual response to the power vacuum left by the departure of the Romans and population pressures in their homelands. In the wider area a Saxon barrow has been identified at Minster whilst a 7th century sunken floored building has been excavated just east of Minster (Scott Wilson 2008, 18). A defensive camp of Saxon date may be located at the site of Queenborough Castle (ibid) and may be linked to the 9th century records of Danish wintering and grazing stock at Sheppey.
- 7.20 **Medieval** (AD1066-AD1500): With the arrival of the Norman aristocracy in 1066 came a further reorganisation of the settlement pattern based on feudalism and the 'three field' system of farming. Medieval rural sites beyond the key market towns, such as religious centres including Nunnery at Minster Abbey (RPS 241) some 4.5km to the east. Earthen sea walls were constructed around the coastline to protect the farmland within from inundation and silt accumulation (Scott Wilson 2008, 19). Evans (1953, 20) suggests that the effect was such that the salt marshes outside the walls rose by 2.4m to 3m. The location of RPS 110 at the extreme north-west extent of the Proposal Site tallies with HER reference TQ 97 NW 120 to the medieval and post-medieval dockyard town (Shurnasty more commonly Sheerness). The location point is general rather than specific however and is not necessarily intended to signal below ground medieval/post-medieval town remains at that location.
- 7.21 Within the southern area of the Study Area, approximately 1km south-east of the VW Group relocation site ('Whiteways'), are the remains of Edward II's 'concentric royal castle' at Queenborough (RPS 13, 14, 101 and 240). The castle was built at a strategically important location near the confluence of the Medway with the Swale between 1361-75 and was demolished in 1650. It represented the principle centre of power on Sheppey. RPS 240 refers to the Scheduled Ancient Monument status of the remains (SAM 23030). Although only the moat and grass covered foundations remain, evaluation trenches in 1991 identified the inner edge of the moat, ribbing of the outer wall and part of the inner moat (HER TQ 97 SW 1) whilst geophysical survey in 2005 identified key components of the castle layout. Further evaluation trenching was carried out in 2006 (Wessex Archaeology 2006).

e) Post-Medieval and Modern (AD1500- present).

i. *Archaeology of the Historic Dockyard Zone*

- 7.22 In terms of traditional buried archaeology the dockyard area and adjacent waters of the northern portion of the Proposal Site and the land reclamation area of the central and southern area present several strands of archaeological interest. Of particular note is the correlation, albeit on potentially inaccurate 17th century mapping, of De Gomme's defences (Figs 11 and 12) with the north-eastern area of the Proposal Site. The defences were demolished in the 18th century. In particular the Moat may correlate as shown on Figures 11 and 12. This may survive partially as a buried feature although it is probable that much or all of the defences was truncated or removed by later development.
- 7.23 The 16th to 18th century dockyard was used for the repair and maintenance of Royal Navy vessels and had also included a number of hulks of a 'floating town' used to house the dockyard workforce prior to the construction of barrack blocks within the fort by the Government in the 1790's, and the expansion of Blue Town and Mile Town in the early 19th century. The position of the cluster of ships is shown on John Potter's map of 1725 and again in the same position in a chart of 1728, but with additional vessels (RPS 134). The cluster is also shown in 1770 (Fig. 12). The vessels were hulks which may include the 'Medway Prize' which the HER indicates which was a 3rd rate sunk to form a breakwater in 1712 (a vessel captured in 1697). Although the hulks forming the breakers were removed by Rennie the extent to which other sunken hulks were incorporated as made ground is less clear. Tyler (not dated, 83) notes that *'the old hulks were removed and the problem of the soft mud was overcome by sinking obsolete vessels, and by the extensive use of piles to form a solid foundation.'* Remains of some of these sunken vessels may survive within estuary mud in some areas beneath the northern area of the modern dockyard, although this area was substantially truncated by the construction of Rennie's Small Basin (now in-filled) and the foundations and piles of the 'Quadrangle' (now demolished) and other structures. In addition to (presumably broken up) former wooden vessels, the made ground associated with the 16th-18th century dockyard would have comprised large dumps of earth, and possibly industrial debris, parts of former defensive structures (e.g. of De Gomme's defences) and of various phases of dockyard foundations compressed onto the underlying alluvial mud. Other pre-Rennie features that may have archaeological relevance include a well sunk to 99m within the dockyard walls of 1782 (Shardlow 2002) and possibly remnants of earlier sea walls as shown on the mapping.
- 7.24 The 1755 and 1813 maps already show extensive areas of reclaimed land at the dock prior to Rennie's work, with various structures in addition to the docks and harbour areas. The depth and level of preservation of any surviving archaeological remains of these types is unknown but may be informed by forthcoming geotechnical information.
- 7.25 Various former features of the pre-19th century docks include the site of a former timber pond

within the former inter-tidal zone as marked on the plan of 1755 (Fig. 12). The location (RPS 60) is situated beneath Garrison Basin Road within the north-eastern area of the Proposal Site although it is doubtful whether archaeological remains of the timber pound would have survived the 19th century dockyard construction.

- 7.26 The latest significant period of archaeology and most likely to be represented by buried remains relate to early 19th century elements of Sir John Rennie's dockyard (the general HER reference for the dockyard is located at RPS 67). The new yard covered 65 acres and was principally constructed from granite blocks. Rennie's constructions include the in-filled Great Basin and its three former dry dock structures beneath the current warehouse structure and possibly the foundations of various former storehouses, sheds and basins. The Great Basin/dry docks (centred on RPS 59 – Fig. 6) were built c.1814 and are described as 'a good example of Royal Naval docks of the early 19th century'. The walls of the Great Basin, walls and stepped sides of the two associated dry docks and the slipway opening into the Boat Basin (RPS 54 – south & RPS 62/84 - north) are described by the associated HER record as a Grade II Listed Building (LB ID 1399527) de-listed in 1999 because the facilities had been in-filled in the 1970's. However, the remains are preserved archaeologically beneath the warehouses on they north side of Great Basin Road. The superstructure is constructed from granite blocks, with the stepped docks inscribed with Roman numerals. The position of the outer walls was evident within warehouse 1 during the site walkover because of slumping of floor due to compression the backfilling material which comprised sands and gravels.
- 7.27 The 'Former site of Shed Number 19' (otherwise known as 'the Quadrangle' or Stonehouse) was located at the north-east extent of the Proposal Site (RPS 66) and was formerly Grade II* listed. The building comprised a yellow brick warehouse and was built by Holl 1824-1829. The quadrangle of four-storeyed ranges building was demolished in 1980 after which it was de-listed. The walls are described as 'massively thick' and will have had suitably robust foundations which almost certainly survive archaeologically beneath the modern structures (Fig.18). The structure may overlay the remains of De Gomme's 17th century moat and the Ordnance Wharf, whilst the in-filled Small Basin (otherwise known as the Middle Basin) closely overlies the 17th century 'Powder Monkey Bay' where ship repair and ordnance loading took place. Again aspects of these earlier phases may partially survive later truncation.
- 7.28 RPS 75 represents the former location of the 12ft high buttressed yellow brick Royal naval dockyard wall that ran to the east of the Proposal Site.
- 7.29 Dry Dock Number 4, to the north of the Boathouse and the Proposal Site (RPS 80) was built in 1827 and with its 'fine stonework' and a pair of cast iron gates remains the most visible component of Rennie's dockyard. The HER reference confirms that the gates were 'the first to be constructed anywhere and can still be opened by hand capstans'. The adjacent Dock Basin (RPS 87) and

Sheerness Dry Dock (RPS 88) were rebuilt at the location of the 18th century versions first shown on the Map of 1725.

- 7.30 Rennie used a caisson structure foundation design for building foundations and roadways which utilised paired sets of piles tapering to the top secured with iron collars. 'The whole structure was coated with blue clay. Granite slabs were then lined up on both sides of the inner surface of the piles and the void filled with blue clay and old granite' (Scott Wilson 2008, 22). These foundations and piles may be encountered by the Proposal Site's groundworks depending on design solutions. The roadways were formed using pig iron ballast blocks which systematically extracted in 1947 for use in steel manufacturing (ibid).
- 7.31 Later additions to the Rennie dockyard included the construction of the Boat House to the immediate north of the Proposal Site and the construction of rail lines that serviced the port from the 1860's. As noted elements of the track survive within the eastern area of the Proposal Site.
- 7.32 **The 20th Century Reclamation Zone** includes the location of the former Sheerness (Blue Town) Pier (at RPS 51). The pier was built in the mid 19th century for packet ships by the Sheerness Pier Commission and ran across the former intertidal just to the south of the former Mast Pond (RPS 42). The 4500m long pier had a deck c.25m wide for the first 1000m (within the Proposal Site). It was damaged by a barge in 1946 and was finally closed in 1958 before final demolition in 1971. It is possible that its foundations piled into the alluvium may remain buried beneath the modern reclamation if they were not recovered. The HER includes reference to a wharf at West Minster (RPS 37) shown on the 3rd Edition OS of 1901-12 which is located at the south-east extent of the Proposal Site whilst the outfall from Sheerness Sewage Works was located at RPS 40 and was present on the 1st Edition OS 1:10,560 scale of 1858-73. The foundations of the pier and the sewer outfall might remain buried within the alluvium beneath the modern made ground.
- 7.33 RPS 42 on Figure 6 represents the location of the original Mast Pond as shown on the 1725 'Plan of Sheerness at the Mouth of the River Medway' (John Potter). The 18th century Mast Pond was situated within the intertidal salt marsh to the much more extensive than the 19th century version. This former Mast Pond area was simply created by dredging of the alluvial mud but it is possible that the associated piles of wooden berths and other related features may survive beneath the modern made ground of the reclamation. The HER includes a brief reference Admiralty records of a wreck site of unknown date (RPS 132) within the approximate area of the 18th century Mast Pond elements of which might also be sealed beneath the modern reclamation (1970's to 2000). A further 1984 record (RPS 133) within the Rats Bay area refers to an unidentified obstruction ('fishermans fastener') charted as being within 35m of the former Sheerness pier. The reclamation itself is referenced on the HER (RPS 111) and comprises c. 6 m of made ground built up over the former foreshore/ inter-tidal zone.

7.34 The Sheerness Sea Wall located at the east edge of the Proposal Site (RPS 45). The concrete sea wall borders the full eastern extent of the 20th century Reclamation Zone. The position of the sea wall along the northern coast is located at RPS 58 and RPS 79 are and has been present there since at least 1725. Of potential relevance to archaeology within this zone is the status of Bastion 4 (RPS 44) of the Sheerness Lines (Figs. 3, 6 & 20). The bastion was a partial bastion only against the sea wall although it appears that the associated moat continued west into the inter-tidal mud flats (such that the moat system was flooded with sea water (Fig 3). Remains of the associated ditch/moat may survive beneath the made ground.

f) HER entries within the 'VW Group relocation site' (or 'Whiteways')

7.35 There are four entries within the potential VW relocation site (RPS 29-32). These all relate to observations of earthworks shown on the 3rd Edition Ordnance Survey Map of 1905-10 and 3rd Edition 1:2500 scale of 1908 (Fig. 22) and a L-shaped earthwork bank shown in 1933. The HER indicates that the earthworks covered areas of 53m by 74m (RPS 29), 17m by 13m (RPS 30) 14m by 35m (RPS 31) and 139m by 154m (RPS 32) respectively. The banks are somewhat sinuous in plan and do not appear to represent a coherent plans such enclosures. It is possible that they were phases of flood-banks, or were associated with a specific industry such as salterns (adjacent to the tidal stream). Whatever the specific function these banks & ditches are not shown on the 1st and 2nd Edition OS and may therefore have post-dated them. Alternatively they may not have been identified by earlier surveys. It is interesting to note that the north-east aligned section of the L-shaped bank shown on the 1933 OS (but not the 1908) aligns with the 'Queenborough Lines' defence (now a concrete lined canal – RPS252) which formed yet another line of defence across the peninsula and was constructed in 1782 (see Fig. 7 for alignment). Whether this bank was directly related or not the cut for the Queenborough Lines dyke may have extended through the Whiteways site and may therefore be represented archaeologically. No remains were visible during the Site Walkover of 23rd June with the location viewed from Whiteway Road to the SE side of the Proposal Site and Brielle Way to the east, due to levelling and surfacing for the 1970's car depot.

7.36 **The Marine Zone/Marine Dredging Zone** – Appendix 1 lists a number of post-medieval and modern wreck sites within the wider study area. The most infamous wreck is that of the SS Richard Montgomery, an American liberty ship loaded with 6,862 tons of explosives which sank off the Sheppey coast in 1944 D-Day operation when she drifted onto a sandbank. Only part of the munitions cargo was retrieved (Clancy 2009, 74).

7.37 Within the Proposal Site the undated wreck within the mud of the Reclamation Zone (RPS 132), along with the deliberately sunk hulks within the Historic Dockyard Zone (134), illustrate the potential for unknown earlier wrecks within the marine areas adjacent to the Proposal Site. Any traces of unknown ship wrecks within the Dredging Zone may be located via marine geophysical survey or diving, if required.

g) Archaeological Context of the Study Area in the Post-Medieval Period

7.38 There has been only limited archaeological works in the wider study area within the Isle of Sheppey. These include a watching brief on the construction of the Sheerness Inner relief Road (Phase 2) in 2000 (Archaeology South East 2001). The findings from this work were restricted to 19th century remains including domestic cess pits, a well (RPS 50) and part of a narrow gauge railway (RPS 49).

7.39 Ordnance Survey maps indicate a number of post-medieval features associated with the inter-tidal zone including boat hard near Queenborough (RPS 23) and the Queenborough pier (RPS 27) both first shown on the identified on the 1st Edition of 1870, whilst a landing stage (RPS 28) is shown from 1905-10. The 1870 OS also shows various post-medieval realignments of natural channels such as of the 'Drain' at RPS 24 on the south side of Diggs Marshes.

7.40 RPS 90 relates to a hard crossing marked on the 1st and 2nd Edition OS maps.

h) The Dry Land Dockyard Zone (East of reclaimed dockyard) and 'The Sheerness Defences' (Including Garrison Point Fort, Indented Lines and Sheerness Lines including WWII additions)

7.41 As indicated the first phase of extensive peninsula defences had been constructed by De Gomme during the 2nd Dutch War. This included the replacement of the earlier fort at the tip of the peninsula (site of Garrison Point Fort) with a much larger scale fortification of triangular plan that included the early phase of the Indented Lines along the Thames coast, and returned across the landward side to enclose the peninsula. The early mapping (for example Hasted's Map of Sheerness c.1798) shows defences along the western coast within the dockyard area, which has no above ground representation but there is little information available for these. However, the creation of Blue Town by the 1780's and growth of the dockyard rendered the southern landward defensive line obsolete and required an extension and replacement of De Gomme's defensive works by the Sheerness Lines (see below). Rennie's dockyard of the early 19th century included extensive land-take to the east of the earlier 17th and 18th century docks which necessitated the levelling of much of the east-west portion of Sir Bernard De Gomme's 17th century defensive ramparts. These had survived relatively intact to 1813, by which time Blue Town was constructed to the south, but were severed by the new dockyard boundary wall and the development it enclosed and appear greatly reduced and in-filled by 1826. The defensive ditches and foundations of De Gomme's works may therefore survive archaeologically beneath the western edge or to the immediate west of the Proposal Site, providing they have not been completely removed by later works.

7.42 The line of De Gomme's Thames side defences (general reference RPS 108) is followed by 'Indented Lines' 1 to 4 (RPS 105, 106, 107 and 108) which are Scheduled Ancient Monuments and

preserve his 'Gunners Battery', 'Dial Line' and Long Lines' (renamed The Indented Lines after 1838). The early defences were linked by a sea wall in 1827 and by 1899 mounted two six pounders and 12 quick firers. The 'Albemarle Battery' was added to Intended Line no. 2 in 1889 (RPS 92). The fabric of the 17th defences survives at low levels of the walls comprising Kentish Ragstone ashlar blocks. Various defences were added up until the 2nd World War.

- 7.43 The 2nd phase of peninsula defences was termed the Sheerness Lines (RPS 102) and was constructed by the Board of Ordnance c.1780 to c.1870. They ran as a continuous linear work from the tip of the peninsula SE along the Thames, then west to the Medway to the south of Blue Town, thus encircling it and the dockyard. Fort Townsend formed part of the defensive line by 1782. The Sheerness Lines continued to form the defences, with various adaptations up until World War II. The Lines were still complete until 1960 but since then much of the defensive line has been demolished ahead of development with the Scheduled sections shown on Figures 4 & 6 representing surviving elements. The Sheerness defences are allocated a group reference on the HER with a centre point located within the Proposal Site (at RPS 57) although the series of defences (of various build periods) referred to fall beyond it. The associated defences comprise the Garrison Point Fort (RPS 98), The Sheerness Lines (RPS 102), The Moat (RPS 56), Centre Bastion (RPS 86), Curtain Battery (RPS 77), Albermarle battery (RPS 92), Bastions 1-4 (RPS 72, 52, 43 & 44), Battery and defensive ditch (RPS ?), The Ravelin (RPS 61) and 20th century battery now demolished (RPS 65). The landward defences of the dockyard included Star Fort (first shown on Potters map of 1725) whose water moat was part star shaped, beneath Brielle Way to the east of the Proposal Site (RPS 55). The 'moat associated with The Ravelin' was formerly adjacent (RPS 56).
- 7.44 There were four bastions (No. 1 at RPS 72, No. 2 at RPS 52, No 3 at RPS 43 and No. 4 at RPS 44) constructed from 1780 to 1794 (Bastions 1 and 2) and 1797 to 1816 (Bastions 3 and 4). Elements of Bastions 1 and 2 partially survive in much altered state. Bastions 3 and 4 incorporated earthworks of the earlier Fort Townsend. The remains of the fort and Bastion 4, which was located immediately to the east of the Proposal Site's western extent according to the HER, were demolished when a steel works was constructed there in the late 1960's and early 1970's. Bastion 4 was a demi rather than full bastion and does not appear to have extended into the Proposal although the associated moat may have done so. Part of the associated moat defences that had linked Bastions 3 and 4 remain in situ as a cooling pond. Earthwork remains of an artillery fort were still extant to the north of the former bastions until 1946 (RPS 48). Various other defences were added to the original Sheerness Lines where they followed the Thames coastline as indicated the RPS numbers on Figure 6. These are listed in Appendix 1 with the Scheduled elements, which include the Garrison Point Fort and the Indented Lines are discussed in the Built Heritage section above.

- 7.45 Garrison Point Fort (RPS 98) was built on site of three earlier forts beginning with a Tudor blockhouse/ battery was incorporated within the 1667 Sheerness fort. The fort was sacked by the Dutch in the same year. It was rebuilt in red brick (all that survives of this phase is two lions and a series of bastions and moats that were severely damaged in the 19th century by gun emplacements). The Royal Commission demolished the fort and replaced it with the present structure in 1860-1872. A Bren torpedo station was added in 1887 (RPS 96) (now demolished) along with new batteries. The torpedo station was later used in World War II as machine gun posts. 'Old Admiralty House' built in 1830 (RPS 94) was formerly located to the immediate south-east of the fort. A 19th century dockyard cement works (RPS 100) was located to the north of the fort.
- 7.46 The Ravelin (RPS 61) was constructed as part of the Sheerness Lines defences protecting Blue Town in 1816. Surviving features include a musketry wall and an accommodation block (as shown on the OS of 1828) although the bastion outwork is demolished. There are traces of the moat 30m to the north-east and south-east. Very little intrusive archaeological fieldwork has been conducted in areas of the former Sheerness Lines (designed to enclose Sheerness Dockyard and Blue Town). However, an archaeological watching brief at Sheepey College was undertaken on the line of the Ravelin defensive work in 2001 and recovered evidence of the ditch (Canterbury Archaeological Trust 2001). The Ravelin Battery (RPS 65) to the north of The Ravelin was a 1906 coastal battery for 9.2 inch guns. The Sheerness Lines were further amended during World War II when defences include gun emplacements (RPS 71, 93, 96), pillbox (RPS 82), coastal artillery searchlight (RPS 95)
- i) Undated
- 7.47 There are a number of undated references within the wider Study Area on the HER. These include many of the 27 possible sites identified via an assessment of land of the foreshore at the eastern tip of the Isle of Grain by Wessex Archaeology as part of the BritNed Interconnector assessment project (Wessex Archaeology 2005). An evaluation at Castle Street Queenborough by the Swale and Thames Archaeological Survey Company in 2006 (RPS 16) located a series of poorly dated field-ditches representing a rural landscape which was considered to date anywhere between the 8th and 18th century. Several undated ditched enclosures have been identified on aerial photographs in the southern area of the Study Area. These include a 78m by 45m rectangular enclosure (RPS 21) two similar enclosures to the north (RPS 22 and 36) that are considered to be potentially of World War II derivation, and another potentially earlier enclosure shown on the 3rd Edition OS on 1901-12 (RPS 35).
- 7.48 Post-medieval oyster pits are shown on 1st and 2nd Edition OS maps at RPS 10 (Figure 7) and are shown as disused by 3rd Edition of 1908.

j) Initial Truncation Assessment

- 7.49 The alluvial of inter-tidal zone of the Historic Dockyard Zone was subject to truncation from dredging of the docks, basins, mast ponds, and piling and foundations from the 17th-19th century. This extent of these works is shown by the historic mapping and Rennie's treatise records illustrate the depth and dimensions of the principle intrusions. These plans and sections will be fully scrutinised at impact assessment stage in concert with the results of borehole investigations to provide a more reliable indication of truncation to the underlying alluvium beneath raised ground and of the pre-Rennie dockyard phases. In particular the issue of survival of 17th-18th century hulks will be advanced. At present it is clear that The Small Basin and Quadrangle were located in the former area of the 'floating town' and necessitated hulk removal or breaking up there. The Great Basin and dry docks were also cut deep down through the made ground into the former inter-tidal zone levels beneath. The Great Basin was in-filled with sand in 1977 shortly after the infilling of the Small Basin and therefore the infill of these structures is of no archaeological interest. The foundations of all of these structures were substantial due to the presence of deep alluvium and comprised piles supporting masonry arches and capped by clay upon which the walls were set. The extent to which other vessels were used as part of the made ground is unclear at present, although wood is present within borehole logs from the 1980's.
- 7.50 Within the 20th Century Reclamation Zone there are few documented intrusions into the inter-tidal zone alluvium although the 18th century Mast pond in the northern area will have required dredging to facilitate shipping access. The late 20th century reclamation itself will have compressed the sedimentation below, particularly within the upper levels. However, sediments beneath, which may contain the types of archaeology outlined above, are likely to remain intact below the made ground. As with the northern area of the Proposal Site fluvial erosion and alluvial deposition will have affected any early archaeological remains and /or land-surfaces within this zone. The possible extension of the moat associated with Bastion 4 of the Sheerness Lines into the area south of Cool Store 2 and east of Berth 7 (Fig. 3) may have been removed by erosion or sealed by silt prior to the modern land raise.
- 7.51 Truncation to buried archaeology within the Whiteways site is likely to have been minimal, although the modern (1970's) surfacing of the site may have horizontally truncated the upper levels and has certainly removed linear earthworks shown on the 3rd Edition OS of 1908. The foundations of structures within the western area of the Whiteways site may have effected archaeology, if present, although the extent of the potential impact relatively slight.
- 7.52 The extent of truncation within the two areas of proposed dredging (the Dredging Zone) is unknown at present. In terms of dredging a plan of Sheerness Docks in 1977 (Medway Ports Authority) shows dredging of the keyside at the Ferry Terminal north of the existing boat basin as 'dredged to 8m', opposite Shed 78 (The Boat House) at 8.5m, and at the keyside opposite and

south-west of the former Great basin dredged to 11.5m. The area of proposed dredging around the harbour gates to the Car Terminal is noted as dredged to 8.5m (below river bed). The results a geotechnical borehole study for the dredging zones will require archaeological scrutiny to assess whether the remains potential for the 5-6m deep additional dredging to impact archaeologically sensitive levels.

k) Summary of Potential Direct Impacts

- 7.53 **Historic Dockyard Zone:** Alluvium levels beneath the dockyard have potential to contain prehistoric to medieval archaeological remains or submerged land-surfaces, where not removed by later the extensive later intrusions. In particular former Intertidal zone archaeology may include archaeological remains such as fish traps, salt-working remains, oyster pits, wrecks or boats and ships, lost cargoes, votive deposits, former track-ways, piers and hards as well as inundated archaeological sites and/or land-surfaces with potential to contain well preserved environmental remains (particularly within former channels) .
- 7.54 As indicated above truncation of buried alluvium beneath the historic dockyard will have comprised dredging and excavation for the harbour walls, slips, dry docks and basins ahead for their installation and subsequent dredging of the key-side to allow access for large cargo shipping. The former works will have locally removed at least the upper levels of the alluvial sequence (with potential to contain archaeology) in the area of the dockyard walls, Great Basin and its three dry docks for example. Most notably the stabilisation of the dockyard by means of piling by Rennie 1813-1823, as part of his great engineering work, will have impacted both the previous efforts to raise grounds level at the docks, including the sinking of hulks and warships in addition to the alluvial sediments below which may contain much earlier remains.
- 7.55 In addition, any such remains will be deeply stratified beneath post-medieval made ground (likely to be about 2m in depth) and may only be affected by deep piling and any other c.2-3m plus intrusions that may be required, subject to design. .
- 7.56 The potential for possible impacts to any surviving remnants of 17th- early 19th century hulks that had been used as breakwaters and for accommodation and later incorporated in made ground (and where not removed by later constructions and intrusions) will be required at impact assessment stage following design. In particular these remains may be present around the area of the former (in-filled) Small Basin and (demolished) Quadrangle in the area of the former 'floating town'. These remains might be affected by piling and by foundations subject to detailed design. Remains of De Gomme's 17th century defences may also edge the north-eastern extent of the Proposal Site, although it is possible all traces were removed by later works.
- 7.57 Potentially most significant are potential impacts to buried remnants of Rennie's dockyard. These include the walls of the in-filled Great Basin, Small Basin, Mast Pond and in-filled sections of the

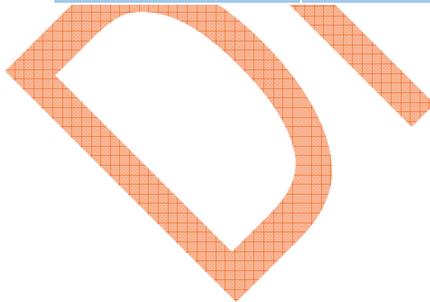
most tunnel, and foundations of various former buildings and services, most notably the former Quadrangle structure. The level of impact may however be minimal, however, depending on design solutions.

- 7.58 **20th Century Reclamation Zone:** The same considerations relative to buried alluvium are relevant to this extensive area. Again impacts to potential archaeology within the buried alluvium are buffered to a large extent by the dept of modern ground although piling and deep foundations may impact such remains (if present) subject to design. There are few other features of note on the HER within the zone although again deep impacts may reach any remnants of the former Sheerness pier, the historic sewer outfall for Sheerness, any features or structures associated with the former 18th century Mast Pond (south of the pier), a possible wreck site of unknown date and to any surviving remnants of the western extent of the Sheerness Lines west on the west side of the No.4 Bastion at the extreme eastern edge of the Proposal Site. Any remains of the late 18th-19th century defences would be considered significant with a preference for their retention in situ.
- 7.59 **Dredging Zone** . The existence of ancient sedimentation (as oppose to recent accumulations of alluvium) within the dredging zones is unproven prior to geotechnical study. In addition there is slight potential for the zone to contain archaeological remains resting on the sea bed. The same considerations apply to the below sea level areas of alluvium as those buried beneath later made ground with 5m of sea bed reduction likely to impact any such remains if present.
- 7.60 **Whiteways site:** This site is minimally disturbed by modern intrusions and all but shallow negative archaeological features have potential to survive here. In addition the location will have been subject to inundation for thousands of years up until the construction of sea defences and buried former land-surfaces and archaeological features/sites may be stratified within alluvium underlying the site. However, the potential use of the site for car storage may not require deep impacts and potentially only more recent archaeology at the top of the sequence may be affected by potential resurfacing works (subject to design). Bank features are shown at the site in the early 20th century and these subsequently levelled features may have had associated ditches that may survive beneath the present tarmac/concrete surfacing (unless the site is underlain by made ground) and might therefore be impacted by development. Although such features are unlikely to be of high significance if impacted they may require archaeological mitigation (recording).

Possible Archaeological Receptors within Proposal Site

Archaeological Receptor	RPS Fig No.	Significance/Potential Significance	Rationale
Pre-historic – Medieval archaeology within alluvium	N/A	Unknown	Various well preserved archaeological remains may be present in localised areas within the mud underlying the Proposal Site. Significance varies depending on form preservation and rarity.
De Gomme's 16 th	Fig 11	Regional (if present)	Moat potentially extended into NE extend of

Archaeological Receptor	RPS Fig No.	Significance/Potential Significance	Rationale
Century defences			Proposal Site. May have been removed by later Dockyard.
16 th – 18 th Century Dockyard	Figs 10-13	Local – Regional (if present)	Underlies Rennie Dockyard but largely truncated by 19 th Century Dockyard. Former mast pond in southern Dockyard area.
Late 18 th Century 'Sheerness Lines'	Figs 3, 6 & 20	Regional (if present)	Western extent of moat west of Bastion 4 may partially survive below modern made ground.
19 th Century Dockyard	Figs 14-19	Regional	The Small Basin and Great Basin/dry docks (formerly Listed) are in-filled but retained, as is the 19 th Century mast pond and the mast tunnel. Foundations of other structures including the Quadrangle remain as archaeological features. Road foundations and services were not removed.
16-18 th Century hulks	Figs 12-14	Regional (if present)	Remains of former 'floating town' hulks may be present in truncated and/or broken up form in Small Basin area.
19 th Century Sheerness Pier/sewer outfall	Fig. 20	Local	Foundations of Sheerness Pier may survive deeply buried beneath made ground and alluvium.
Wreck sites and 'Fishermans fastener'	Figs. 6-7	Unknown	At least one wreck site of unknown date is recorded within the 20 th Century reclamation zone (.....). There is also a record of a 'Fishermans fastener' obstruction at RPSX.
Early 20 th Century banks at Whiteways	Figs. 7 & 22	Local (?)	Banks of unknown function were located at Whiteways in 1908 (OS) but were absent by 1933. May have archaeological traces if associated with cut features. L-shaped bank shown on 1933 OS has possible indirect relationship with 18 th C Queenborough Lines.



8 HERITAGE ASSETS/ASSESSMENT CRITERIA

8.1 This baseline document is not intended to assess the potential effect that development may have on heritage assets. However for information purposes this section of the report sets out the criteria that will be used in the Environmental Statement.

a) Significance

8.2 There are no national government guidelines for evaluating the significance of all types of heritage asset. For archaeological remains, DCMS has adopted a series of recommended (i.e. non-statutory) criteria for use in the determination of national importance when scheduling ancient monuments. These are expressed in DCMS (2010).

8.3 The criteria include period, rarity, documentation, group value, survival/condition, fragility/vulnerability, diversity and potential, and can be used as a basis for the assessment of the importance of historic remains and archaeological sites. However the document also states that these criteria 'should not be regarded as definitive; but as indicators which contribute to a wider judgment based on the individual circumstances of a case.'

8.4 These criteria can be used as a basis for the assessment of the importance of archaeological remains/heritage assets of national importance. However the categories of regional and district / local importance are less clearly established than that of national importance, and implicitly relate to local, district and regional priorities which themselves will be varied within and between regions.

8.5 Clearly a degree of professional judgement is necessary, guided by acknowledged standards, designations and priorities. It is also important to understand that buried archaeological remains may not be well-understood at the time of assessment, and can therefore be of uncertain importance.

8.6 Significance is also described in PPS 5 (Annex 2) as:

The value of a heritage asset to this and future generations because of its heritage interest. That interest may be archaeological, architectural, artistic or historic

8.7 The following table assists in assessing the importance/significance of heritage assets.

Significance/Importance	Type of Asset
Very High	<ul style="list-style-type: none"> ▪ World Heritage Sites ▪ Assets of acknowledged international importance ▪ Assets that can contribute significantly to acknowledged international research objectives
High	<ul style="list-style-type: none"> ▪ Scheduled Monuments ▪ Grade I and II* Listed buildings ▪ Undesignated assets of schedulable quality and importance

Significance/Importance	Type of Asset
	<ul style="list-style-type: none"> Assets that can contribute significantly to acknowledged national research objectives
Medium	<ul style="list-style-type: none"> Designated or undesignated assets that contribute to regional research objectives Grade II Listed Buildings
Low	<ul style="list-style-type: none"> Undesignated assets of local importance Assets compromised by poor preservation and/or poor survival of contextual associations Assets of limited importance, but with potential to contribute to local research objectives 'Locally listed' buildings
Negligible	<ul style="list-style-type: none"> Assets with very little or no surviving archaeological interest Buildings of no architectural or historic note; buildings of an intrusive character
Unknown	<ul style="list-style-type: none"> The importance of the asset cannot be ascertained Buildings with some hidden (i.e. inaccessible) potential for historic significance

b) Setting

8.8 The issues surrounding the identification of the 'settings' of heritage assets, and the nature and magnitude of impacts and consequently effects on such 'settings', have been subject to much recent debate within the historic environment profession.

8.9 PPS 5 (Annex 2: Terminology) has brought some clarity in that it provides a clear definition of setting:

The surroundings in which a heritage asset is experienced. Its extent is not fixed and may change as the asset and its surroundings evolve. Elements of a setting may make a positive or negative contribution to the significance of an asset, may affect the ability to appreciate that significance or may be neutral.

8.10 Guidance to the PPS is provided in the document Planning for the Historic Environment Practice Guide. Paragraphs 113-124 of the Practice Guide address the issue of the settings of heritage assets and include the following points:

- All heritage assets have a setting, irrespective of the form in which they survive and whether they are designated or not;
- The setting of a heritage asset can enhance its significance whether or not it was designed to do so;

- The contribution that setting makes to the significance does not depend on there being public rights or an ability to access or experience that setting. This will vary over time and according to circumstance. Nevertheless, proper evaluation of the effect of change within the setting of a heritage asset will usually need to consider the implications, if any, for public appreciation of its significance;
 - For the purposes of spatial planning, any development or change capable of affecting the significance of a heritage asset or people's experience of it can be considered as falling within its setting; and
 - A proper assessment of the impact on setting will take into account, and be proportionate to, the significance of the asset and the ability to appreciate it.
- 8.11 In August 2010 English Heritage published a Consultation Draft of a document on the settings of heritage assets. The aim of this guidance, as stated in the Consultation Draft, is to 'ensure that judgements made about the contribution of setting to the significance of heritage assets and about the implications of change are as objective and consistent as possible, reducing conflict and delay in decision-making.'
- 8.12 Any assessment of the likely effects of a proposed development on the settings of a heritage asset therefore should seek to establish the following:
- Will the proposed development form part of the surroundings of the heritage asset?
 - If so, will it make a positive or negative (or neutral) contribution to the significance of that heritage asset, or the ability to appreciate that significance?
 - In the case of the contribution being positive or negative, what level of impact on the significance of the heritage asset is likely to occur, i.e. high, medium, low or negligible?
- 8.13 English Heritage guidance on setting also indicates that setting can make a contribution to the significance of a heritage asset through:
- Evidential value.
 - Historical value.
 - Aesthetic value,
 - Communal value.

- 8.14 These values are set out in English Heritage *Conservation Principles* (English Heritage 2008).
- 8.15 Evidential value is described as the potential of a place to yield evidence about past human activity.
- 8.16 Historical value is described as the way in which 'past people, events and aspects of life can be connected through a place to the present. It tends to be illustrative or associative'.
- 8.17 Aesthetic value 'derives from the ways in which people draw sensory and intellectual stimulation from a place'.
- 8.18 'Communal value derives from the meanings of a place for the people who relate to it, or for whom it figures in their collective experience or memory'. (English Heritage, 2008, Para. 35, 39, 46 and 54).
- 8.19 Once the level of effect on the significance of the heritage asset has been established, this can be examined with regard to the impact scales. The level of impact can then be placed against the importance of the heritage asset in a matrix provided in the Table below to reach a conclusion regarding the level of effect. This can be used to apply to both direct and non-direct impacts and effects.
- 8.20 Impact scales are defined as follows:
- **Major:** Change to most or all key archaeological elements, such that the asset is totally altered and much of its significance is lost. Substantial change within the setting leading to considerable loss of significance of the asset.
 - **Moderate:** Changes to many key archaeological elements, such that the asset is clearly modified and there is some loss of significance. Change within the setting leading to some loss of significance of the asset.
 - **Minor:** Changes to key archaeological elements, such that the asset is slightly altered and there is a slight loss of significance. Slight change within the setting leading to a slight loss of significance of the asset.
 - **Negligible:** Very minor changes to key archaeological elements or within the setting that hardly affect the significance.
 - **No change:** No change to key archaeological elements or within the setting.

SIGNIFICANCE / IMPORTANCE	Effect	Effect	Effect	Effect	Effect
Very High	Neutral	Minor	Moderate / Major	Major / Substantial	Substantial
High	Neutral	Minor	Moderate / Minor	Moderate / Major	Major / Substantial
Medium	Neutral	Neutral / Minor	Minor	Moderate	Moderate / Major
Low	Neutral	Neutral / Minor	Neutral / Minor	Minor	Minor / Moderate
Negligible	Neutral	Neutral	Neutral / Minor	Neutral / Minor	Minor
	No Change	Negligible	Minor	Moderate	Major
	MAGNITUDE OF IMPACT				

DRAFT

BIBLIOGRAPHY

Ancient Monuments and Archaeological Areas Act 1979

Archaeology South-East 2001. An Archaeological Watching Brief during the Construction of the sheerness Inner Relief Road, Sheerness, Kent. Unpub report.

Bennell, M. 1998. Under The Road. The Archaeology of Bronze Age Way, Erith. Bexley Borough Council

Canterbury Archaeological Trust 2001. An Archaeological watching Brief, Extension to Sheepey College, Sheerness. Unpub. report

Clancy, J., 2009. The Story of Sheppey. The History Press.

CLG 2010a, PPS 5, Planning for the Historic Environment: Historic Environment Planning Practice Guide

CLG 2010b, Planning Policy Statement 5: Planning for the Historic Environment

Coad, J, 1999 . Sheerness Dockyard and the Rennie Model. A guide by Jonathan Coad with an introduction and illustrations compiled by Alan Ogilvie

DCMS 2010, Scheduled Monuments: Identifying, protecting, conserving and investigating nationally important archaeological sites under the Ancient Monuments and Archaeological Areas Act 1979

English Heritage, 2010, The Setting of Heritage Assets. Consultation Draft

English Heritage, 2008, Conservation Principles. Policies and Guidance for the Sustainable Management of the Historic Environment

English Heritage, 2003, Royal Naval Dockyards Thematic List review. Summary report and Recommendations

Hastead E., 1798. History of the Isle of Sheppey. In The History and Topographical Survey of the County of Kent, Vol VI.

Hughes, D.T, '2002, Sheerness Naval Dockyard and Garrison

IfA, 2008, Standard and Guidance for archaeological desk-based assessment

Kent County Council with English Heritage, 2004. Historic Kent Historic Towns Survey for Sheerness

Little, B., 1958. A Relic from the Age of Sail – The Dockyard at Sheerness, Kent. Country Life, May 15, 1958

<http://magic.defra.gov.uk/>

Margary, I.D. 1967. Roman Roads in Britain (Revised Edition) London

Masefield, R. Branch, N. et al, Couldery, P., Goodburn, D. et al and Tyres, I. 2003. A Later Bronze Age Well Complex at Swalecliffe, Kent. *The Antiquaries Journal* 83, 2003 pp47-121

RCHME March 1995. Sheerness. The Dockyard, Defences and Blue Town

Scott Wilson August 2008. Peel and Planning (Ports) Ltd. Historic Environment Assessment Sheerness Port, Isle of Sheppey, Kent – Interim Report (Draft)

Shardlow, B.B., 2002. A History of Sheerness Dockyard 1667-1960

Sheppey Heritage Trust, Undated. Sheppey and the Royal Navy. A short history of the island's links with the senior service. Hammond Press Ltd Ramsgate

Skempton, A.W., 19???. The Boat Store, Sheerness (1858-60) and its Place in Structural History

Swale Borough Council November 2010. Sheerness Royal naval Dockyard Conservation Area Boundary Review. Character Appraisal and Management Strategy. Public Consultation Draft

Swale and Thames Archaeological Survey Company 2006. Archaeological Excavations at castle Street, Queenborough, Isle of Sheppey, Kent. Unpub report

Tyler, L., undated. The History of Sheppey. B.A. Fitch Sheerness

Wessex Archaeology 2000. Historic Environment of the North Kent Coast: Rapid Coastal Zone Assessment Survey. Unpub. report

Wessex Archaeology 2001. North Kent Coast Rapid Coastal Zone Assessment Survey Phase II Preliminary Survey Phase II. Unpub. report

Wessex Archaeology 2005. BritNed Interconnector. Archaeological Assessment

Wessex Archaeology 2006. Queenborough Castle, Isle of Sheppey, Kent: archaeological evaluation and assessment of results. Unpub

Woodthorpe T.J., 1951. History of the Isle of Sheppey, Sheerness & District Co-operative Society Ltd.