PORT OF TILBURY LONDON

PLANNING ACT 2008
INFRASTRUCTURE PLANNING
(APPLICATIONS: PRESCRIBED FORMS AND PROCEDURE) REGULATIONS 2009
REGULATION 5 (2) (a)

PROPOSED PORT TERMINAL AT
FORMER TILBURY POWER STATION

TILBURY2

TRO30003

VOLUME 6 PART 3

ES APPENDIX 12.B: BUILT HERITAGE ASSESSMENT

DOCUMENT REF: 6.2 12.B

TILBURY2

Built Heritage Assessment

In respect of
Tilbury2
Land at former RWE Power Station
Tilbury
Essex

On behalf of
Port of Tilbury London Ltd

CgMs Ref: JCG22584
October 2017

CONTENTS

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1.0 INTRODUCTION

1.1 This Built Heritage Assessment has been prepared by CgMs Heritage (part of RPS) on behalf of Port of Tilbury London Ltd (PoTLL), in relation to the proposed redevelopment of Land at the former RWE Power Station.

1.2 The proposed redevelopment is for a new port terminal, known as 'Tilbury2'. The proposed main uses on the Tilbury2 Site will be a Roll -on/Roll-off (RoRo) terminal and a Construction Materials and Aggregates terminal (the "CMAT"), and associated infrastructure including rail and road facilities and revisions to the existing marine infrastructure. An 'infrastructure corridor' is proposed that will accommodate road and rail links to the existing rail and road network. The CMAT will include stockpiling of construction materials and some processing of aggregates for the production of asphalt and concrete products.

1.3 For clarity, the following terms are used within this report and defined as follows, as set out within the ES Glossary:

- 'the Order Limits' - The extent of land and rights over land that will be needed temporarily to construct the proposals, and permanently to operate, maintain and safeguard the proposals (often referred to as 'the red line boundary' or 'the Site boundary').
- 'the Tilbury2 Site' - The site of the proposed RoRo and CMAT terminals and associated infrastructure.
- 'the Site' - The Tilbury2 Site; The infrastructure corridor; and Sections of the tidal Thames required for the construction of expanded berthing capacity and associated dredging.

1.4 The proposed volumes of import/export on RoRo units for the terminal exceed the threshold of 250,000 units stated in the Planning Act 2008 for throughput per annum. The Tilbury2 project therefore constitutes a Nationally Significant Infrastructure Project (NSIP).

1.5 The Site does not contain any designated or non-designated built heritage assets. It does, however, lie within the vicinity of a large number of designated and non-designated heritage assets on both the north (Essex) and south (Kent) sides of the River Thames, including Scheduled Monuments, Listed Buildings and Conservation Areas. In particular, the Site lies in close proximity to Tilbury Fort, a Scheduled Monument which is considered to be England's most spectacular surviving example of a late seventeenth century coastal fort. A number of other historic coastal forts also lie within the vicinity of the Site.

1.6 As such, any potential impact caused by the Proposals will stem from effects upon the settings of built heritage assets that lie outside of the Site boundary. The NPPF defines 'setting' as:

'*The surroundings in which a heritage asset is experienced. Its extent is not fixed and may change as the asset and its surroundings*

Figure 1: Aerial View of the bulk of part of the main Tilbury2 Site, showing its proximity to the River Thames, the Anglian Water Recycling Centre to the west and existing Tilbury B Power Station to the east (due to be demolished). The area is principally defined by industrial uses and marshland. (Source: PoTLL)

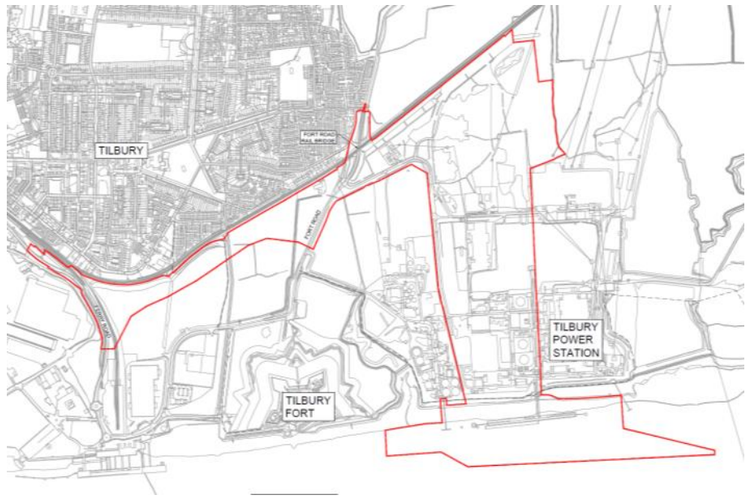


Figure 2: The Order Limits. (Source: Atkins)

Figure 3: Aerial view of the Site and its surroundings. The Port of Tilbury is situated to the west of the Site, surrounding the docks. Industrial and commercial uses largely characterise the land on both sides of the river. Tilbury Fort is visible in aerial views in close proximity to the Site, 'sandwiched' between two industrial areas, defined by the existing Port of Tilbury and the Anglian Water Recycling Centre and Tilbury Power Station site. The red outline indicates the rough location of the main Tilbury2 Site; the extent of which is shown in detail in Figure 2. (Source: Google Maps)

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.'

1.7 By virtue of Paragraph 5.12.6 of the National Policy Statement for Ports (NPS) and Paragraph 128 of the National Planning Policy Framework (NPPF), applicants are required to describe the significance of any heritage assets affected by the Proposals, including any contribution made by their setting to that significance, and to assess the impacts of the Proposals upon that significance.

1.8 Section 2.0 of this Built Heritage Assessment sets out the relevant legislative framework and planning policy at national and local levels, with special regard to policies that relate to development affecting the setting of heritage assets.

1.9 Section 3.0 provides an assessment of the historic development of the surrounding area and the Site itself, including a historic map appraisal, in order to further understand the historic context in which the Site lies.

1.10 Section 4.0 provides a description of the Site and its surroundings. This is based on a suite of site/study area visits undertaken between September 2016 and May 2017.

1.11 Section 5.0 provides an assessment of the Proposals and their potential impact upon the surrounding built heritage assets. Section 5.2 identifies the designated and non-designated built heritage assets that surround the Site. The Historic Environment Records (HER) for both Essex and Kent have been consulted, in addition to the National Heritage List for England (NHLE) and relevant Local Planning Authority documentation, such as conservation area appraisals. The assessment methodology is also outlined in Section 5.2; of particular importance, the methodology for assessing setting is detailed.

1.12 Sections 5.3 to 5.6 provide an assessment of the significance of the identified built heritage assets, including any contribution of their settings. The potential impacts of the Proposals upon this significance has subsequently been assessed. The assessment of potential impacts is supported by a series of wireline images of the Proposals from viewpoint locations that have been agreed with Historic England. These wirelines illustrate the maximum parameters of the Proposals ('worst case' scenario) and thus the potential visual impacts of the development upon the surrounding heritage assets. Ultimately, this report forms Technical Appendix 12.B to Chapter 12 (Archaeology and Cultural Heritage) of the Environment Statement (ES).

1.13 Essentially, this Built Heritage Assessment has been completed in order to assist those involved in considering the application, specifically with regard to aspects concerning the setting and significance of built heritage assets.

1.14 The Built Heritage Assessment should be read alongside all documents submitted as part of the DCO, in particular including the full ES and its appendices, General Arrangement Plans, Engineering Section Drawings and Plans, and the Masterplanning Statement (document reference 6.2 5A) which provides justification for the various elements of the Proposals, their scale and locations.

2.0 LEGISLATIVE & PLANNING POLICY FRAMEWORK

2.1 LEGISLATION & NATIONAL PLANNING POLICY

2.1.1. Section 2.0 outlines the relevant legislation and national and local planning policy context relating to Nationally Significant Infrastructure Projects (NSIPs) and built heritage assets.

2.1.2. The current national policy system identifies, through the National Policy Statement for Ports (NPS) and the National Planning Policy Framework (NPPF), that applications should consider the potential impact of development upon 'heritage assets'. This term includes: designated heritage assets, which possess a statutory designation (for example World Heritage Sites, Scheduled Monuments, Listed Buildings, Conservation Areas, Registered Parks and Gardens, Protected Wreck Site, Protected Military Remains and Registered Battlefields); and non-designated heritage assets, typically compiled by Local Planning Authorities (LPAs) and incorporated into a Local List.

Legislation

Planning (Listed Buildings and Conservation Areas) Act 1990.

2.1.3 Where any development may affect designated heritage assets, there is a legislative framework to ensure proposed works are developed and considered with due regard for their impact on the historic environment. This extends from primary legislation under the Planning (Listed Buildings and Conservation Areas) Act 1990.

2.1.4 The relevant legislation in this case extends from Section 66 of the 1990 Act which states that special regard must be given by the authority in the exercise of planning functions to the desirability of preserving or enhancing listed buildings and their setting.

2.1.5 A particularly appropriate example of upholding a S66 is in the case of West Coast Energy's proposal for five wind turbines to be installed within the setting of the Grade I listed Barnwell Manor, Northamptonshire. The National Trust advocated that the proposals would have an adverse impact upon the heritage asset's setting and, reinforced by local opposition, the proposal was rejected by East Northamptonshire District Council in 2010. The developers won an appeal for four turbines, however, this was overturned at the High Court. A subsequent Appeal to overturn the High Court ruling was dismissed in February 2014.

Infrastructure Planning (Decisions) Regulations 2010

2.1.6 The Regulations set out matters to which the Secretary of State, the Commission's Council or a Panel of Commissioners (as the case may be) must have regard when deciding applications for development consent relating to listed buildings, conservation areas and scheduled monuments.

2.1.7 Regulation 3 states that:

1) "When deciding an application which affects a listed building or its setting, the decision-maker must have regard to the desirability of preserving the listed building or its setting or any features of special architectural or historic interest which it possesses.

2) When deciding an application relating to a conservation area, the decision-maker must have regard to the desirability of preserving or enhancing the character or appearance of that area.

3) When deciding an application for development consent which affects or is likely to affect a scheduled monument or its setting, the decision-maker must have regard to the desirability of preserving the scheduled monument or its setting."

National Planning Policy

National Policy Statement for Ports (NPS) (Department for Transport, January 2012)

2.1.8 In January 2012 the government published the National Policy Statement for Ports (NPS). The NPS is part of the planning system established under the Planning Act 2008 to deal with nationally significant infrastructure proposals. It provides the framework for decisions on proposals for new port development.

2.1.9 The NPS sets out the Government's conclusions on the need for new port infrastructure, considering the current place of ports in the national economy, the available evidence on future demand and the options for meeting future needs. It explains to planning decision-makers the approach they should take to proposals, including the main issues which, in the Government's view, will need to be addressed to ensure that future development is fully sustainable, as well as the weight to be given to the need for new port infrastructure and to the positive and negative impacts it may bring.

2.1.10 Section 5.12 of the NPS considers the potential environmental effects on the historic environment. It describes heritage assets as "the elements of the historic environment that hold value to this and future generations because of their historic, archaeological, architectural or artistic interest.." and describes significance as "the sum of the heritage interest that a heritage asset holds..".

2.1.11 Designated heritage assets are World Heritage Sites, Scheduled Monuments, Listed Buildings, Protected Wreck Sites, Protected Military Remains, Registered Parks and Gardens, Registered Battlefields and Conservation Areas.

2.1.12 Paragraph 5.12.5 further states that: "The decision-maker should also consider the impacts on other non-designated heritage assets, as identified either through the development plan making process (local listing) or through the decision-making process on the basis of clear evidence that the assets have a significance that merits consideration in its decisions, even though those assets are of lesser value than designated heritage assets."

2.1.13 Paragraph 5.12.6 states that: "As part of the ES, the applicant should provide a description of the significance of the heritage assets affected by the proposed development and the contribution of their setting to that significance. The level of detail should be proportionate to the importance of the heritage assets and no more than is sufficient to understand the potential impact of the proposal on the significance of the heritage asset. As a minimum, the applicant should have consulted the relevant Historic Environment Record and assessed the heritage assets themselves using expertise where necessary according to the proposed development's impact."

2.1.14 Paragraph 5.12.7 notes that: "Where proposed development will affect the setting of a heritage asset, representative visualisations may be necessary to explain the impact."

2.1.15 Paragraph 5.12.12 states that: "The decision-maker should take into account the desirability of sustaining and, where appropriate, enhancing the significance of heritage assets, the contribution of their settings and the positive contribution they can make to sustainable communities and economic vitality. The decision-maker 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. The decision-maker should have regard to any relevant local authority development plans or local impact report on the proposed development in respect of the factors set out in footnote 72 below.

Footnote 72: This can be by virtue of:

- heritage assets having an influence on the character of the environment and an area's sense of place;
- heritage assets having a potential to be a catalyst for regeneration in an area, particularly through leisure, tourism and economic development;
- heritage assets being a stimulus to inspire new development of imaginative and high quality design;
- the re-use of existing fabric, minimising waste; and

- the mixed and flexible patterns of land use in historic areas that are likely to be, and remain, sustainable."

2.1.16 Paragraph 5.12.13 states that "There should be a presumption in favour of the conservation of designated heritage assets and, the more significant the designated heritage asset, the greater the presumption in favour of its conservation should be. Once lost, heritage assets cannot be replaced, and their loss has a cultural, environmental, economic and social impact. Significance can be harmed or lost through alteration or destruction of the heritage asset or development within its setting. Loss affecting any designated heritage asset should require clear and convincing justification. Substantial harm to or loss of a grade II listed building park or garden should be exceptional. Substantial harm to or loss of designated assets of the highest significance, including Scheduled Monuments; registered battlefields; grade I and II* listed buildings; grade I and II* registered parks and gardens; and World Heritage Sites should be wholly exceptional."

2.1.17 Paragraph 5.12.14 outlines that: "Any harmful impact on the significance of a designated heritage asset should be weighed against the public benefit of development, recognising that, the greater the harm to the significance of the heritage asset, the greater the justification will be needed for any loss."

2.1.18 Paragraph 5.12.16 states that: "When considering applications for development affecting the setting of a heritage asset, the decision -maker should treat favourably applications that preserve those elements of the setting that make a positive contribution to, or that better reveal the significance of, the asset. When considering applications that do not do this, the decision-maker should weigh any negative effects against the wider benefits of the application. The greater the negative impact on the significance of the asset, the greater the benefits that will be needed to justify approval."

National Planning Policy Framework (NPPF) (Department of Communities and Local Government (DCLG), March 2012)

2.1.19 The NPPF is the principal document that sets out the Government's planning policies for England and how these are expected to be applied. It has been purposefully created to provide a framework within which LPAs and the local populace can produce their own distinctive Local and Neighbourhood Plans, respectively. Such Plans consequently reflect the needs and priorities of their communities.

2.1.20 Paragraph 3 of the NPPF states that: "This Framework does not contain specific policies for nationally significant infrastructure projects for which particular considerations apply. These are determined in accordance with the decision-making framework set out in the Planning Act 2008 and relevant national policy statements for major infrastructure, as well as any other matters that are considered both important and relevant (which may include the National Planning Policy Framework). National policy statements form part of the overall framework of national planning policy, and are a material consideration in decisions on planning applications."

2.1.21 When determining planning applications, the NPPF directs LPAs to apply the presumption in favour of sustainable development; the 'golden thread' that is expected to run through the plan-making and decision-making process. Nonetheless, NPPF Paragraph 14 states that the presumption in favour of sustainable development is only applied unless certain specific policies indicate that such development should be restricted; these include policies protecting sites identified as: designated heritage assets; Areas of Outstanding Natural Beauty (AONBs); Sites of Special Scientific Interest (SSSIs); and the Green Belt.

2.1.22 The NPPF defines a heritage asset as: "A building, monument, site, place, area or landscape identified as having a degree of significance meriting consideration in planning decisions, because of its heritage interest". The definition of a heritage asset includes 'designated' heritage assets: "A World Heritage Site, Scheduled Monument, Listed Building, Protected Wreck Site, Registered Park and Garden, Registered Battlefield or Conservation Area designated under the relevant legislation". In addition, other 'non-designated' heritage assets identified by LPAs are included in a Local List.

2.1.23 Section 12 *Conserving and Enhancing the Historic Environment* contains NPPF Paragraphs 126-141, which relate to development proposals that have an affect upon the historic environment. Such policies provide the framework that LPAs need to refer to when setting out a strategy for the conservation and enjoyment of the historic environment in their Local Plans.

2.1.24 The NPPF advises LPAs to take into account the following points when drawing up strategies for the conservation and enjoyment of the historic environment:

- The desirability of sustaining and enhancing the significance of heritage assets and preserving them in a viable use consistent with their conservation;
- the wider social, cultural, economic and environmental benefits that the conservation of the historic environment can bring;
- the desirability of new development in making a positive contribution to local character and distinctiveness; and
- opportunities to draw on the contribution made by the historic environment to the character of a place.

2.1.25 These considerations should be taken into account when determining planning applications and, in addition, the positive contribution that conservation of heritage assets can make to sustainable communities, including their economic vitality.

2.1.26 In order to determine applications, NPPF Paragraph 128 states that LPAs should require applicants to demonstrate the significance of any heritage assets likely to be affected by development proposals, including the contribution made to their setting. The level of detail provided should be proportionate to each heritage assets' significance and sufficient to understand what impact will be caused upon their significance. This is supported by NPPF Paragraph 129, which requires LPAs to take this assessment into account when considering applications.

2.1.27 NPPF Paragraphs 132-136 consider the impact of development proposals upon the significance of a heritage asset. NPPF Paragraph 132 emphasises the need for proportionality in decision-making and identifies that, when a development is proposed, the weight given to the conservation of a heritage asset should be proportionate to its significance, with greater weight given to those assets of higher significance.

2.1.28 NPPF Paragraph 133 states that "Where a proposed development will lead to substantial harm to or total loss of significance of a designated heritage asset, local planning authorities should refuse consent, unless it can be demonstrated that the substantial harm or loss is necessary to achieve substantial public benefits that outweigh that harm or loss".

2.1.29 NPPF Paragraph 134 states that, where less than substantial harm will be caused to a designated heritage asset, the harm should be weighed against the public benefits of the development proposals, which include securing the heritage asset's viable optimum use.

2.1.30 NPPF Paragraph 135 states that "the effect of an application on the significance of a non-designated heritage asset should be taken into account in determining the application. In weighing applications that affect directly or indirectly non designated heritage assets, a balanced judgement will be required having regard to the scale of any harm or loss and the significance of the heritage asset".

2.1.31 In relation to Conservation Areas, it is acknowledged in NPPF Paragraph 138 that not all aspects of a Conservation Area will necessarily contribute to its significance. This allows some flexibility for sustainable development to take place in or near Conservation Areas, without causing harm to the overall heritage asset's significance.

2.2 NATIONAL PLANNING GUIDANCE

National Guidance

Planning Practice Guidance (PPG) (DCLG)

2.2.1 This guidance has been adopted in support of the NPPF. It reiterates the importance of conserving heritage assets in a manner appropriate to their significance as a core planning principle.

2.2.2 The PPG states that "conservation is an active process of maintenance and managing change", requiring a "flexible and thoughtful approach". Furthermore, it highlights that "neglect and decay of heritage assets is best addressed through ensuring they remain in an active use that is consistent with their conservation". (Paragraph: 003; Reference ID: 18a-003-20140306; Revision date: 06 03 2014)

2.2.3 Key elements of the guidance relate to assessing harm. It states, an important consideration should be whether the proposed works adversely affect a key element of the heritage asset's special architectural or historic interest. Adding, "it is the degree of harm, rather than the scale of development that is to be assessed". The PPG further notes that: "In general terms, substantial harm is a high test, so it may not arise in many cases." Essentially, whether a proposal causes substantial harm will be a judgment for the decision taker, having regard to the circumstances of the case and the NPPF. Importantly, it is stated harm may arise from works to the asset or from development within its setting. (Paragraph: 017; Reference ID: 18a-017-20140306; Revision date: 06 03 2014)

2.2.4 Setting is defined as "the surroundings in which an asset is experienced, and may be more extensive than the curtilage". A thorough assessment of the impact of proposals upon setting needs to take into account, and be proportionate to, the significance of the heritage asset and the degree to which proposed changes enhance or detract from that significance and the ability to appreciate it. (Paragraph: 013; Reference ID: 18a-013-20140306; Revision date: 06 03 2014)

2.2.5 Importantly, the guidance states that if "complete or partial loss of a heritage asset is justified, the aim should then be to capture and record the evidence of the asset's significance, and make the interpretation publically available". (Paragraph: 003; Reference ID: 18a-003-20140306; Revision date: 06 03 2014)

Conservation Principles, Policies and Guidance (English Heritage, April 2008)

2.2.6 The document outlines Historic England's approach to the sustainable management of the historic environment. While primarily intended to ensure consistency in their own advice and guidance through the planning process, the document is commended to LPAs to ensure that all decisions about change affecting the historic environment are informed and sustainable.

2.2.7 This document was published in line with the philosophy of PPS5, yet remains relevant with the NPPF and PPG, the emphasis placed upon the importance of understanding significance as a means to properly assess the effects of change to heritage assets.

2.2.8 Guidance within the document describes a range of 'heritage values' that constitute a heritage asset's significance to be established systematically; the four main heritage values include: aesthetic, evidential, communal or historical. The document emphasises that 'considered change offers the potential to enhance and add value to places…it is the means by which each generation aspires to enrich the historic environment' (Paragraph 25).

Overview: Historic Environment Good Practice Advice in Planning

2.2.9 In March 2015 Historic England (formerly English Heritage) withdrew the PPS5 Practice Guide document and replaced with three Good Practice Advice in Planning Notes (GPAs): 'GPA1: Local Plan Making', 'GPA2: Managing significance in Decision-Taking in the historic Environment', and 'GPA3: The Setting of Heritage Assets. A fourth document entitled 'GPA4: Enabling Development' has yet to be adopted.

2.2.10 These GPAs provide supporting guidance relating to good conservation practice. The documents particularly focus on how good practice can be achieved through the principles included within national policy and guidance. As such, the GPAs provide information on good practice to assist LPAs, planning and other consultants, owners, applicants and other interested parties when implementing policy found within the NPPF and PPG relating to the historic environment. Those most relevant in this case are summarised below:

GPA2: Managing Significance in Decision-Taking in the Historic Environment (March 2015)

2.2.11 This document provides advice on the numerous ways in which decision-taking in the historic environment can be undertaken, emphasising that the first step for all applicants is to understand the significance of any affected heritage asset and the contribution of its setting to its significance. In line with the NPPF and PPG, this document states that early engagement and expert advice in considering and assessing the significance of heritage assets is encouraged, stating that 'development proposals that affect the historic environment are much more likely to gain the necessary permissions and create successful places if they are designed with the knowledge and understanding of the significance of the heritage assets they may affect.'

2.2.12 The advice suggests a structured staged approach to the assembly and analysis of relevant information, this is as follows:

1. Understand the significance of the affected assets;
2. Understand the impact of the proposal on that significance;
3. Avoid, minimise and mitigate impact in a way that meets the objectives of the NPPF;
4. Look for opportunities to better reveal or enhance significance;
5. Justify any harmful impacts in terms of the sustainable development objective of conserving significance and the need for change; and,
6. Offset negative impacts on aspects of significance by enhancing others through recording, disseminating and archiving archaeological and historical interest of the important elements of the heritage assets affected.

2.2.13 The advice reiterates that heritage assets may be affected by direct physical change or by change in their setting. Assessment of the nature, extent and importance of the significance of a heritage asset and the contribution of its setting at an early stage can assist the planning process resulting in informed decision-taking.

2.2.14 This document sets out the recommended steps for assessing significance and the impact of development proposals upon a heritage asset, including examining the asset and its setting and analysing local policies and information sources. In assessing the impact of a development proposal on the significance of a heritage asset the document emphasises that the cumulative impact of incremental small-scale changes may have as great an effect on the significance of a heritage asset as a larger scale change.

2.2 NATIONAL PLANNING GUIDANCE

2.2.15 Crucially, the nature and importance of the significance that is affected will dictate the proportionate response to assessing that change, its justification, mitigation and any recording which may be necessary. This document also provides guidance in respect of neglect and unauthorised works.

GPA3: The Setting of Heritage Assets (July 2015)

2.2.16 This advice note focuses on the management of change within the setting of heritage assets. This document replaces 'The Setting of Heritage Assets' (English Heritage, March 2011) in order to aid practitioners with the implementation of national policies and guidance relating to the historic environment found within the NPPF and PPG. The guidance is largely a continuation of the philosophy and approach of the 2011 document and does not present a divergence in either the definition of setting or the way in which it should be assessed.

2.2.17 As with the NPPF the document defines setting as 'the surroundings in which a heritage asset is experienced. Its extent is not fixed and may change as the asset and its surroundings evolve'. Setting is also described as being a separate term to curtilage, character and context. The guidance emphasises that setting is not a heritage asset, nor a heritage designation, and that its importance lies in what it contributes to the significance of the heritage asset. It also states that elements of setting may make a positive, negative or neutral contribution to the significance of the heritage asset.

2.2.18 While setting is largely a visual term, with views considered to be an important consideration in any assessment of the contribution that setting makes to the significance of an asset, setting, and thus the way in which an asset is experienced, can also be affected by other environmental factors including noise, vibration and odour, while setting may also incorporate perceptual and associational attributes pertaining to the asset's surroundings.

2.2.19 This document provides guidance on practical and proportionate decision making with regards to the management of proposed development and the setting of heritage assets. It is stated that the protection of the setting of a heritage asset need not prevent change and that decisions relating to such issues need to be based on the nature, extent and level of the significance of a heritage asset, further weighing up the potential public benefits associated with the proposals. It is further stated that changes within the setting of a heritage asset may have positive or neutral effects.

2.2.20 It is stated that the contribution made to the significance of heritage assets by their settings will vary depending on the nature of the heritage asset and its setting and that different heritage assets may have different abilities to accommodate change within their settings without harming the significance of the asset and therefore setting should be assessed on a case-by-case basis. Although not prescriptive in setting out how this assessment should be carried out, noting that any approach should be demonstrably compliant with legislation, national policies and objectives, Historic England recommend using the '5-step process' in order to assess the potential effects of a proposed development on the setting and significance of a heritage asset, with this 5-step process continued from the 2011 guidance:

1. Identification of heritage assets which are likely to be affected by proposals;
2. Assessment of whether and what contribution the setting makes to the significance of a heritage asset;
3. Assessing the effects of proposed development on the significance of a heritage asset;
4. Maximising enhancement and reduction of harm on the setting of heritage assets; and,
5. The final decision about the acceptability of proposals.

2.2.21 The guidance reiterates the NPPF in stating that where developments affecting the setting results in 'substantial' harm to significance, this harm can only be justified if the developments delivers substantial public benefit and that there is no other alternative (i.e. redesign or relocation).

Overview: Historic England Advice Notes in Planning

2.2.22 In addition to the above documentation, Historic England has published three core Heritage Advice Notes (HEAs) that provide detailed and practical advice on how national policy and guidance is implemented. These documents include:

2.2.23 Previously adopted documentation by Historic England that provide further information and guidance in respect of managing change within the historic environment include *Seeing the History in the View* (May 2011), and *Managing Local Authority Heritage* (June 2003). Those most relevant in this case are summarised below:

Other National Guidance

Seeing the History in the View (May 2011)

2.2.24 This document provides guidance relating to the assessment of heritage significance within views. It gives a method that can be applied to any view that is considered significant in terms of heritage. Historic England is currently in the process of revising this document to reflect the NPPF and recent case law.

2.2.25 This document states that the assessment of heritage significance within a view can be divided into two phases:

Phase A: Baseline Analysis includes the following five steps to assist in defining and analysing significance within a view:

Step 1: Establishing reasons for identifying a particular view as important;

Step 2: Identifying which heritage assets in a view merit considerations;

Step 3: Assessing the significance of individual heritage assets;

Step 4: Assessing the overall heritage significance in a view; and

Step 5: How can heritage significance be sustained?

Phase B: Assessment explains the potential impact of a specific development proposal on significance within a view, as analysed in Phase A, through the following steps:

- Development proposals;
- establishing magnitude of impact on significance; and
- significance of effect.

2.2.26 Historic England recently consulted on proposals to incorporate this advice in a revised version of their Good Practice Advice Note on the Setting of Heritage Assets. The working title of the revised document is, 'Setting and Views of Heritage Assets: Historic Environment Good Practice Advice in Planning Note 3'. The consultation ended on 28 February 2017. If adopted, the 'Seeing the History in the View' document would be superseded by the new GPA3.

2.2.27 As such, whilst 'Seeing the History in the View' remains a helpful document, the assessment within this report has been carried out in line with the guidance contained within GPA3.

2.3 LOCAL PLANNING POLICY & GUIDANCE

2.3.1 The key relevant local planning policy in this case extends from Thurrock Council as the Site lies within Thurrock. Also relevant are Gravesham Borough Council's planning policies, given the inter-visibility across the River Thames and the potential impact of the Proposals upon the settings of heritage assets within Gravesend. Those policies relevant to development affecting the historic environment, specifically built heritage assets, are thus outlined below.

Thurrock Council

Core Strategy and Policies for Management of Development (as amended) Adopted January 2015

2.3.2 The Core Strategy was originally adopted on 21 December 2011 and subsequently updated on 28 January 2015, following an independent examination of our Core Strategy focused review document on consistency with the National Planning Policy Framework (NPPF). The relevant policies in regard to this assessment are outlined below:

CSTP23—Thurrock Character and Distinctiveness

2.3.3 Policy CSTP23 states that: "The Council will protect, manage and enhance the character of Thurrock to ensure improved quality and strengthened sense of place.

II. The Council requires the retention and enhancement of significant natural, historic and built features which contribute to the character of the Borough as defined by their value, quality, cultural association and meaning or their relationship to the setting and local context.

III. The Council requires the retention and enhancement of strategic and local views, which contribute to a distinctive sense of place. Where development will affect these views, their sensitivity and capacity for change must be adequately assessed and the effect of the development on them appropriately tested."

CSTP24—Heritage Assets and the Historic Environment

2.3.4 Policy CSTP24 states the following:

1. "Protecting and Enhancing Heritage Assets

I. The Council will preserve or enhance the historic environment by:

i. Promoting the importance of the heritage assets, including their fabric and their settings;

ii. Encouraging the appropriate use of heritage assets and their settings;

iii. Supporting increased public access to historic assets, including military and industrial heritage;

iv. Reviewing the designation of local heritage assets, including considering the designation of new Conservation Areas;

v. Retaining non-designated heritage assets which are considered locally important as well as those with statutory protection; and

vi. Encouraging proposals that include enhancement of surrounding landscapes and integration between priority heritage assets and the Greengrid.

2. Proposed Development

I. All development proposals will be required to consider and appraise development options and demonstrate that the final proposal is the most appropriate for the heritage asset and its setting, in accordance with:

i. The objectives in part 1 above;

ii. The requirements of PMD 4 Historic Environment;

iii. Conservation Area Character Appraisals and Management Proposals as appropriate; and

iv. Relevant national and regional guidance.

3. Priorities for Heritage Regeneration and Enhancement

I. The Council will work collaboratively with owners and partners to encourage the appropriate regeneration and use of priority heritage assets to secure their long-term future. The Council will identify priority heritage assets from:

i. English Heritage's national Heritage at Risk Register;

ii. The Thurrock Heritage at Risk Register, which will be reviewed annually;

iii. The Conservation Area Management Proposals, which will be reviewed at least every five years, and

iv. A local list of heritage assets once produced.

v. The Historic Environment Record

II. Of priority heritage assets already identified, the Council will:

i. Ensure that the setting of Tilbury Fort, including views of it from the river, are appropriately protected and enhanced, and that encroachment on the open land around it is not permitted.

ii. Ensure that the setting of Coalhouse Fort is appropriately protected from development and that its fabric is conserved.

iii. Resist development that undermines an understanding of the role the river Thames has played in the historic development of Thurrock.

iv. Promote public access between Tilbury Fort and Coalhouse Fort through riverside links."

PMD4—Historic Environment

2.3.5 Policy PMD4 states that: "The Council will ensure that the fabric and setting of heritage assets, including Listed Buildings, Conservation Areas, Scheduled Monuments and other important archeological sites, and historic landscape features are appropriately protected and enhanced in accordance with their significance.

1. The Council will also require new development to take all reasonable steps to retain and incorporate non-statutorily protected heritage assets contributing to the quality of Thurrock's broader historic environment.

2. Applications must demonstrate that they contribute positively to the special qualities and local distinctiveness of Thurrock, through compliance with local heritage guidance including:

i. Conservation Area Character Appraisals;

ii. Conservation Area Management Proposals;

iii. Other relevant Thurrock-based studies, including the *Landscape Capacity Study* (2005), the *Thurrock Urban Character Study* (2007) and the *Thurrock Unitary Historic Environment Characterisation Project* (2009).

iv. Further local guidance as it is developed.

3. The Council will follow the approach set out in the NPPF in the determination of applications affecting Thurrock's built or archaeological heritage assets including the expectation that the relevant historic environment record will be consulted and the heritage asset(s) assessed using appropriate expertise where necessary. This will include consideration of alterations, extensions or demolition of Listed Buildings or the demolition of unlisted buildings within Conservation Areas, and requirements for pre-determination archaeological evaluations and for preservation of archaeology in situ or by recording."

2.3.6 Chapter 7 of the Core Strategy and Policies for Management of Development document considers the monitoring and implementation of policies. A programme to be delivered under Policy CSTP24 is the 'Preservation and Enhancement of Tilbury Fort', where it is stated that: "Opportunities to preserve and enhance the setting and historic landscape of Tilbury Fort along with appropriate economic and tourism opportunities will be supported", with funding to be delivered externally.

2.3 LOCAL PLANNING POLICY & GUIDANCE

Gravesham Borough Council

Gravesham Local Plan Core Strategy

2.3.7 The Local Plan Core Strategy is the main document in the Gravesham Local Plan; it was adopted on 30 September 2014. The relevant policies in regard to this assessment are outlined below:

Policy CS20: Heritage and the Historic Environment

2.3.8 Policy CS20 states that: "Proposals and initiatives will be supported which preserve and, where appropriate, enhance the significance of the Borough's heritage assets, their setting where it contributes to the significance of the asset and their interpretation and enjoyment, especially where these contribute to the distinct identity of the Borough. These include:

- Gravesend Town Centre, its development as a heritage riverside town, and its setting;
- The Borough's urban and rural conservation areas; and
- Surviving built features and archaeology relating to the Borough's maritime, military, industrial and transport history.

When considering the impact of a proposed development on a designated heritage asset, the weight that will be given to the asset's conservation value will be commensurate with the importance and significance of the asset. For non-designated assets, decisions will have regard to the scale of any harm or loss and the significance of the heritage asset."

Gravesham Local Plan First Review - Saved Policies

2.3.9 The Gravesham Local Plan First Review was adopted in November 1994. In 2007, as part of changes to the planning system, Gravesham Borough Council saved some of the adopted policies where they were relevant and up to date. Many of the saved Local Plan First Review polices have since been deleted because they were no longer relevant or they have been replaced with more up to date policies in the Local Plan Core Strategy (September 2014).

2.3.10 The following saved policies remain relevant in this case:

Policy TC2 (Listed Buildings) outlines that in the case of applications for development affecting the setting of listed buildings, the primary consideration of the Borough Council will be the maintenance of the integrity of the original listed building. Proposals will also need to be sympathetic to the listed building in terms of massing, scale, appearance and materials.

Policy TC3 (Development affecting Conservation Areas) outlines that: "The Borough Council will adopt the following approach to applications for development within or affecting conservation areas:

(i) Where development is acceptable in relation to other policies in this Plan, it will be carefully judged for its impact and will be expected to make a positive contribution to the conservation area. The Borough Council will expect applications to contain sufficient details to enable the impact of the proposal upon the conservation area to be assessed."

3.0 ARCHITECTURAL & HISTORICAL APPRAISAL

3.1 HISTORICAL DEVELOPMENT: TILBURY

Tilbury Town: An Overview

3.1.1 Tilbury's development and history is due to its strategic location on the river bank of the Thames, to the East of London. The town of Tilbury was predominantly developed after the arrival of the railway and docks. The London, Tilbury and Southend Railway line was first authorised in 1852 with the first section opening in 1854. It was created under two railway companies: the London & Blackwall Railway and the Eastern Counties Railway. The line was to connect the eastern centre of London, reaching Tilbury and Gravesend by the use of steamers. By the 1880s the London Tilbury & Southend Railway became an independent company which enabled them to establish their own locomotives named after the local towns, for example the Number 3 Tilburies. Taken over by Midland Railway in 1912, more lines were developed; in 1923 the railway company was incorporated by London Midland & Scottish Railway Company (LMSR).

3.1.2 Although Tilbury had seen some development after the railway had been introduced, it was the development of the docks that had seen the arrival of Tilbury as a town. Due to this growth, in 1912 the Tilbury Urban District Council was established, however, West and East Tilbury remained under the Orsett Rural District. In 1936 the area was restructured to form Thurrock Urban District until 1974 when it was succeeded by Thurrock Council. During the Second World War Tilbury was targeted by enemy fire, with the railway bombed directly in 1944. After the war, the railway had become run down, however, the ocean liner traffic remained prosperous as there were regular boat trains. The line was not regenerated until the late 1950s when the electrification of the railway took place, after the nationalisation of services in 1948.

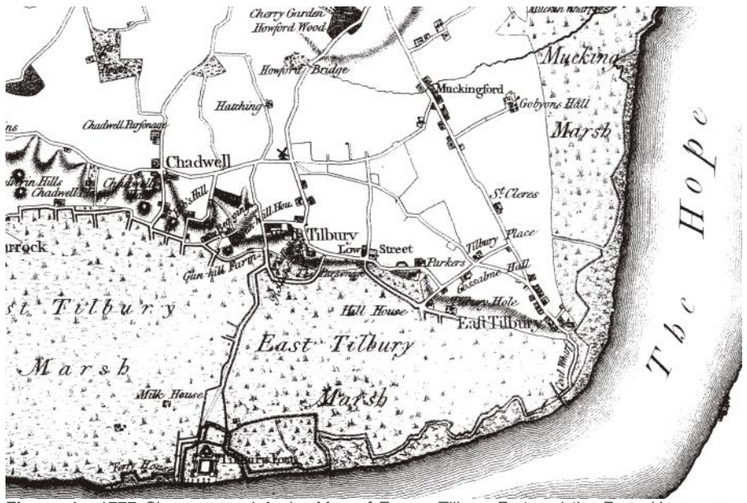


Figure 4: 1777 Chapman and Andre Map of Essex. Tilbury Fort and the Ferry House are identified on the river frontage, surrounded by marsh land to the north. (Source: Thurrock Local History Society)

Tilbury Docks

3.1.3 In 1884 the East and West India Docks Company, who had merged a few years previously, established Tilbury docks. The docks were one of the first located away from the centre of London in order to save the vessels navigating upstream; Tilbury's development was a strategic decision as it was in close proximity to Gravesend, an already established and historic point of entry. The deep water port rapidly became a significant asset. Port of London Authority (PLA) took over the docks in 1909 (Figure 6). PLA was established in the late nineteenth century to control the increased levels of activity on the river Thames.

3.1.4 Further developments to the docks occurred in 1930 when a cruise terminal was opened; the construction of which was a joint scheme between LMSR and PLA. The floating river Landing Stage, which was designed by Sir Edwin Cooper (1874–1942), meant that liners would be able to access the port during all tidal conditions. During the Second World War Tilbury docks were instrumental in the preparation and marshalling for D-Day.

3.1.5 Tilbury docks continued to grow and by 1972 it was the largest container handling port in Britain and second largest in Europe. In 1992 the docks became privatised and the PLA moved away from cargo handling. Today's Port of Tilbury covers 850 acres in order to serve the UK market and the 18 million people that live within 75 miles. The River Thames and in particular Tilbury Docks have had a significant role within world trade, communication and migration.

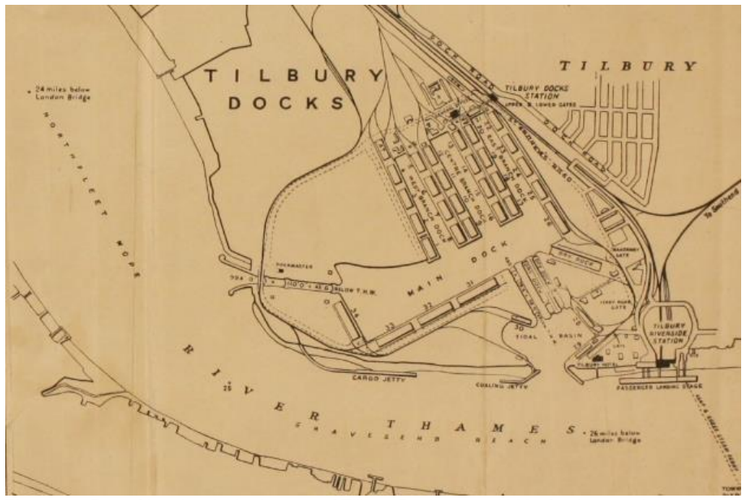


Figure 5: Port of London Authority map of Tilbury Docks, post 1909 after it was taken over by the PLA. (Source: Essex Record Office)

Defensive Forts: An Overview

Tudor Defence

3.1.6 The area surrounding the Site has a rich history due to its close proximity to the mouth of the River Thames from the North Sea. For centuries the River Thames was the most important route into England, providing a vital artery for the nation's trade. It is, therefore, unsurprising that there is a long history of defensive measures to discourage attack and invasion along the river.

3.1.7 Henry VIII was the first to establish a strong coastal defence strategy and began building artillery forts along the east and south coasts of England, to prevent hostile shipping from attacking the river settlements and proceeding upstream towards London or disembarking soldiers. Five small forts, knowns as 'blockhouses', were thus established on the Thames at West Tilbury, East Tilbury, Higham, Milton and Gravesend. The blockhouses at Higham and East Tilbury formed the frontline, establishing a crossfire and guarding ferries; the others, including West Tilbury, formed a second line, guarding another ferry crossing.

3.1.8 Each blockhouse was a squat tower, D-shaped in plan, with thick walls of brick and stone. Artillery was mounted at ground level within enclosed chambers (casements), as well as on the roof in open positions protected by a parapet. As illustrated in Figures 6 and 7, the blockhouses in Gravesend and Tilbury were established on opposite sides of the river to create a strong crossfire along the Thames.

3.1.9 The blockhouses were disarmed in 1553 by Queen Mary I and by

Figure 6: Illustration of military defences surrounding Tilbury and Gravesend (Source: Paul Pattison, *Tilbury Fort*, p18)

3.1 HISTORICAL DEVELOPMENT: TILBURY

the time Elizabeth I succeeded to the throne, most were in a poor condition. Whilst West Tilbury and Gravesend were repaired, the others were demolished. Milton Blockhouse, situated to the east of Gravesend Blockhouse, was disarmed in 1553 and demolished in 1557-8. Today the location of its archaeological remains is marked by studs in the road, however, no above ground remains survive.

Eighteenth and Nineteenth Century Development

3.1.10 There were a number of efforts to redevelop and rearm the blockhouses and forts whenever there were threats from neighbouring countries. In 1778, fear of a major attack on the port of London led to a survey and reassessment of Thames defences by captain of Engineers, Thomas Hyde Page.

3.1.11 The 1778 survey led to the establishment of New Tavern Fort in Gravesend to provide additional crossfire with Tilbury Fort. Tilbury Fort had been extensively redeveloped during the seventeenth century (discussed in further detail in Section 3.2 of this report) and thus the 1778 survey concluded that Tilbury Fort only required a small additional battery of six guns on the outer defences, facing directly downstream.

3.1.12 However, none of these efforts were arguably as rigorous as the maritime defence strategy during the late nineteenth century. By 1859 there were new threats from France from Napoleon III. A Royal Commission reappraised the British coastal defence and recommended stronger defences and new forts. This became the largest maritime defence strategy since Henry VIII's efforts.

3.1.13 The East Tilbury blockhouse was located at Coalhouse Point on the edge of the Essex peninsula and records indicate that it had been used as a defensive site since 1402. Originally comprising earthworks with towers, during Henry VIII's scheme it was made into a fifteen cannon blockhouse, which would crossfire with Higham blockhouse on the other side of the river as the first line of defence. The East Tilbury blockhouse had been fortified on a number of occasions, however, after the Royal Commission in 1859; Coalhouse Fort was established by dismantling the East Tilbury Battery situated behind the site. Coalhouse Fort was paired with Cliffe Fort on the southern river bank (Figure 10) for crossfire, another nineteenth century fort built as a result of the Royal Commission. Shornemead Fort, situated to the southwest of Coalhouse Fort on the Kent side of the river, forms a further fortification that was built as a result of the Royal Commission.

3.1.14 By the early twentieth century advancements in military defence meant that main defences were being established further down the river; however, remote controlled mines were being laid out between the forts. Following the Second World War and emergence of modern warfare, the traditional coastal forts had become archaic. A number of these have been preserved through statutory heritage designation and form key historic sites.

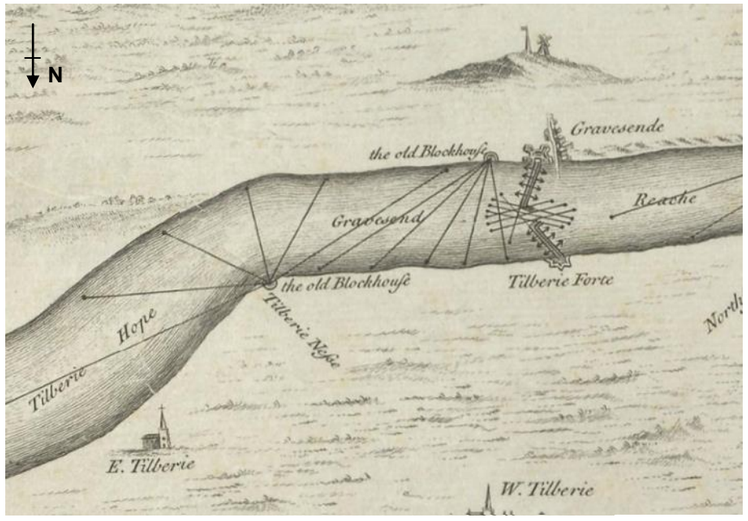


Figure 7: Part of an engraving produced in the 1738 from an original survey made by Robert Adams in 1588 to show the defence along the River Thames from London to Tilbury in case of attack from the Spanish Armada. It shows the fortifications and points of observation along the river, the pontoon between Gravesend and Tilbury, the main defence against the advancing Armada. (Source: British Library)

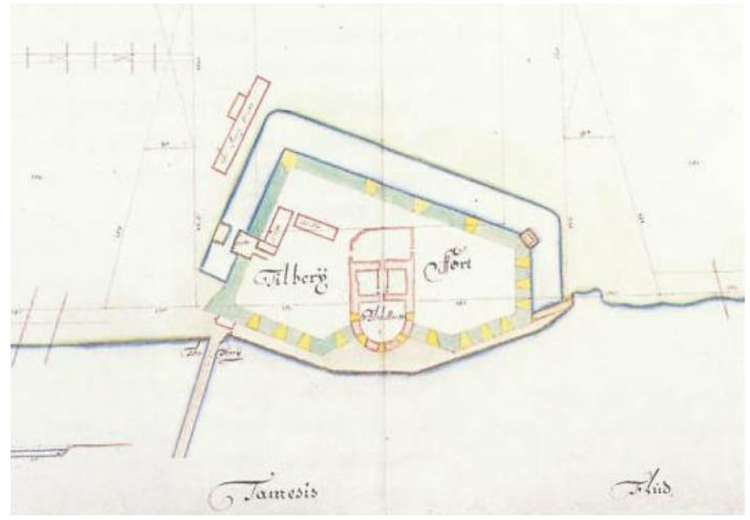


Figure 9: The Tilbury Blockhouse, shown on a plan of 1669, but largely as it would have been in the sixteenth century (Source: Paul Pattison, *Tilbury Fort*, p21)

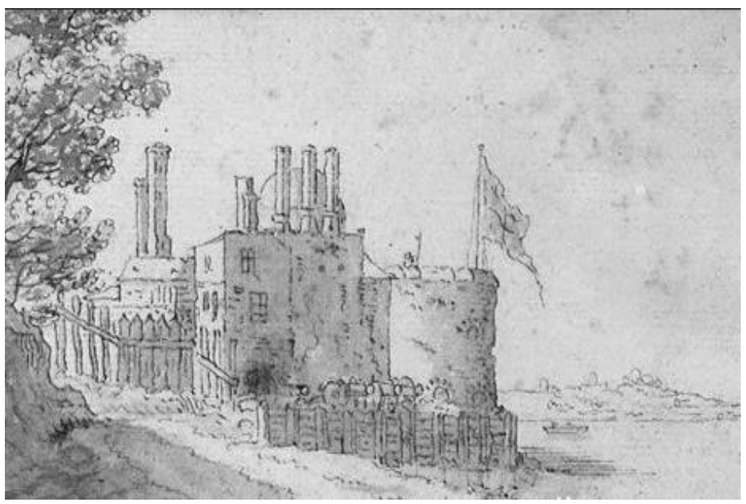


Figure 8: Unknown, Gravesend Blockhouse , watercolour. (Source: Gravesham Borough Council)

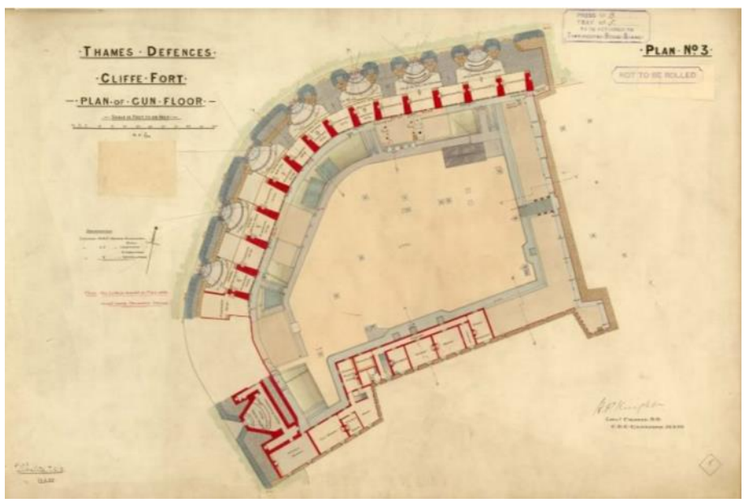


Figure 10: Cliffe Fort plans of Gun Floor 1899. (Source: National Archives)

3.2 HISTORICAL DEVELOPMENT: TILBURY FORT

3.2.1 The Site lies in close proximity to Tilbury Fort, a designated Scheduled Monument. The present Tilbury Fort was begun in 1670 during the reign of Charles II, however, it was built on the site of an earlier blockhouse built by Henry VIII between 1539 and 1540, as discussed above.

3.2.2 Tilbury Fort was designed by Sir Bernard de Gomme (1620–1685), a Dutch military engineer in the 1670s, under the reign of Charles II. The design of Tilbury Fort is modelled on fortifications developed during the seventeenth century in the Low Countries, where the Dutch were establishing complex defences on similar wet terrain (Figure 11). It is arguably De Gomme's most accomplished design and is the most complete example of a seventeenth century bastioned artillery fort with elaborate outer defences in Britain.

3.2.3 The construction process stretched over 15 years; by 1680 the fort was armed and by 1685 it was almost finished. Further improvements were made in the 1690s by de Gomme's successor, Sir Martin Beckman, including the introduction of stone artillery platforms. By 1700 the completed, armed and garrisoned Tilbury Fort formed one of the most powerful fortresses in the land. The main gun batteries were ranged along the riverbank and four bastions were built out from the main curtain wall; the fifth, intended to project into the river, was not completed. The old D-shaped tower of the Tudor blockhouse was retained as a gunpowder magazine.

3.2.4 The outer defences were designed to protect the fort from an attack by land, comprising a formidable design of two broad moats which could be crossed only by timber bridges that incorporated lifting sections and were guarded by small strong points (redoubts) on triangular islands in the moats. The land between the moats formed an earth rampart behind which infantry could defend the approaches to the moats, redoubts and bridges. A further small triangular redoubt guarded the approach to the gun lines from the ferry.

3.2.5 In the eighteenth century Tilbury Fort was additionally used for the storage and supply of gunpowder. This resulted in the construction of two large powder magazines on the edge of the parade ground as well as a wharf built on the river solely to shift gunpowder in and out of the fort. The old Tudor blockhouse and an ordinary storehouse to the west of the parade ground were also converted into magazines. In 1830 the storage capacity at Tilbury exceeded 19,000 barrels of gunpowder, a very large quantity.

3.2.6 An additional small battery of six guns on the outer defences, facing directly downstream, was constructed in c.1780 following a review of the forts defences. At this time, New Tavern Fort was built on the southern river bank to provide crossfire with Tilbury Fort. Tilbury Fort continued to fulfil its joint role as garrison and store during the Napoleonic Wars (1793-1815) and few new works were undertaken.

3.2.7 With the construction of new coastal forts including Coalhouse, Cliffe and Shornemead, situated further east along the river in the 1860s, Tilbury Fort and New Tavern Fort became a secondary line of defence. Nevertheless, conversion at Tilbury between 1868 and 1871 produced a formidable battery of 13 new gun emplacements in the west and north-east bastions and along the south-east curtain, mostly facing down the Thames in support of the new forts.

3.2.8 By the beginning of the twentieth century technological advances were such that artillery forts were soon obsolete. Warships became stronger, faster and more versatile. By 1905 it was decided that the Thames was so well defended by the Royal Navy that the likelihood of attack this far up the river had become practically non-existent.

3.2.9 Whilst its role in defence of the Thames was in decline, Tilbury Fort continued to act as a store for ammunition and other supplies. With invasion imminent, in 1889-90 several large semi-permanent buildings were introduced within the fort to form a mobilisation centre to serve as an assembly point and supply bases for a mobile army. These structures contained large quantities of waggons and horse harnesses for army transport.

3.2.10 At the outbreak of the First World War in 1914, all the stores at Tilbury were issued and the fort was given over to barracks for soldiers destined for France, accommodating over 300 men at any one time. In 1915 the fort was officially designated as an Ordnance Depot and by 1917 the fort was dedicated to the storage and supply of army and wartime essentials. Rails were also laid for a tramway system to aid movement of supplies.

3.2.11 When war broke out again in 1939, the chapel and guard house were converted into anti-aircraft operations room, controlling and

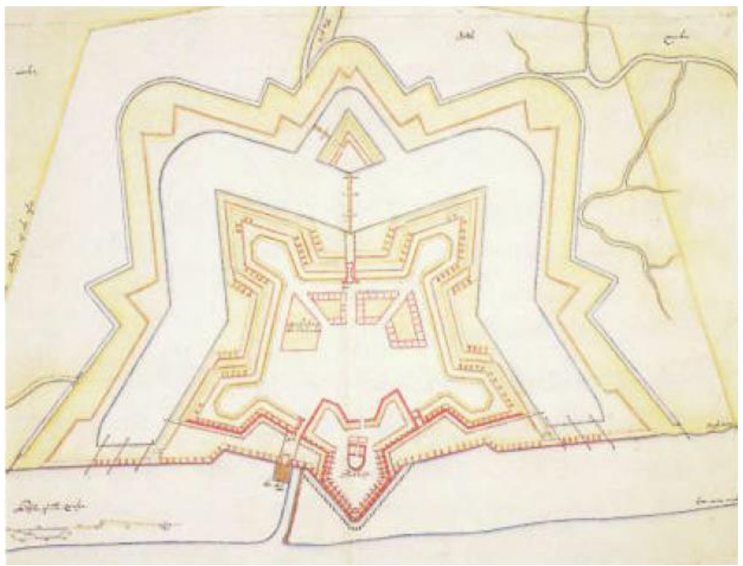


Figure 11: Sir Bernard de Gomme's design for Tilbury Fort, dated 1670. This plan was implemented with the omission of the riverside bastion, while the other four bastions were given just one tier of guns. (Source: Paul Pattison, *Tilbury Fort*, p22)

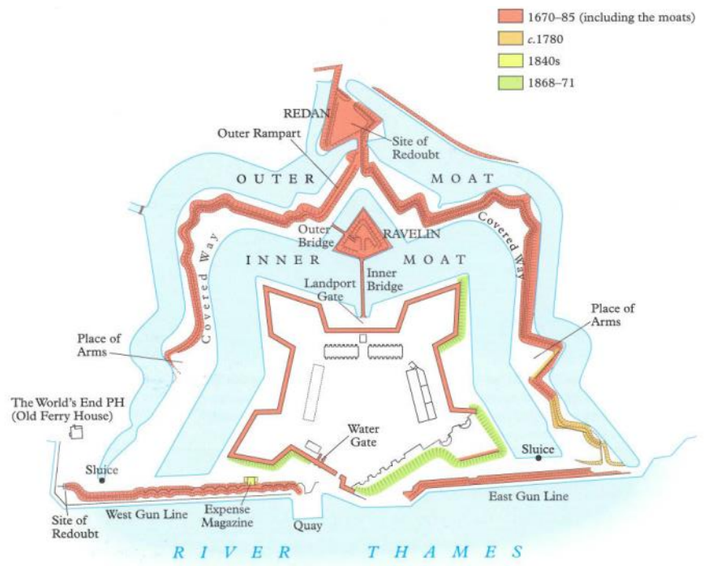


Figure 12: Phase Dating Illustration of Tilbury Fort (Source: Paul Pattison, *Tilbury Fort*, p32)

Figure 13: Map of the open marsh land surrounding Tilbury Fort in 1805. Whilst not shown, the shape of Tilbury Fort is visible on the river front. The surrounding landscape was considerably changed during the 19th century by the building of docks to the west of Tilbury Fort. (Source: British Library)

3.2 HISTORICAL DEVELOPMENT: TILBURY FORT

co-ordinating the fire from guns along the river against German bombing raids. In 1973 Tilbury Fort was designated as a Scheduled Monument and a major programme of restoration works was undertaken throughout the 1970s, including the repair of the moats, the paving of the parade ground and the building of replica bridges. The fort opened to the public in 1982 and has been looked after by English Heritage since 1983.

3.2.12 Given that Tilbury Fort never experienced the attack that it was built for it remains today as one of the best surviving examples of seventeenth century coastal forts, retaining many of its original features.

Figure 14: Unknown, View of Tilbury Fort in Tilbury, Essex, Aquatint Print, c1815 (Source: London Metropolitan Archives)

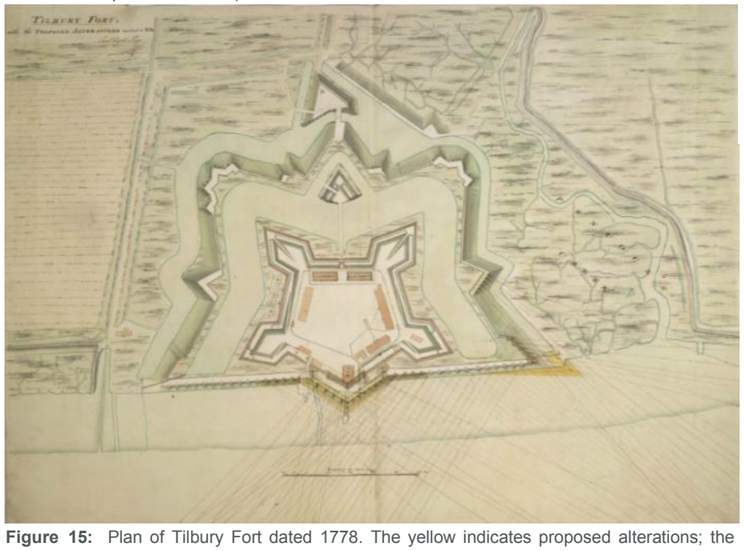


Figure 15: Plan of Tilbury Fort dated 1778. The yellow indicates proposed alterations; the bastion projecting into the water was never implemented. The crossfire sightlines between Tilbury Fort and New Tavern Fort are also shown. (Source: British Library)

Figure 16: 'The north prospect of Gravesend in the county of Kent' by Samuel and Nathaniel Buck (1738) shows a view looking across Tilbury Fort towards Gravesend. The Worlds End Inn is visible near the river front to the right of Tilbury Fort. St George's Church is prominent on the southern river bank, as is Windmill Hill. (Source: rmg.co.uk)

Figure 17: A view of Tilbury Fort from Gravesend, 1783, by J. Thane. (Source: British Library)

3.2 HISTORICAL DEVELOPMENT: TILBURY FORT

Figure 18: Plan of Tilbury Fort dated 1778 showing the crossfire with New Tavern Fort and Gravesend Blockhouse (the eastern arm of the gun lines remained armed at this date). The yellow indicates proposed alterations; the bastion projecting into the water was never implemented. (Source: British Library)

Figure 19: Illustrative view of Tilbury Fort in 1904; a reconstruction by Frank Gardiner. This image shows numerous buildings that have been demolished, including the mobilisation sheds on the parade ground, the married quarters in the north-west bastion, the canteen next to the Water Gate and a range of service and accommodation buildings next to the soldiers quarters. By this time the outer defences were not in use. (Source: Paul Pattison, *Tilbury Fort*, p30)

Figure 20: Aerial view dated 1938 looking across Tilbury Fort towards the Site which remained undeveloped at this time. The land surrounding Tilbury Fort remained largely undeveloped, however, industrial uses had already been laid out in close proximity to the east, including a sewage works. Within Tilbury Fort numerous buildings are visible within the parade ground; these no longer survive. (Source: Britain From Above)

3.3 HISTORICAL DEVELOPMENT: TILBURY POWER STATION

3.3.1 Tilbury Power Station was in operation from 1956 and its design was characterised by the multiple phases of its development, with the station's construction always conceived of in two distinct stages, that of Tilbury A and Tilbury B.

3.3.2 The Site forms an area of land that was previously occupied by Tilbury A and other associated structures. Tilbury A was originally commissioned to be a coal fire station in 1948. However, with advancements in the field progressing rapidly, by the time of completion it was already outdated; and so the boilers were converted to burn oil before turning fully commercial. By 1958 there were six generating units producing 360 megawatts of power. Tilbury was significant as it was the first set of power stations that were able to be situated away from the centre of the population and still have maximum sufficiency; this was particularly advantageous for densely populated areas such as London. Tilbury A was designed under engineering firm, Alexander Gibbs and Partners and despite being situated in close proximity to Tilbury Fort, the approach to the design was such that 'form followed function'. Due to the ever increasing demand of electricity, Tilbury B was commissioned in 1961 and was built 1964-69; its 170m (approx.) high twin chimneys were its defining feature, ensuring that the power station formed a landmark on the river and was visible from a wide area.

3.3.3 It was not long before the coal and oil fired Tilbury A was outdated and inefficient and so was mothballed in 1981. In 1999 the station boilers and turbine hall were demolished. In the 1990s the Central Electricity Generating Board was privatised and Tilbury Power Station was incorporated under National Power. This move meant that the power station was only functioning during peak times. The closure of Tilbury Power Station in 2013 came into being after the European legislation, Large Combustion Plant Directive, was issued.

3.3.4 On 12 November 2014, a Certificate of Immunity (COI no. 1422243) was granted, preventing Tilbury A and B Power Stations from being statutorily listed for 5 years. The buildings were not designated for the following principal reasons:

"Architectural interest: Tilbury B station is of modest architectural interest, its principal structures being designed almost entirely to meet the functional requirement of housing machinery and plant, and with consideration of their external appearance and their impact upon their surroundings being limited to the massing of the main component structures. The retained buildings of the Tilbury A are the fragmentary remains of a much larger site, and as such are not of special interest.

Historic interest: Tilbury A and B stations were conventional power generation sites for their period, and are not recognised as representing a significant stage in C20 power station design or development In England.

Technological interest: Tilbury B station's turbines and boilers, whilst having been designed to maximise the output of the station, are nevertheless representative of the then-current stage of the respective technologies rather than marking a innovative technological advance."

3.3.5 Tilbury A has since been completely demolished. Until recently, the substantial turbine hall and twin chimneys (approximately 170m high) were all that remained of Tilbury B. The power station is currently in the process of being demolished by owners RWE on a phased basis and will be completely removed by January 2019, prior to the proposed construction commencement of the Proposals. The 170m high twin chimneys were demolished on 28 September 2017; this took place after the baseline assessment included within this report had been completed.

3.3.6 On 20 July 2017 RWE Generation, the owners of the Tilbury B Power Station site, wrote to PoTLL to advise that they are proposing the development of a project to be known as "Tilbury Energy Centre." They advised that the project includes the potential for a Combined Cycle Gas Turbine (CCGT) power station with capacity of up to 2,500 Megawatts, 100 MW of energy storage development and 300MW of Open Cycle Gas Turbines (OCGT) but that "*the exact size and range of these technologies will be defined as the project progresses based on an assessment of environmental impacts and market and commercial factors*." No details of the proposal are yet available. RWE anticipate that an application will be submitted to the Planning Inspectorate under the Planning Act 2008 at the end of 2018 or early in 2019. This is discussed in further detail in regard to the 'future baseline' in Section 4.0 of this report.

Figure 21: A magnified view from of Tilbury B from the marshes to the west in 2013. Its 170m high (approx.) chimneys and the substantial turbine hall are dominant in long views from the surrounding area. (Source: CgMs)

Figure 22: A view from the south bank of the River Thames towards Tilbury, showing both stations complete.

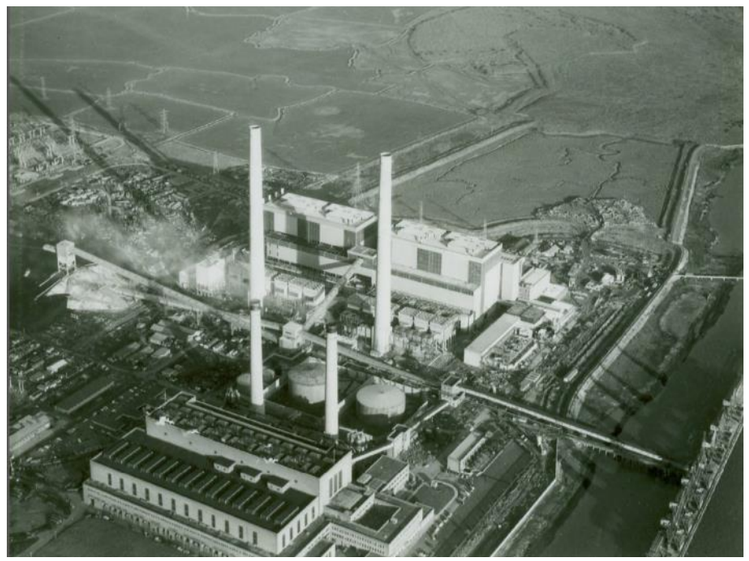


Figure 23: Aerial view of site showing the chimneys and complete structures of Tilbury A and B.

3.4 HISTORIC MAP PROGRESSION

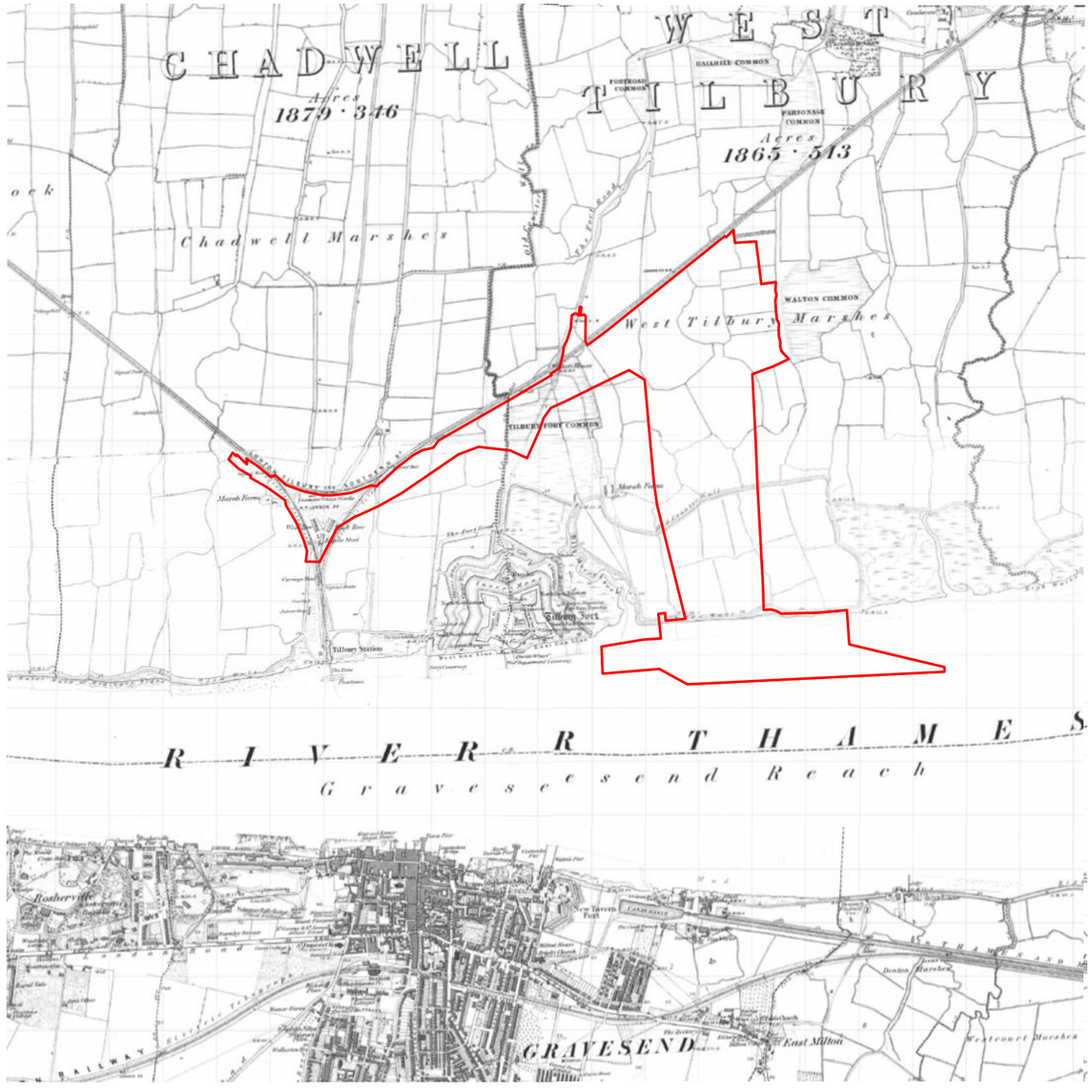


Figure 24: OS map of 1865; scale: 1:10,560 (Source: Landmark)

3.4.1 In 1865, the Site remained undeveloped with the exception of the railway line running through part of the western section; the Tilbury line had been opened a few years previously. By this date, together with the area to the north and east, the Site formed marshland. Tilbury Fort to the west of the Site forms the most significant and largely isolated development within the area, with the exception of Marsh Farm to its east, Tilbury Station to its west and the railway line to the north.

3.4.2 On the southern side of the river Gravesend is clearly visible and by 1865 the historic grain of the town centre had been established.

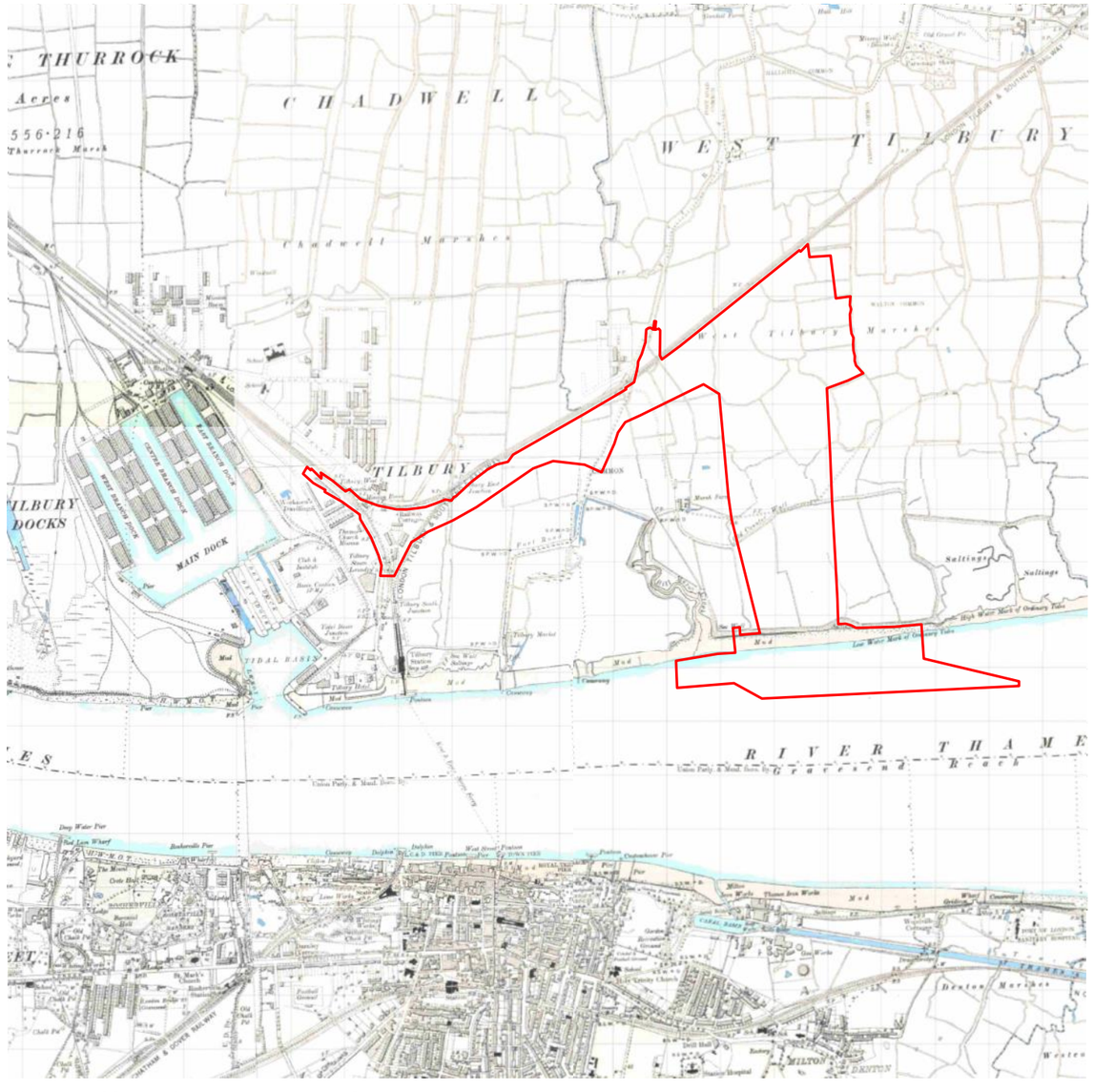


Figure 25: OS map of 1895; scale: 1:10,560 (Source: Landmark)

3.4.3 By 1895, the OS map shows that the Site itself remained undeveloped. However, significant development had occurred to the west of the Site with the arrival of Tilbury Docks, initiating the beginning of the industrial character which largely defines Tilbury in proximity to the river today. The docks also stimulated development of the surrounding area with workmen's dwellings to the south of the rail track and two schools and further residential development to the north.

3.4.4 South of the river, Gravesend had also further developed to the east and west, including the installation of another railway line by London Chatham and Dover railway running north to the pier.

3.4 HISTORIC MAP PROGRESSION

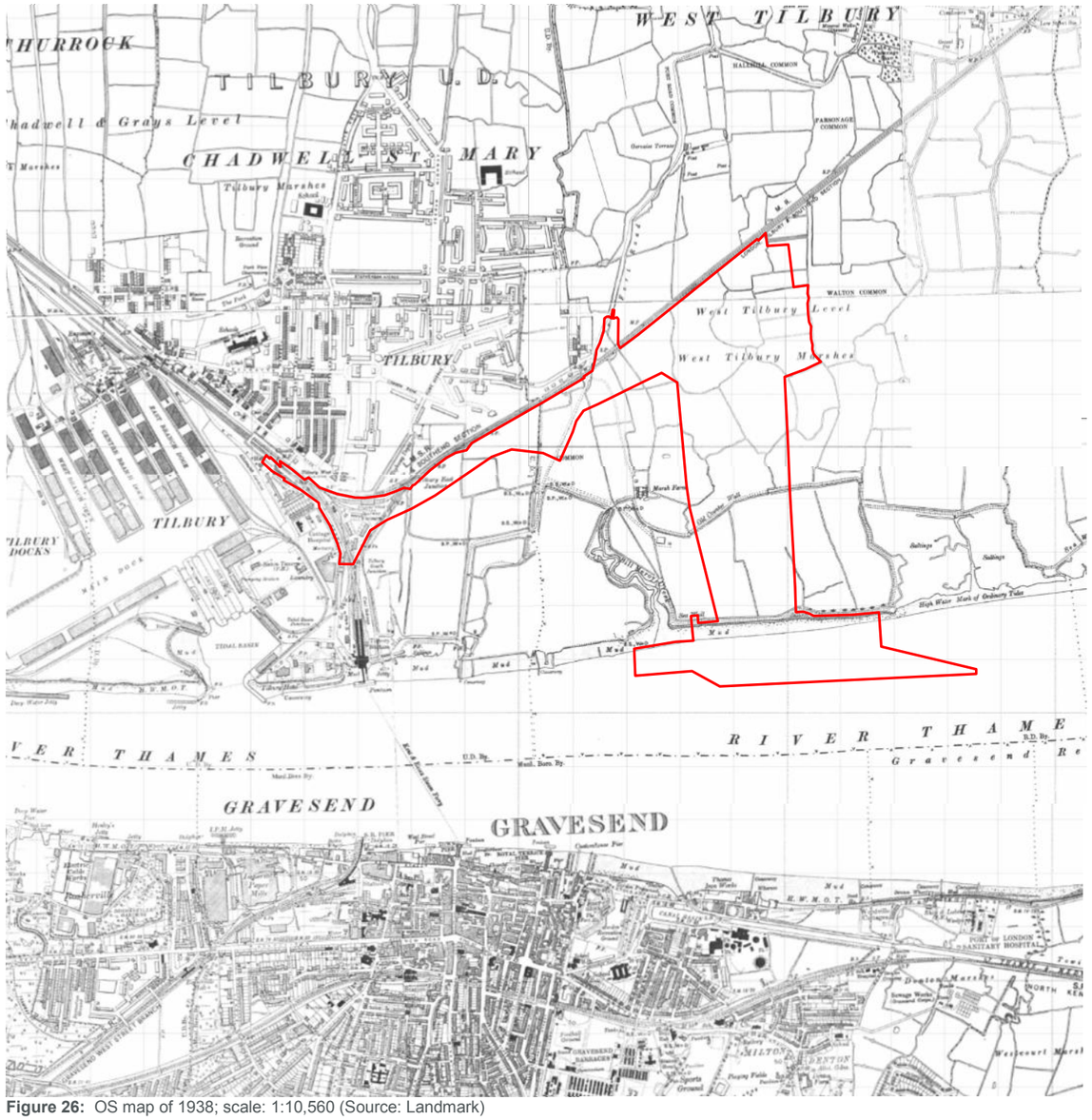


Figure 26: OS map of 1938; scale: 1:10,560 (Source: Landmark)

3.4.5 By the interwar period there had been considerable development in proximity to the Docks. Tilbury Town to the north west of the Site had rapidly urbanised following the arrival of the docks, resulting in an appreciable 'built' context in proximity to Tilbury Fort. Tilbury Docks to the west had also expanded, illustrating its strategic importance as an infrastructure route. Whilst the Site itself remains undeveloped, Marsh Farm remains identifiable to the immediate west of the Site.

3.4.6 Gravesend had also been further developed; to the west of the town the area had become industrialised with a number of factories including, paper mills, printing works and electric cable works, thus further enhancing the industrial character of this section of the Thames.

Figure 27: OS map of 1955; scale: 1:10,560 (Source: Landmark)

3.4.7 By 1955, development had begun to take place within the Site, with the foundations being established for the Tilbury A Power Station which opened in 1956. Part of the jetty within the Site is also indicated by this date. To the west of the power station, Marsh Farm has been demolished and the sewage works (now Anglian Water Recycling Centre) were laid out. Further to the west, Tilbury Docks and Tilbury rail has continued to expand with a new landing stage being established on the Thames. By this date, the land surrounding Tilbury Fort had become increasingly industrial in character.

3.4.8 The Rosherville area to the west of Gravesend had also become a fully established industrial area with further works and mills constructed. The Milton and Denton areas to the east had also further developed with a number of residential dwellings, schools and further industrial premises along the Thames.

3.4 HISTORIC MAP PROGRESSION

Figure 28: OS map of 1973; scale: 1:10,000 (Source: Landmark)

3.4.9 By 1973, further development had taken place to within the southern section of the Site boundary as well as further industrial buildings in the northern section. Tilbury B Power Station had also been laid out to the immediate east of the Site boundary, forming a substantial landmark structure on the northern bank of the Thames. The jetty had also been largely extended. Furthermore, the residential suburb of Tilbury Town had further developed to the north-west.

3.4.10 In Gravesend, the railway line running north to the pier had been dismantled by this date and infilled towards the south. Further infill had taken place to the east in the Milton and Denton areas, in the form of residential, commercial and industrial buildings.

Figure 29: OS map of 2002; scale: 1:10,000 (Source: Landmark)

3.4.11 By the beginning of the twenty-first century, Tilbury Power Station had undergone further isolated expansion, however, the buildings within the northern section of the Site had by this time been removed. Similarly, Tilbury Town had also experienced areas of infill development and further development activity had taken place at the Port.

3.4.12 By 2002, Gravesend formed a densely developed urbanised area, with a number of industrialised areas, to the west and east of the town centre.

4.0 SITE ASSESSMENT

4.1 The following section provides the existing baseline conditions for the Tilbury2 Site and its surroundings. Site/study area visits were undertaken by CgMs in September 2016, January 2017, May 2017 and September 2017. These visits took place prior to the recent demolition of the Tilbury B chimneys on 28 September 2017 and as such they are visible in the following photographs. The future baseline conditions described within this section. Section 5.2 of this report provides further discussion of the existing and future baseline conditions and how these have been adopted within the built heritage assessment.

Location

4.2 The Tilbury2 Site lies to the south east of the town of Tilbury which lies within the Borough of Thurrock, within south Essex. The Site is situated on the north side of the River Thames within the Tilbury Marshes.

4.3 Tilbury Town comprises areas of predominantly residential development with a commercial and retail centre. However, the character of the town and its environs is related in large part to the Port of Tilbury itself, which lies to the south and west of the town and to the west of the Tilbury2 Site. At its closest, the main Port operational area is 820m from the western boundary of the Tilbury2 Site.

Redline Boundary (Order Limits)

4.4 The redline boundary for the DCO (known as the 'Order Limits') comprises four main areas, summarised as:

- the main site of the new port facility on the former Tilbury Power Station land (the Tilbury2 Site);
- sections of the tidal Thames required for the construction of expanded berthing capacity and associated dredging;
- an infrastructure corridor to the Tilbury2 Site between Ferry Road and Fort Road; and
- land around the roundabout to the north of the Port (the "ASDA roundabout") where highway improvements will be required.

Tilbury2 Site Description

4.5 The Tilbury2 Site comprises approximately 61 hectares (152 acres) of the western part of RWE's former landholding at the former Tilbury Power Station. RWE are retaining the 'B' Station land to the east of the Tilbury2 Site for potential future power generation. PoTLL are the freehold owners of the Tilbury2 Site. The Tilbury2 Site is divided by an access road which runs east-west, known as 'Sub-Station Road'.

4.6 To the north of Sub-Station Road is land in part used for the open storage of new motor vehicles. PoTLL was granted temporary planning permission for 5 years for this use in September 2016 by Thurrock Council (LPA reference 16/00848/FUL). The remainder of the land north of Sub-Station Road is largely brownfield land with areas of plantation woodland and developing scrub. Parts of the northern area were formerly used to manufacture 'Lytag' blocks as a by-product of fuel ash from the power station. To the north-east of this area is land formerly used for agriculture, but more recently appropriated by RWE for advance habitat creation to provide compensatory habitat for water voles, reptiles and other species in anticipation of the loss of the TEEC site and adjoining areas to a power station development that was subsequently shelved.

4.7 A former railway line crossed the northern part of the Tilbury2 Site on a north-south alignment connected to the main London-Southend line to the north; last used in the 1960s, the railway cutting can be observed on the Tilbury2 Site.

4.8 To the south of Substation Road, the Tilbury2 Site comprises land that formerly accommodated the Tilbury A power station and areas previously used for coal storage, ancillary buildings and land including the former Tilbury Energy and Environment Centre (TEEC) which was an educational facility run by RWE and which showcased examples of brownfield habitats and reedbed. Apart from a number of small structures, all buildings and operational structures have now been demolished and the area comprises flat ground comprising hardstanding, reinforced concrete, coarse gravel or grassed landscaping. Parts of this land are presently the subject of a further application for temporary planning permission to Thurrock Council by PoTLL for additional areas of storage of new motor vehicles.

4.9 The southern area of the Tilbury2 Site also includes the remains of railway tracks which cross the Tilbury2 Site whilst a levelled green space lies to the north-west of the former clubhouse, once used as a sports pitch. In addition, a jetty extends into the foreshore in the south of the Tilbury2 Site.

4.10 The Tilbury2 Site is accessed directly using Sub-Station Road from Fort Road immediately south of a road bridge where Fort Road crosses the railway line. The access to the Tilbury2 Site forms a simple priority junction with Fort Road.

Figure 30: Aerial view looking east across the Site. The Anglian Water Recycling Centre and Stobart's Biomass Products Limited wood waste storage area are situated to the west. Tilbury B is prominent to the east but will be demolished by January 2019; it is noted that the chimneys were demolished on 28 September 2017. (Source: PoTLL, Feb 2017)

Figure 31: Aerial view looking northeast across the Site. The Anglian Water Recycling Centre and Stobart's Biomass Products Limited wood waste storage area are situated to the west, separating the Site from the outer moats of Tilbury Fort. Tilbury B is prominent to the east but will be demolished by January 2019; it is noted that the chimneys were demolished on 28 September 2017. (Source: PoTLL, Feb 2017)

Figure 32: Aerial view looking north across the Site. The Anglian Water Recycling Centre and Stobart's Biomass Products Limited wood waste storage area are situated to the west., separating the Site from Tilbury Fort. Tilbury Fort is visibly prominent in aerial views given its distinctive 'star' shaped defences. The outskirts of Tilbury Town are also visible to the north, bordering the landscaping to the north of the Fort but separated by the train tracks. Tilbury B is prominent to the east but will be demolished by January 2019; it is noted that the chimneys were demolished on 28 September 2017. (Source: PoTLL, Feb 2017)

4.11 Vegetation on the Tilbury2 Site broadly comprises scrub and poor quality grassland together with some areas of more significant vegetation. A number of ponds and drainage ditches (some of which are recut natural channels) cross the overgrown rough grass and scrub in the north of the Tilbury2 Site. There is little variation in the topography of the site, which is between 1.5 and 3.5m AOD.

4.12 As noted, the Order Limits also includes a corridor of land to the north-west of the Tilbury2 Site which will form a new infrastructure corridor. The land around the roundabout to the north of the Port—the ASDA roundabout—is also included within the redline boundary.

The Tilbury2 Site's Existing Surroundings

4.13 The northern boundary of the Tilbury2 Site is defined by a railway line which comprises the Tilbury loop of the London-Southend line. The southern boundary is defined by the River Thames. The PoTLL ownership includes a deep water jetty, previously used for the importation of coal. The Tilbury2 Site has a frontage of 290m to the river.

4.14 To the east, the Tilbury2 Site is bounded in part by agricultural land, in part by the Tilbury 400kv substation, and in part by the remainder of the power station complex which is in the process of being demolished. This includes the substantial Tilbury B Station which forms a large landmark on the river front, identified by both the rectangular form of the former turbine hall and its twin chimneys of approximately 170m high. It is noted that the two chimneys were demolished on 28 September 2017. The considerable scale and bulk of Tilbury B ensures that it forms a substantial landmark, identifying the location of Tilbury over a wide area.

4.15 Immediately to the west, the Tilbury2 Site is bounded by the Anglian Water Recycling Centre (formerly sewage treatment works) which includes a number of large and tall industrial buildings and structures. Immediately to the north of the Anglian Water Recycling Centre is the partially complete waste wood storage and fuel processing plant operated by Stobarts Biomass Products Limited. This site is to manufacture and supply the nearby Tilbury Green Power (TGP) Power Station which is located approximately 3km from the site. As well as waste wood stockpiles, Stobart's may also undertake external processing activities to include mobile vehicles, shredding plant, segregation equipment and conveyors. The Stobart's site is currently subject to a retrospective planning application for the retention and completion of the facility for which the target determination date is 13 November 2017.

4.16 To the west of the Anglian Water Recycling Centre is Bill Meroy Creek, a small tidal tributary of the Thames. Beyond the Creek is land at and adjoining Tilbury Fort, a Scheduled Monument and tourist attraction run by English Heritage. The main fortifications are surrounded by a series of moats and parts of the surrounding landscape and river are also included within the Scheduling. The boundary of the Scheduled Monument of Tilbury Fort is shown in Figure 40 on page 32.

Figure 33: Aerial view looking west across the Site. Tilbury B power station is prominent and the main area of the Site lies between this and the Anglian Water Recycling Centre and Stobart's Biomass Products Limited wood waste storage area. Tilbury Fort is visible further west, in close proximity to the industrial uses of the existing Port which lies further west. The outskirts of Tilbury Town are also visible to the north, bordering the landscaping to the north of the Fort but separated by the train tracks. (Source: PoTLL, Feb 2017)

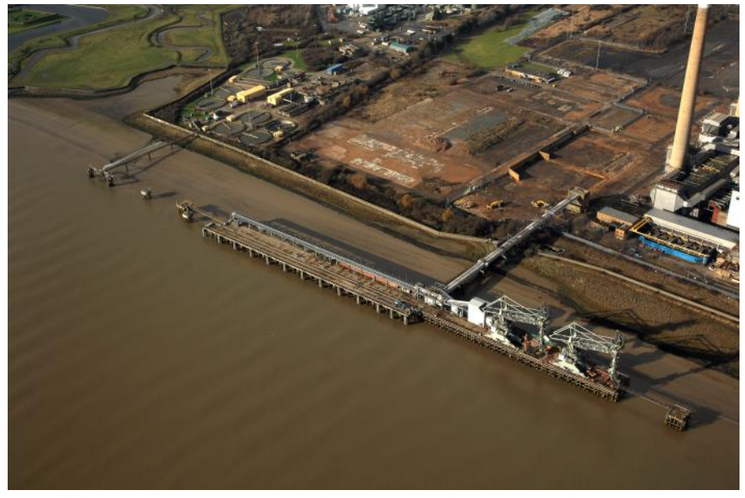


Figure 34: Aerial view looking northwest across the southern section of the Site, showing the existing large jetty. The Anglian Water Recycling Centre are partially visible, as is Bill Meroy Creek and the outer-most defence of Tilbury Fort. (Source: PoTLL, Feb 2017)

4.17 The River Thames directly south of the Order Limits comprises the navigation channel of the main river which serves a variety of shipping and leisure traffic, much of which is associated with the Port of Tilbury itself. The river is approximately 1.03km wide in this location.

4.18 To the south of the river is the town of Gravesend (within Gravesham Borough Council, within the county of Kent) which has an immediate frontage and access to the river. Given its location directly on the northern bank of the River Thames, there is inter-visibility between the Site and Gravesend on the southern side of the river.

4.19 Overall, the Site lies within an existing context which is largely defined by its industrial character. This is appreciable through the variety of industrial uses, buildings and structures immediately adjacent to the Site to its east and west, as well as the brownfield character of the surrounding land which was until 2013 in use by Tilbury Power Station. The existing Port of Tilbury to the east of the Site is also appreciable within views from the Site, including the four tall wind turbines. In addition, the River Thames in this area has a distinct industrial character due to the existing Port of Tilbury in close proximity. This industrial character surrounding the Site is long established and has developed since the establishment of the docks in the late-nineteenth century, dramatically increasing during the latter half of the twentieth century and more recently.

Future Baseline

4.20 Tilbury Power Station officially closed in October 2013 and planning permission has been granted for the demolition of the facility to ground level during 2016-2019 in order to enable redevelopment to be carried out. Tilbury A and other structures within the Tilbury2 Site have already been demolished. Tilbury B Power Station is currently in the process of being demolished by owners RWE on a phased basis and will be completely removed by January 2019, prior to the proposed construction commencement of the Proposals. The 170m high twin chimneys were demolished on 28 September 2017; this took place after the baseline assessment included within this report had been completed.

4.21 Given the current process of demolition and that Tilbury B will no longer remain by the time of the construction of the Proposals, it is considered that the building's lack of heritage significance has been established and as such it is not considered to be a non-designated heritage asset for the purpose of this assessment.

4.22 As the demolition of Tilbury B will occur prior to the commencement of the Proposals, it is within the context of this future baseline that the potential impacts of the Proposals upon the settings and significance of surrounding built heritage assets has been assessed. This is supported by a series of wirelines of the Proposals which are shown in the context of the future baseline, i.e. without Tilbury B (included within Appendix 9.F of the Landscape and Visual Impact Assessment (LVIA)). Section 5.2 of this report outlines the overall assessment methodology in further detail.

4.23 As noted within Section 3.3, on 20 July 2017 RWE Generation, the owners of the Tilbury B Power Station site, wrote to PoTLL to advise that they are proposing the development of a project to be known as "Tilbury Energy Centre." They advised that the project includes the potential for a Combined Cycle Gas Turbine (CCGT) power station with capacity of up to 2,500 Megawatts, 100 MW of energy storage development and 300MW of Open Cycle Gas Turbines (OCGT) but that "*the exact size and range of these technologies will be defined as the project progresses based on an assessment of environmental impacts and market and commercial factors*." No details of the proposal are yet available. RWE anticipate that an application will be submitted to the Planning Inspectorate under the Planning Act 2008 at the end of 2018 or early in 2019.

4.24 Having regard to PINS guidance on cumulative impacts in its Advice Notes 9 and 17, PoTLL have concluded that it is not possible to properly define a 'scheme' for the putative RWE Power Station in order to assess the cumulative impacts with the proposals. Accordingly, the proposal is not included as a cumulative development within this assessment.

4.25 In addition, the current operation of the partially complete Stobart's waste wood recycling centre on the land immediately adjoining the Tilbury2 Site to the west, is now the subject of a retrospective planning application (presently with Thurrock Council for determination) for a "Waste wood processing plant (Class B2/B8) & fire retained area bounded by concrete push walls, erection of buildings to form associated storage, reception/ administration, security, and staff welfare area; formation of impermeable surface to form a lorry parking/waiting area; weighbridge and staff parking area together with associated highways and drainage works" (LPA reference (17/00977/FUL). The target determination date for this application is 13 November 2017.

4.26 Given that the Stobart's development is currently in operation the development has also been considered as part of the future baseline as a reasonably likely expectation of on-going operation at the time of Tilbury2 construction and operation. Where it is included within the assessment of the settings of heritage assets in Sections 5.3 to 5.6, this is in reference to the partially complete operations that currently exist on the site.

5.0 PROPOSALS & ASSESSMENT OF IMPACT

5.1 DEVELOPMENT PROPOSALS

5.1.1 The following provides a summary of the Proposals and, in particular, focuses upon the elements most relevant to the assessment of potential impacts upon the surrounding built heritage assets. Full details of the Proposals can be found within Chapter 5 of the Environmental Statement (ES) and Schedule 1 of the DCO. In addition, the Masterplanning Statement (document reference 6.2 5A) describes the design process that has led to the Proposals that are included within the DCO application for Tilbury2 and explains the options that have been considered during that design process. The document then summarises the Proposals that are the subject of the DCO application, as the outcome of that design process.

5.1.2 The redevelopment of the Tilbury2 Site itself will comprise the development of a new harbour facility in the form of an operational port. A number of key components are proposed within the port, with the two principal proposed uses being a RoRo terminal, located south of Substation Road, and a Construction Materials and Aggregates Terminal (CMAT) to the north of Substation Road. These locations are shown on General Arrangement Plans (see Figure 35 and drawings accompanying the ES). The Proposals also include a new infrastructure corridor (Figure 36) to accommodate road and rail links to the existing rail and road network.

Jetty/Marine Works

5.1.3 To facilitate its use for both the RoRo terminal and the CMAT, the existing jetty will require modification at both its upstream and downstream arms.

5.1.4 The RoRo berth will accommodate two vessels at a time, one moored against the existing jetty at its western end, and one moored against mooring dolphins to the west of the existing jetty. A central pontoon will be constructed against which stern ramps of each vessel will be placed to allow embarkation and disembarkation of trailers and containers.

5.1.5 To facilitate the RoRo activities the upstream works will comprise:

- the construction of dolphins in the river bed with associated fenders and walkways;
- the construction of a floating pontoon with associated restraint structures;
- the construction of structures and buildings on the floating pontoon;
- the construction of an approach bridge with abutments, with a roadway, footway and wind barrier on the surface of the bridge;

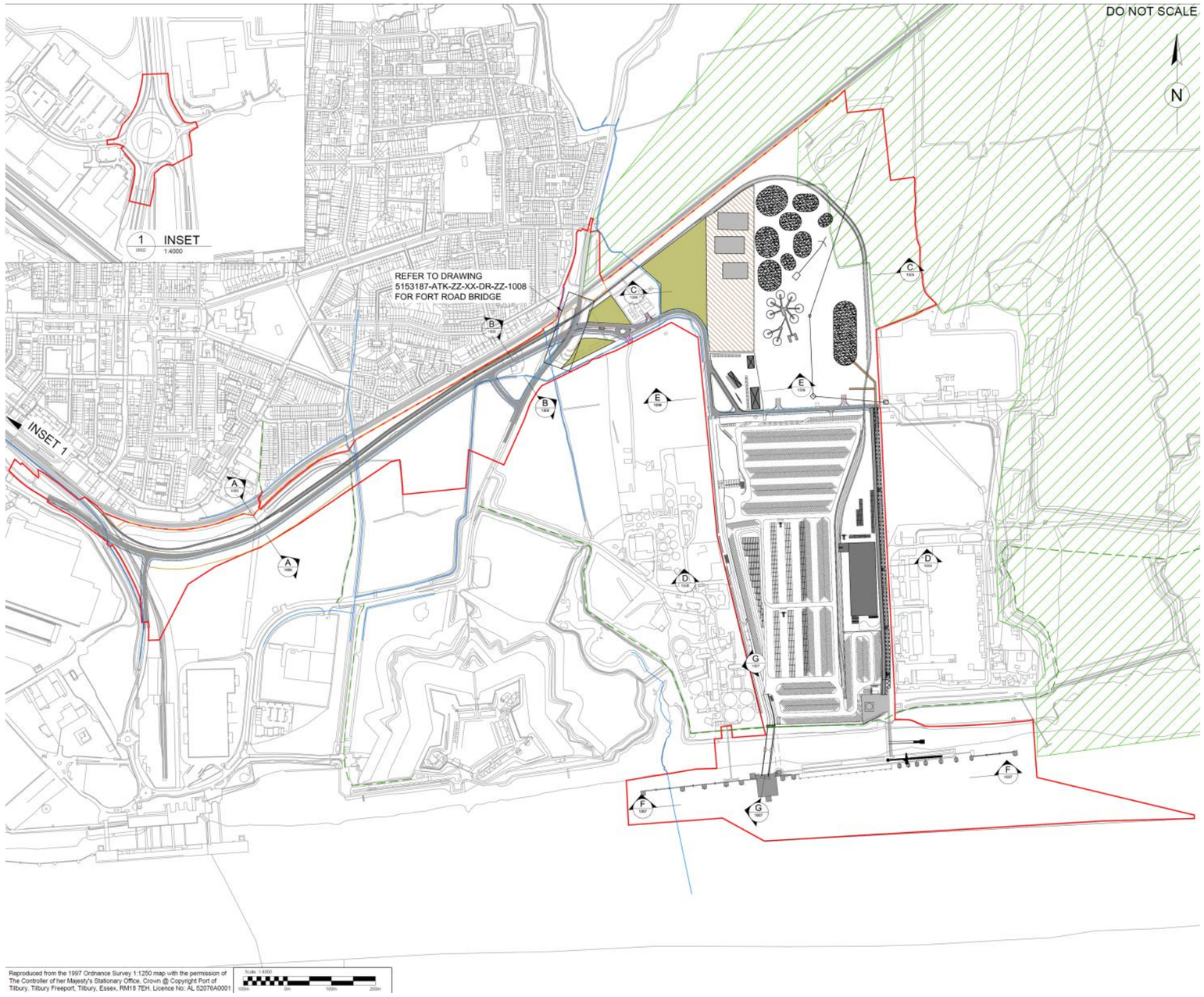


Figure 35: General Arrangement plan of the main Tilbury2 Site (Sheet 1 of 2) (Source: Atkins)

- the construction of a linkspan bridge between the floating pontoon and the approach bridge, with a roadway, footway and wind barrier on the surface of the bridge;
- the construction of a surface water outfall;
- the alteration, renovation and renewal of an existing jetty and its associated structures including fenders and piles;
- the alteration and renewal of an existing flood defence;
- the removal of an existing jetty and associated structures;
- related dredging works within the River Thames for the above; and
- piling works and construction operations (including piling and scour preventative and remedial works) within the River Thames.

5.1.6 The CMAT berth will be at the eastern (downstream) end of the existing jetty which will be extended to accommodate barges and vessels of the required size. Downstream works in association with the CMAT will comprise:

- the construction of dolphins in the river bed with associated fenders and walkways;
- the construction of a conveyor hopper and supporting structures on the river bed;
- the installation of pipework on the jetty;
- the construction of a conveyor and supporting structures on in the river bed;
- the alteration, renovation and renewal of an existing jetty and its associated structures including fenders and piles;
- related dredging works within the River Thames for the above; and
- piling works and construction operations (including piling and scour preventative and remedial works) within the River Thames .

5.1.7 In order to assess the visual impact of vessels berthed at the extended jetty, it has been assumed that RoRo vessels will be 200m in length with a draft of 7.5m and aggregate vessels will be 250m in length with a draft of 15m. aggregate vessels will be 250m in length with a draft of 15m. For RoRo vessels, the vessel size has been defined by the known fleet of RoRo operators presently using the Port of Tilbury; for the CMAT vessels, the assumption derives from identification of the largest operating aggregate vessel (the Yeoman Bridge, a self-discharging aggregate vessel).

5.1.8 Within the accompanying wirelines the vessels are also shown berthed at high tide and unladen (worst case).

Landside facilities

5.1.9 The existing ground levels across the main Tilbury2 Site vary slightly. To allow for necessary ground works the Proposals include a 'worst case' ground level of 4m AOD across the developable areas of the main Tilbury2 Site. It is likely that this can be reduced in areas across the Tilbury2 Site, however, for the purpose of the EIA a 'worst case' has been adopted in order to assess the potential impacts of the Proposals. This is particularly relevant in regard to the visual impact assessment and the representation of the Proposals within the wirelines. This is explained further in Section 5.2 of this report (page 30).

RoRo Terminal—landside facilities

5.1.10 The land south of Substation Road will be developed to accommodate associated storage areas and access to the RoRo jetty over an area of approximately 20ha. These works will comprise:

- The filling of land for port facilities including the formation of a concrete pavement for the storage of shipping containers and trailers and other port facilities with associated civil works, earth works and service works;
- Infrastructure and the laying out of vehicular, cyclist and pedestrian roads routes including a roadway close to the western boundary to access the approach bridge;
- Underground and above ground surface water drainage features including a pumping station (dependent on detailed discussions with the LLFA and EA);
- Installation of site lighting infrastructure including column mounted and high mast luminaires;
- The construction of ancillary buildings including staff welfare and operational facilities;
- Construction of rail sidings (discussed further below); and
- Peripheral structural landscaping including SUDs features.

5.1.11 No fixed landside cranes are proposed within the RoRo terminal, with containers being moved by reach stackers. In the RoRo terminal area, containers may be stacked up to six containers high, albeit the short dwell times of containers within the RoRo terminal are such that in general, stacking will be less than this. Different areas of the RoRo terminal will perform specific functions.

5.1.12 The most southerly areas closest to the jetty will generally be used for storage of imported trailers and containers. For the purpose of defining a 'worst case' visual envelope, containers have been assessed at the maximum dimensions that they could be, which is based on ISO standards for 'high cube' containers. It has been assumed that the containers will be stacked up to 6 high (the maximum that can be reasonably expected at a RoRo terminal given handling equipment). This will represent a maximum height of 18m high (above a ground level of a worst case maximum of 4m AOD) across the whole of the RoRo terminal.

5.1.13 Immediately north of Substation Road, at its eastern end, an area will be used as an operational compound for the RoRo terminal. This will comprise the construction of surfacing, car parking, ancillary buildings including staff welfare facilities.

5.1.14 This area will also accommodate a single storey rail served warehouse on a site area of approximately 3ha. This will replace the existing "Maritime" terminal warehouse at the existing Port and will be used for multi-modal transhipment of steel. The building has proposed dimensions of 170m x 60m with a maximum eaves height of 20m and ridge height of 22m (above a ground level of a worst case maximum of 4m AOD).

CMAT—landside facilities

5.1.15 The Construction Materials and Aggregates Terminal (CMAT) will comprise a number of permanent uses and structures as outlined below. The exact composition of uses, structures and processes is not known in detail at this stage but industry-based assumptions have been used to define the likely worst-case scenario. The CMAT is assumed to include the following elements.

Aggregates Storage Yard.

5.1.16 This area will comprise the storage of aggregate, pigments and cementitious materials in silos and in the open air, fed by a conveyor system from the riverside. It will also include covered aggregate storage bays with dust suppression water spray systems. For the purpose of defining a reasonable worst case visual envelope it has been assumed that the highest level of stored material at this facility will be 17m high (above a ground level of a worst case maximum of 4m AOD).

5.1 DEVELOPMENT PROPOSALS

Processing facilities

5.1.17 This area will comprise a number of processing facilities including associated buildings and infrastructure. It has been assumed to include:

- Block & Precast Manufacturing Facility: this is envisaged to involve a mixing plant that will include the use of a mechanical mixer; moulding; pressure removal of water, and the robotised stacking of products once completed. Manufactured products may also be cured in a heated area of the plant;
- Cement Facility: this is envisaged to include a ready-mix concrete batching plant fed from the aggregate storage yard described above; and
- Asphalt manufacturing plant: this area is envisaged to involve the processing of materials such as aggregate, sand, reclaimed asphalt pavement (RAP), bitumen and limestone. The aggregated would be heated in a heating drum and transported to the top of the plant via a bucket elevator. The aggregates would then be screened, weighed out and mixed with the other materials mentioned above. Finished material would then be stored in hot material storage bins. This material would then be collected and moved to offsite facilities where it could be reprocessed as recycled asphalt.

5.1.18 For the purposes of defining a likely 'worst case' visual envelope of development, it has been assumed that the structures and buildings within the CMAT processing and production area will be a maximum of 30m high (above a ground level of a worst case maximum of 4m AOD). This has been based on comparators in other locations where such a facility exists.

Silo

5.1.19 A silo is proposed on land close to the river. The facility will include associated piping and pumping infrastructure and road tanker loading, a weighbridge, access roads, surfacing and other works. The silo will be enclosed to approximately 100m (above a ground level of a worst case maximum of 4m AOD) in height and has been assessed on the basis of a diameter of 15m. It will be capable of storing powdered bulk products that will be supplied by river. The exact design of the silo will be controlled by the submission of further details pursuant to a requirement in the DCO.

CMAT conveyor

5.1.20 A conveyor and supporting structure will be constructed close to the eastern boundary of the site linking the CMAT Berth to the area of aggregate stockpiles within the CMAT itself.

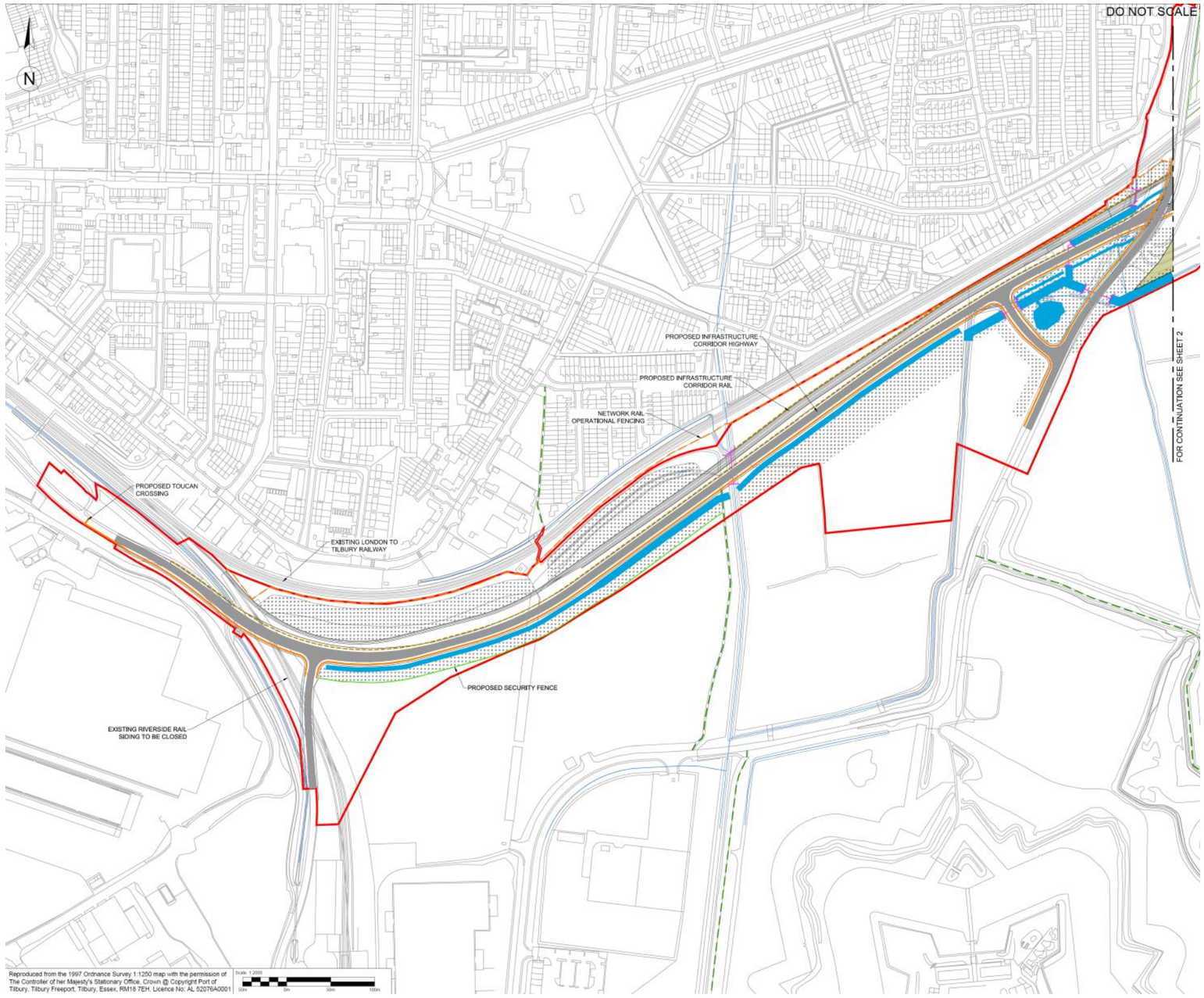


Figure 36: General Arrangement plan of the infrastructure corridor (Sheet 2 of 2) (Source: Atkins)

5.1 DEVELOPMENT PROPOSALS

Other uses and structures

5.1.21 Remaining land within the site will be used for external storage uses, with the use likely to be either the storage of new imported motor vehicles that is already taking place within the site, or for storage of bulk materials. Since there is uncertainty as to what this land will be used for until operation of Tilbury2 is commenced, a worst case scenario has been adopted for each relevant topic area. In these areas it has been assumed that storage would not exceed 5.0m in height (above a worst case maximum ground level of 4m). For Built Heritage, the storage of bulk materials is likely to result in potentially more significant effects than vehicle storage and as such this has been taken as the 'worst case' for the purpose of this assessment.

5.1.22 The entrance to the Tilbury2 Site will include construction of a security gatehouse and other security features including cameras and fencing.

5.1.23 A rail spur will enter the main site in the north west corner, routing around the northern and down the eastern boundary of the Site, terminating in three new sidings within the RoRo Terminal adjoining the Maritime warehouse. The rail spur within the CMAT will include a loading siding.

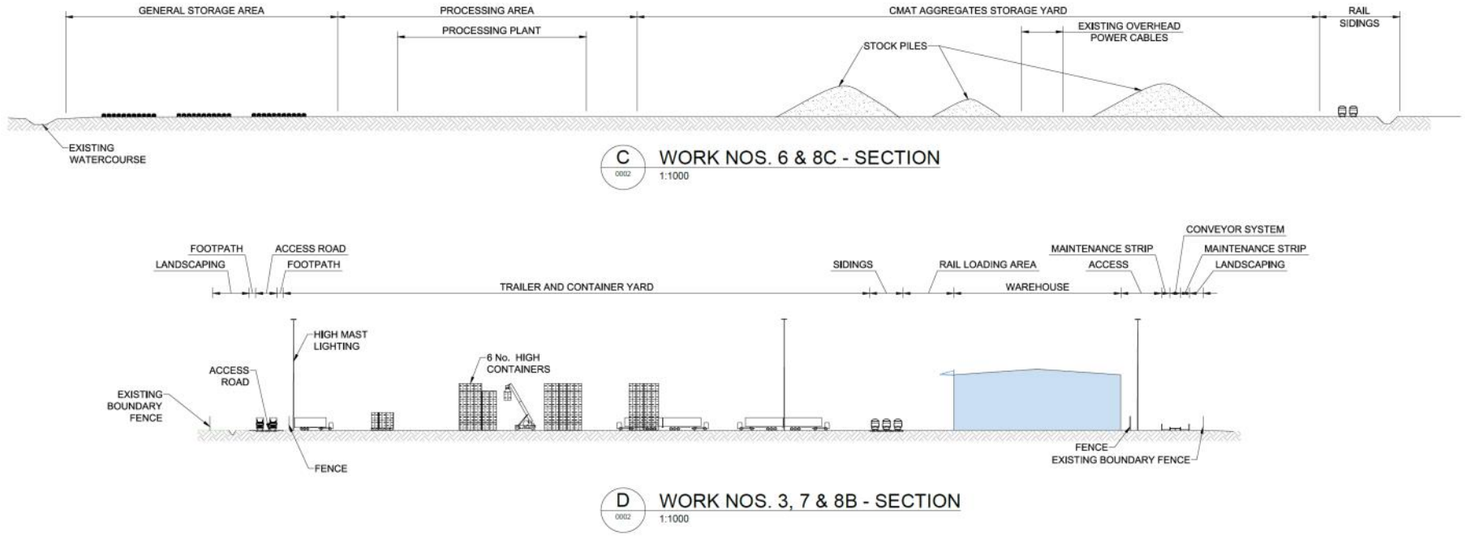
Highways / Rail Provision

5.1.24 In order to fully utilise the new RoRo terminal and CMAT, a surface access strategy has been devised comprising new and improved road and rail links. The proposed general arrangement of this is shown in Figure 36.

Highway Provision

5.1.25 It is proposed to construct a new single lane two way highway to link Ferry Road from a location to the south of Tilbury Railway station, along an alignment which closely follows the existing railway line to the Tilbury2 site. The highway will be approximately 1,450m in length and will comprise a single carriageway in each direction. On its southern side a shared cycleway (permitting cyclists and pedestrians) will be constructed.

5.1.26 The works to construct the new highway include improvement to a 150m length of St Andrew's Road itself. A simple priority junction will be formed with a length of new highway approximately 165m in length that will connect with the existing highway that forms a route to the Cruise terminal. The main highway route will then route east through the PoTLL owned Fortland site, separated from the existing rail corridor by an existing landscaped bund.



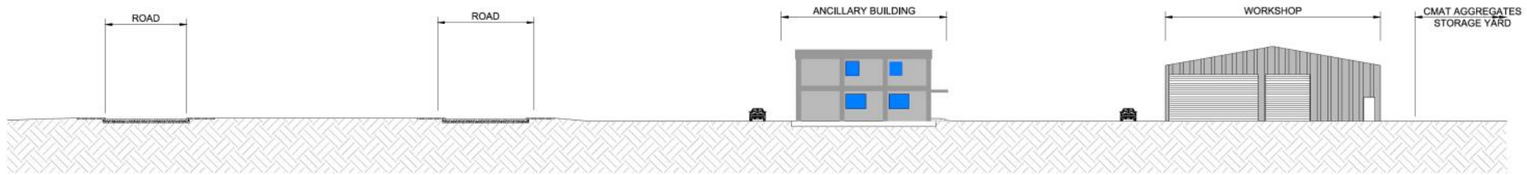


Figure 37: Illustrative cross sections of CMAT and RoRo terminals. The locations of these cross sections are shown on Figure 35. (Source: Atkins)

5.1.27 The route will cross land currently used for fly grazing of horses and link directly to the new terminal. It will pass under Fort Road, but a new junction and highway will be constructed to link the new highway to Fort Road itself prior to that point.

5.1.28 The existing Fort Road bridge over the railway will be retained and a new independent open span bridge will be constructed south of the existing bridge.

5.1.29 The design of the road pavements will be carried out in accordance with the appropriate design standards and good practice. The road surface will be formed using a suitable material that meets with operational and maintenance requirements.

5.1.30 The proposed infrastructure corridor is to be located as far north as possible, in proximity to the existing railway line. A number of mitigation measures have been embedded into the design in order to reduce the visual impact of the infrastructure corridor in views from and around Tilbury Fort. This includes structural landscaping comprising scrub woodland, scrub grassland and ditches. The planting will in part replace scrub and tree vegetation removed during construction and would comprise scrub species common to the marshlands and locality. The southern margins of the scrub would be fringed with grassland and reeds within the ecological mitigation ditches, further assisting its integration with the remaining grazing marsh north of the fort. The proposed structural planting would reach up to approximately 7m height 25 years following completion. It would provide a dense filter to views of traffic south of the infrastructure corridor during winter and full screening during the growing season, thus mitigating the potential visual impacts of the infrastructure corridor in views from Tilbury Fort. The Landscape Strategy (Figure 9.9 of the LVIA) provides further detail on the landscape mitigation proposed across the Site. The Landscape Strategy will be designed and managed pursuant to a Landscape and Ecological Management Plan (Document Reference 6.1 10.P) which will be a certified document and is submitted with and secured by the DCO.

Rail Provision

5.1.31 Rail provision will be established by realigning the existing Tilbury Railport Junction connection track alignment and severing the existing Tilbury Riverside Sidings. The proposed new rail siding alignment will be routed between the southern boundary of the existing main line railway and the proposed new highway, passing under the extended Fort Road bridge.

5.1.32 It is proposed to allow for two parallel sidings (i.e. separate Arrival and Departure Sidings) within the infrastructure corridor between the main line connection at the western end of the corridor and the Fort Road rail bridge. Both sidings are shown on the GA drawings and have been assessed accordingly in the ES. Although PoTLL would only intend to lay one track in the short term, the ability to construct a second siding will help to 'future proof' the Proposals by allowing for a greater proportion of materials to leave the site by rail in the future. Two sidings would, for example, allow one incoming train to wait outside the site whilst another one leaves or vice versa. This capacity does not affect the overall assumptions as to maximum likely operational train movements.

Lighting

5.1.33 Lighting will be required across the site to facilitate the operation of the terminal. Some areas of lighting may be reduced outside of core hours however assessments are based on a worst case scenario of full operation. Lighting conditions are broadly broken down to the following areas:

- Container and trailer yards, including rail sidings;
- Internal roadways and circulation;
- Jetty;
- Linkspan bridge and pontoon for RoRo berths;
- Construction materials and aggregates terminal (CMAT);
- Security, welfare and ancillary buildings; and
- Infrastructure corridor containing link road from Ferry Road to Fort Road alongside rail access and sidings.

5.1.34 A Preliminary Lighting Strategy and Impact Assessment has been prepared as part of the ES (Document Reference 6.2 9.J).

5.1.35 The indicative scheme seeks to minimise the number of high level (high mast) light sources apparent in extended views whilst ensuring safe operation of the port facilities. Lighting for the port is expected from column mounted and high mast luminaires.

5.1.36 RoRo container storage area: lighting masts will be approximately 50m in height. The masts are spaced at the ends of alternate stacks of containers and at the end of most rows of trailers trailer row and around the perimeter. This enables direct light into each aisle over the top of containers.

5.1.37 CMAT: The internal layout of plant equipment and operations of the CMAT will be determined by the tenant. The scheme at present is based upon reference to other similar facilities. The need for large unobstructed areas for flexible material storage means that the majority of illumination is located around the perimeter of the Site and located or mounted on / adjacent to plant. Lighting masts have been assumed to be up to 25m high.

5.1.38 Internal Roadways and Circulation: lighting of the central and western roadway will be from 12m high masts.

5.1.39 Carpark and Ancillary buildings: Lighting to car parks and external areas surrounding Ancillary buildings is proposed from 12 metre columns equivalent to those used for the internal roadways. Some local building mounted bulkheads may be required in support of the general illumination.

5.1.40 Silo: The height of the structure may require Civil Aviation Authority (CAA) low intensity warning lights and as such have been included as a worse case scenario within the assessment. These are likely to be equivalent in intensity to those previously installed on the chimneys of Tilbury B power station.

5.1.41 Jetty: Columns are proposed as approximately 6 metres in height. There is expected to be a need for some vertical illuminance at the jetty edge, consequently there is direct light overspilling the edge of the jetty. This has been kept to a minimum and this will be continued in detailed design to be as low as possible.

5.1.42 RoRo berth and link bridge: Recognising that the link bridge is elevated and the RoRo pontoon is in a prominent location column heights are reduced to approximately 6 metres. Proposed columns are located between the roadway and pedestrian walkway of the link bridge and at selected perimeter locations on the pontoon. To minimise backspill from the luminaires onto the river then a degree of rear spill shields will be required. This will also reduce the direct visibility of sources in views from Gravesend.

5.1.43 Infrastructure corridor road: lighting will only be applied to the conflict areas of the link road, notably the reformed junction with St Andrews Road at the west and from the junction to Fort Road in the East with illumination continuing under the Fort Road bridge on to the entrance gate for Tilbury2 (and then continuing within the Site), in order to reduce lighting pollution and reduce the visual impact of lighting on the landscape, notably the landscape setting of Tilbury Fort. Illumination to these areas is expected from LED streetlamps mounted on approximately 10 metre high columns.

5.1.44 The final lighting strategy for the proposals must be in general accordance with this preliminary lighting strategy and will be submitted to Thurrock Council for approval in consultation with Gravesham Borough Council and Historic England; this is secured through a DCO requirement.

5.2 IDENTIFICATION OF HERITAGE ASSETS AND ASSESSMENT METHODOLOGY

Introduction

5.2.1 Sections 5.2 to 5.6 of this report identify the surrounding built heritage assets that have the potential to be affected by the Proposals. Their significance has been assessed proportionately, including any contribution of their settings, and an assessment of the likely potential impacts of the Proposals has been made.

Identification of Heritage Assets: Study Area

5.2.2 The Site itself does not contain any designated or non-designated built heritage assets. However, a considerable number of built heritage assets lie within proximity to the Site boundary. Given the location of the Site, relatively flat topography of the area, visibility across the River Thames to Gravesend and the nature of the Proposals, a 2km search radius from the Site boundary has been adopted and all designated built heritage assets within that area identified, as illustrated in Figure 38.

5.2.3 The identification and assessment of heritage assets was undertaken through a mixture of desk-based research and a suite of site/study area visits. In line with Paragraph 5.12.6 of the NPS, the initial identification of built heritage assets was undertaken through consulting the National Heritage List for England (NHLE), the Essex Historic Environment Record (EHER) and the Kent Historic Environment Record (KHER). The significance and settings of these assets were then assessed through a combination of desk-based research including analysis of the NHLE list descriptions and other relevant reports or documentation, a suite of site visits, professional judgement and in accordance with adopted guidance.

5.2.4 Designated heritage assets identified within the 2km search boundary include:

- 5 Scheduled Monuments;
- 132 Listed Buildings (of which 12 are Grade II* and 120 are Grade II); and
- 12 Conservation Areas (1 located in Thurrock District and 11 in Gravesham District)

5.2.5 In regard to non-designated heritage assets, neither Thurrock Council nor Gravesham Borough Council had formally adopted lists of 'Locally Listed Buildings' at the time of writing.

5.2.6 This 2km search radius was outlined within the Scoping Report (March 2017) and agreed as appropriate in consultation with Historic England (meeting on 23 May 2017).

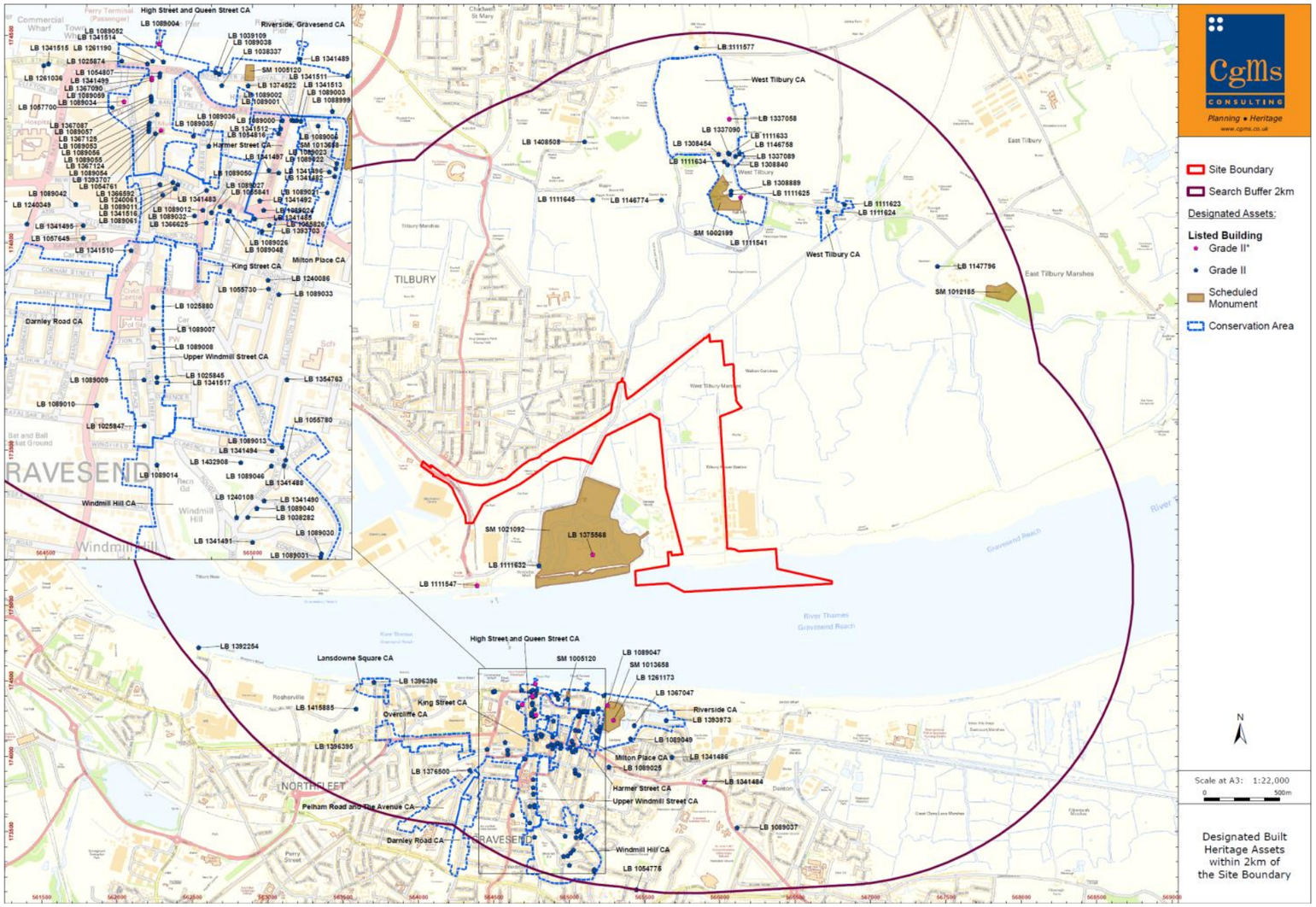


Figure 38: Map indicating the locations and statutory designations of built heritage assets that lie within a 2km radius of the Site boundary. (Source: CgMs)

5.2 IDENTIFICATION OF HERITAGE ASSETS AND ASSESSMENT METHODOLOGY

5.2.7 In addition, three further heritage assets have been identified beyond this 2km search radius and, given their importance, potential for inter-visibility with the Site and historic connection with Tilbury Fort, have also been included within the assessment. These assets are as follows and their locations are identified in Figure 39:

- Coalhouse Fort (Scheduled Monument);
- Cliffe Fort (Scheduled Monument); and
- Shornemead Fort (non-designated heritage asset)

5.2.8 Inclusion of these additional heritage assets was agreed in consultation with Historic England (meeting on 23 May 2017).

5.2.9 No heritage assets were identified within the vicinity of the Asda roundabout that could be affected by the proposed alterations within this part of the Site boundary. As such, elements of the Proposals that relate specifically to the Asda roundabout have been scoped out of this assessment.

5.2.10 As outlined in Section 3.3 of this report (page 16), a Certificate of Immunity (COI no. 1422243) was granted to Tilbury A and B Power Stations on 12 November 2014, preventing the buildings from being statutorily listed for 5 years. Tilbury A has since been completely demolished and Tilbury B is currently undergoing phased demolition; this is due to be completed by January 2019. Given that the building is undergoing demolition, it is considered that its heritage interest, or lack of, has been firmly established and as such it is not considered to be a non-designated heritage asset within this assessment.

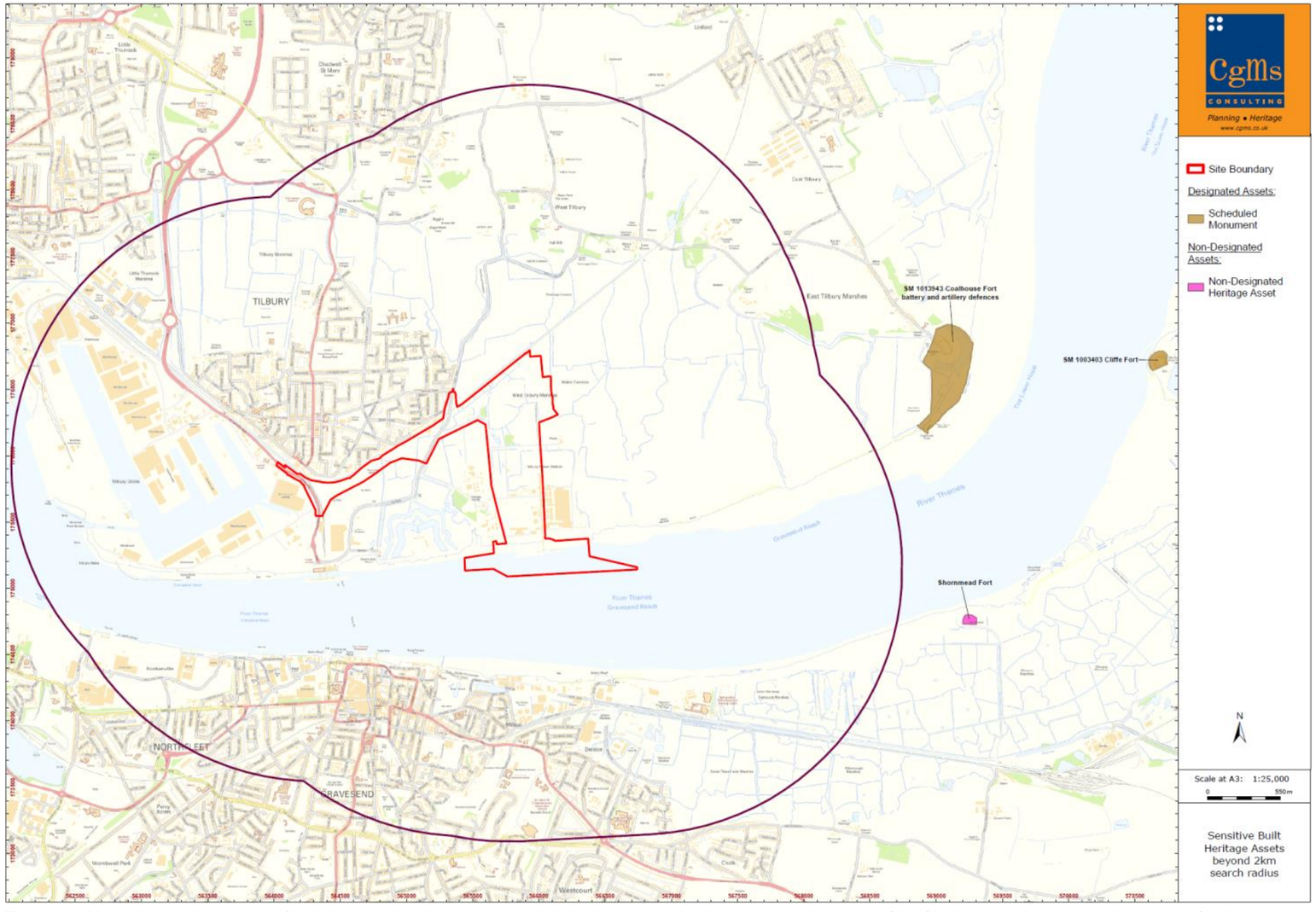


Figure 39: Map indicating the locations of both designated and non-designated built heritage assets that lie beyond the 2km radius of the Site boundary, but are considered to be of high importance and could potentially be affected by the Proposals. These heritage assets have thus been included for assessment. (Source: CgMs)

Built Heritage Assessment Methodology

Significance

5.2.11 In line with Paragraph 5.12.6 of the NPS and Paragraph 128 of the NPPF, the following sections provide a proportionate assessment of the significance of the identified heritage assets, including any contribution made by their setting. The assessment of the significance of each heritage asset has been carried out in accordance with the guidance provided by Historic England within 'Conservation Principles, Policies and Guidance' and considers the four key heritage values:

- Aesthetic value: the ways in which people draw sensory and intellectual stimulation from a place;
- Historical value: the ways 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;

- Evidential value: the potential of a place to yield evidence about past human activity; and
- Communal value: the meanings of a place for the people who relate to it, or for whom it figures in their collective experience or memory.

Setting

5.2.12 The NPPF defines the setting of a heritage asset as "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" (Annex 2: Glossary, NPPF, 2012).

5.2.13 Historic England's 'GPA 3: The Setting of Heritage Assets' (July 2015) provides a 5-step process to assess the potential impact of development within the setting of heritage assets. These steps are outlined as follows:

- Step 1: identify which heritage assets and their settings are affected;
- Step 2: assess whether, how and to what degree these settings make a contribution to the significance of the heritage asset(s);
- Step 3: assess the effects of the proposed development, whether beneficial or harmful, on that significance;
- Step 4: explore the way to maximise enhancement and avoid or minimise harm; and
- Step 5: make and document the decision and monitor outcomes.

5.2.14 Historic England's 5-step process has guided the following assessment of setting, and its contribution to significance, in this report. As such, Sections 5.3 to 5.6 of this report address Steps 1, 2 and 3 of the above guidance, in order to assess the potential impacts of the Proposals on surrounding built heritage assets. This report further provides consideration of Step 4 in Section 6.0.

5.2.15 In assessing the potential effects of the Proposals on the settings of built heritage assets, it is important to focus on identifying the 'contribution' that the setting makes to the asset's significance; setting itself is not a heritage asset. Any likely effect on setting, while often a visual issue, should also not be considered to be purely aesthetic; effects may occur through a change in other environmental factors such as noise, traffic and lighting; this has been considered within this assessment.

Wirelines

5.2.16 In line with Paragraph 5.12.7 of the NPS, the following assessment of setting is supported by a set of wireline images from viewpoint locations that have been agreed with Historic England to inform the assessment of potential impacts. These wirelines illustrate the maximum visual parameters of the Proposals in order to assess the 'worst case scenario'. The 'worst case' includes a 4m AOD level across the developable areas of the main Tilbury2 Site. It is likely that this can be reduced in areas across the Tilbury2 Site and as such the Proposals would appear lower than that which is shown within the wirelines. However, for the purpose of assessing a 'worst case' condition, a 4m AOD level has been adopted across the Tilbury2 site within the wirelines.

5.2.17 Within the wirelines the heights of the various components of the Proposals are shown as follows to show the maximum potential visual envelop (worst case scenario):

- Shipping container storage: Containers stacked up to 6 high with a maximum height of 18.0m (22.0m AOD);
- Single storey rail served warehouse: Eaves Height 20.0m (24.0m AOD), ridge height 22.0m (26.0m AOD);
- RoRo workshop, administrative and ancillary facilities: 8.0m high (12.0m AOD);
- Silo: 100m high (104m AOD), 15m diameter;
- CMAT aggregates storage yard: Aggregate stockpiles up to 17.0m high (21.0m AOD);
- CMAT processing facilities: Concrete and asphalt related buildings up to 30.0m high (34m AOD);
- General storage: Yards with bulk storage items up to 5.0m high (9.0m AOD);
- RoRo vessels: Up to 200m in length with drafts up to 7.5m, berthed at high tide and unladen; and
- CMAT vessels: Up to 250m length with drafts up to 15m, berthed at high tide and unladen.

5.2.18 At the PEIR stage predicted maximum height parameters were based on an average ground level of 2.0m AOD within the developable areas of the main site. In the latter stages of the iterative design process engineering and operational design requirements have identified that, in certain locations, these levels may vary and probably increase. Consequently the maximum height parameters have been increased overall by an additional 2.0m and re-assessed to cover this 'worst case scenario'.

5.2.19 The views relevant to the built heritage assessment are included within this report. A full set of high quality images are included in Appendix 9.F of the Landscape and Visual Impact Assessment (LVIA) ES Chapter; some of the views reproduced in this report have been cropped where relevant for this assessment. It is thus recommended that this report is read in conjunction with Appendix 9.F and that the views are printed at the recommended A2 print size for optimum clarity.

5.2.20 Within the wirelines, the red dashed lines indicate parts of the Proposals that will be visible and the blue dashed lines indicate elements of the Proposals that will be screened by existing intervening built form or vegetation.

5.2.21 The map of sensitive receptor viewpoints is included within Appendix 9.8 of the LVIA and reproduced within Appendix B of this report.

Setting Assessment: Baseline Methodology

5.2.22 The assessment of the significance of the identified built heritage assets within the study area, including any contribution of their settings, was undertaken between September 2016 and May 2017 and informed by a suite of site/study area visits in order to understand the surroundings in which each heritage assets' significance is 'experienced'. This was prior to the recent demolition of the Tilbury B chimneys which took place on 28 September 2017. As such, the following assessment includes images which show the chimneys in place. The assessment of the settings of heritage assets is thus written within the baseline context at the time the assessment was undertaken, i.e. with the Tilbury B chimneys in existence as this is how each heritage asset was 'experienced' at the time of writing.

5.2.23 At the end of each assessment of setting a high level assessment of the likely impact of the complete removal of the Tilbury B station on the settings of each heritage asset is provided. This has been based on the views within Appendix 9.F of the LVIA where the Proposal is shown within the context of the 'future baseline', i.e. without Tilbury B. This high level assessment of what visual impact the complete removal of Tilbury B is likely to have upon the settings of each heritage asset is thus informed wholly by the identified views and is not based on 'experience' given that the turbine hall remains in existence at the time of submission of the DCO.

5.2.24 As Tilbury B will have been completely demolished by January 2019 and prior to the commencement of the construction of the Proposals, the assessment of the potential impacts of the

Proposals on the settings and significance of surrounding heritage assets has thus been undertaken within the 'future baseline' context, i.e. with Tilbury B removed, and without any regard to any potential future industrial development of the Site which is not yet the subject of any consent.

Summary

5.2.25 The following sections thus provide an assessment of the significance of the heritage assets identified within the 2km search radius, and the additional three assets beyond this radius, including any contribution made by their settings and the Site's role in this. It further provides an assessment of the potential impact of the Proposals as they are described in Section 4.0 and including any embedded mitigation, but prior to potential possible further mitigation.

5.2.26 In line with Paragraph 5.12.6 of the NPS and Paragraph 128 of the NPPF, the following assessment is proportionate to the asset's importance and enough to understand the potential impact of the Proposals on an asset's significance. Where the impact of the Proposals are likely to be neutral or negligible, heritage assets have been grouped and their significance assessed accordingly, to ensure a proportionate assessment. For example, many of the listed buildings lie within conservation areas and are unlikely to be significantly impacted by the Proposals. As such, they have been assessed on the same basis as the conservation area in which they lie. Those listed buildings that could potentially experience greater effects have been individually assessed. These heritage assets were identified during the Scoping and PEIR stages and through consultation with relevant statutory consultees.

5.2.27 Where detailed descriptions and reasons for designation for specific heritage assets are included on the NHLE, these have been summarised and included within the following assessment.

5.3 ASSESSMENT OF HERITAGE ASSETS: SCHEDULED MONUMENTS

Tilbury Fort (NHLE no.: 1021092)

Description

5.3.1 The following provides a summarised description of Tilbury Fort and has been informed principally by the Scheduling description and the English Heritage Tilbury Fort guidebook.

5.3.2 Tilbury Fort is situated on low lying ground on the north bank of the River Thames, south east of the modern outskirts of Tilbury. The Scheduled Monument includes the buried remains of a Henrician blockhouse, the far larger and more complex fort and battery which succeeded the blockhouse in the late-seventeenth century, the late-nineteenth and early-twentieth century alterations to the fort and a World War II pillbox.

5.3.3 After the Restoration in 1660, Charles II began a complete reorganisation of the national defences which, following a highly successful Dutch raid up the Thames and Medway in 1667, came to include Tilbury. The new fort and battery, based on principles pioneered in the Low Countries, were designed by Charles' chief engineer Sir Bernard de Gomme. Work began in 1670 and the resulting fortifications remain substantially unaltered to this day. The fighting front of the new fort was a linear battery extending along the shoreline for approximately 250m to either side of the Henrician blockhouse (which no longer survives above ground), which was retained as a powder magazine. Of the 14 original gun positions (renewed with brick revetments towards the end of the 18th century) 12 survive along the West Gun Line, marked by triangular projections on the seaward side of an earthen rampart. The East Gun Line has been more severely eroded over the years leaving only a single gun platform. Behind each line are the remains of artillery store buildings dating from the 1840s and the buried foundations of earlier structures.

5.3.4 De Gomme's fort is pentagonal in plan, with arrowhead-shaped bastions projecting from four of the angles, allowing guns positioned behind the parapets to command wide areas and to be mutually supportive in close quarter defence. Pilings in the intertidal zone in front of the site of the blockhouse indicate an intention to add a fifth bastion to complete the regular appearance of the fort (see Figure 11 page 13 and Figure 15 page 14), but work is thought to have been abandoned at an early stage. The scheduling extends across the foreshore in front of the fort (approximately 50m below the modern flood wall) in order to protect these remains and those of various other jetties and piers associated with the frontage of the fort.

5.3.5 The brick built curtain wall which both encloses and links the bastions is largely original, with some later heightening of the parapet, and survives around all but the south eastern bastion and side of the fort. It supports massive internal earthen banks designed to absorb the impact of bombardment and to provide a firing platform for the defenders. The pentagonal area within the ramparts is known as `The Parade'. The earlier Soldiers' Barracks, kitchen, mess hall, hospital and other structures that were historically located on the western edge of The Parade were damaged by bombing in World War II and subsequently demolished. The eighteenth century terrace of the Officer's Barracks is situated on the eastern edge of the Parade.

5.3.6 On the north side of the Parade are two brick built powder magazines dating from 1716. The magazines are surrounded by a brick blast wall constructed in 1746. Though altered in the 19th century the magazines still contain many of their original features, including ventilation slits and (within the eastern magazine) raised wooden floors to prevent damp affecting the powder. The two magazines are separated by a passage giving access to the Parade from the Landport Gate directly to the north. The gateway consists of a brick vaulted entrance hall supporting an upper storey with a single room.

5.3.7 The main entrance to the fort, known as the Water Gate, is situated in the middle of the south curtain. This is a two storey brick structure with an elaborate outer facade faced with ashlar and including a frieze with a dedication to Charles II with supporting motifs of gun carriages and other military regalia. Adjacent to the west side of the Water Gate is a two storey building, the lower part of which served as a guard room and the upper floor as a chapel.

5.3.8 The elaborate outworks which surround the landward sides of the fort remain largely unaltered. The curtain wall and bastions are flanked by a broad terrace, or berm, in turn surrounded by a 50m wide moat following the outline of the fort. A narrow strip of dry land separates this channel from a more sinuous outer moat and contains a complex of defensive structures, the main element of which is a rampart, or covered way, traceable as a low earthwork running along most of its length. The covered way, with internal firing step, or banquette, acted as a communications channel linking the outer gun positions with the main body of the fort. In

Figure 40: Map of Tilbury Fort showing the extent of the Scheduled Monument designation. This includes part of the river frontage and the landscaped setting to the north. (Source: Historic England)

Figure 41: Aerial view of Tilbury Fort looking northwest. The existing wider built context in which the fort is experience is clearly visible and includes industrial uses, buildings and character to the west and east, and residential uses to the north. (Source: PoTLL, Feb 2017)

Figure 42: View from the southwest corner of the Parade Ground looking east in the direction of the Site. The massing of the existing Tilbury B Power Station is dominant within the background of views towards the Officers Barracks (Grade II*). It is noted that on 28 September 2017 the chimneys were demolished, however the bulk of the turbine hall remains prominent. The upper levels of one of the large plant buildings at the Anglian Water Recycling Centre is also visible to the northeast. (Source: CgMs)

the middle of its eastern and western arms are triangular projections known as `places of arms' which served as muster points for troops defending the covered way, and originally contained platforms for cannon. The covered way to the south of the eastern place of arms was modified in 1779 to provide an additional battery of six guns providing a field of fire down river. Access to the Landport Gate was by a wooden drawbridge across the inner moat. This has not survived but has been replaced by a modern replica. A further wooden bridge, also a modern replacement, links the north western side of the ravelin to the covered way between the moats.

5.3.9 The two moats are connected by a sluice to the east of the ravelin, and the water level is controlled by a second sluice between the south eastern corner of the outer moat and the adjacent tidal creek (Bill Meroy Creek). Water management formed a significant part of the fort's system of defences. The ability to drain the moats was important both for periodic removal of silts and to prevent attack over the frozen surface in winter. Beyond the moats, wider areas of the marsh were enclosed by banks and could be partly flooded to hinder an approaching force and prevent the construction of adjacent siege works. This wider basin is defined to the west by Fort Road (which runs along the top of part of the containment bank), to the north by a bank linking Fort Road to the head of Bill Meroy Creek, and to the east by the creek itself - which effectively provided a third moat along this side. These earthworks, and the area which they contain, are included in the scheduling along with the earthen dam across Bill Meroy Creek which regulated the water level.

5.3.10 Tilbury Fort remained at the forefront of the defence of the Thames and London through the eighteenth and early-nineteenth centuries, although it never saw the action for which it was designed, and it was partly superseded by forward batteries established down river at Coalhouse Point, Hope Point and Shornemead in 1795. The Royal Commission on the Defence of the United Kingdom in 1859 found all these defences inadequate and shortly afterwards larger forts were constructed at Coalhouse, Shornemead and Cliffe Creek. Tilbury Fort subsequently formed a secondary defensive position and the alterations were far from radical, allowing the seventeenth century layout to survive.

Significance

5.3.11 Tilbury Fort is considered to be England's most spectacular surviving example of a late-seventeenth century coastal fort, designed at a time when artillery had become the dominant feature of warfare and therefore built with massive low earthworks, resilient to the shock of bombardment, instead of stone fortifications. The systems of bastions and complicated outworks defending the batteries from the rear is principally a Dutch design; this is rare in England and Tilbury is considered the best preserved and most complete example of the type.

Figure 43: View looking east from Tilbury Fort's outer moats. The Site is visible beyond the existing Anglian Water Recycling Centre with the substantial Tilbury B prominent to the east. This is due to be demolished completely by January 2019; it is noted that the chimneys were demolished on 28 September 2017. (Source: CgMs)

Figure 44: View west from within the Parade Ground towards the industrial uses which further characterise the Fort's wider setting to the west. The substantial wind turbines further ground the fort within a distinct wider industrial setting. (Source: CgMs)

5.3.12 The Fort still retains many of its original internal features with most of the main buildings surviving as standing structures. The magazines are especially notable, as they are rare survivals of a very unusual building type.

5.3.13 Tilbury Fort is of strategic importance in the defence of the approach to London, and as part of a larger system of associated forts in the Thames and Medway area. The alterations to the defences resulting from the recommendations of the 1859 Royal Commission place Tilbury within the largest maritime defence programme since the time of Henry VIII. This programme, prompted by fears of French naval expansion, ultimately involved some 70 new and upgraded coastal forts and batteries, colloquially known as 'Palmerston's follies'. They formed the visible core of Britain's coastal defence systems well into the twentieth century, many of which were still in use during World War II. Features at Tilbury which represent this final military phase (principally the pillbox on the western perimeter of the site), are considered to be an integral part of the fort's history.

5.3.14 Overall, Tilbury Fort is of very high significance and this is principally derived through it historic, evidential and aesthetic values.

Setting

River Thames and surrounding coastal forts

5.3.15 Tilbury Fort is situated on low lying ground on the north bank of the River Thames, to which it has an important historic functional relationship as it was principally built as a coastal defence. The River Thames thus forms the key part of the Tilbury Fort's setting and the frequent shipping movements, including large vessels associated with the Port of Tilbury and cruise liners, form an established part of the Fort's setting today, setting the river within an industrial character. Whilst the size of these modern vessels has no doubt increased, historically Tilbury Fort would have been experienced similarly within the context of a busy river and thus whilst the character of the river has become more industrial and perhaps intensified in recent years, it is not fundamentally different to the historic riverside setting of Tilbury Fort. The surrounding defensive forts on both the north and south side of the river also form an important part of Tilbury Fort's setting and contribute towards its significance due to their historic functional relationship. These defensive structures include Gravesend Blockhouse, New Tavern Fort, Coalhouse Fort, Cliffe Fort and Shornemead Fort; they have group value with Tilbury Fort.

5.3.16 This historic functional relationship is particularly important in regard to New Tavern Fort which was built in the late eighteenth century for crossfire with Tilbury Fort. Figure 18 (page 15) provides a map of the crossfire in 1778, although it should be noted that the proposed projecting water bastion at Tilbury Fort was never implemented. Similarly, Figure 18 also illustrates that Gravesend Blockhouse also crossed its fire with Tilbury Fort. As such, New Tavern Fort and Gravesend Blockhouse form an important part of Tilbury Fort's setting and contribute towards its significance in demonstrating the historic development of coastal forts on this part of the Thames and how the defences on either side of the river interacted. The existing sightlines between Tilbury Fort and New Tavern Fort and Gravesend Blockhouse help to understand, to an extent, the historic crossfire.

5.3.17 Tilbury Fort also has a historic connection with the remaining nineteenth century forts—Coalhouse Fort, Cliffe Fort and Shornemead Fort—as the construction of these defences meant that Tilbury Fort and New Tavern Fort became a secondary form of defence. Importantly, the nineteenth century forts built further downstream were built to cross their fire with each other and not intended to cross fire with Tilbury Fort or New Tavern Fort, however, they are evidence of the historic development of Thames coastal defences and help to understand Tilbury Fort's position from the nineteenth century onwards. These three forts therefore form part of the wider setting of Tilbury Fort as part of a complex, deep system of defence along the river and in part contribute towards understanding its significance and have group value with Tilbury Fort.

5.3.18 Whilst there are long intended views between Tilbury Fort and Coalhouse Fort, Cliffe Fort and Shornemead Fort, these are arguably of lesser historic significance than the sightlines between Tilbury Fort and New Tavern Fort, given that the nineteenth century forts were not built for crossfire with Tilbury Fort. It is further acknowledged that as a low-lying defensive structure, views towards Tilbury Fort from Coalhouse Fort, Cliffe Fort and Shornemead Fort are limited and sightlines would have always been impacted by historic river use. This is further impacted by the considerable distance between the assets and the substantial late-twentieth century sea wall on the north side of the river which partially screens Tilbury Fort from view, particularly in views from the south. The existing industrial context which surrounds Tilbury Fort, formed by buildings and structures associated with the existing Port of Tilbury, Anglian Water Recycling Centre and the remaining Tilbury B structures, as well as large electricity pylons, substantial industrial vessels, is also appreciable at a distance from the nineteenth century forts to its east.

Landside

5.3.19 Tilbury Fort was historically surrounded by open marshland and the substantial star-shaped moats were designed to prevent landside attack. This landscape setting partially survives to the north, largely around Fort Road, and is partly included within the Scheduled Monument designation. However, modern built development has substantially encroached upon the former open land surrounding Tilbury Fort in the form of Tilbury Docks and associated industrial/commercial uses to the west, including Fortress Distribution Park and four tall wind turbines; the residential suburbs of Tilbury Town to the north/northwest; and industrial uses to the east including the Anglian Water Tilbury Water Recycling Centre (formerly sewage treatment works), the partially complete Stobart Biomass Products Limited waste wood storage and plant facility, large electricity pylons and, at present, the prominent Tilbury B power station. Consequently, the historic landscape setting surrounding Tilbury Fort has been considerably altered and Tilbury Fort is now experienced within a wider setting which is largely defined by an existing industrial character which includes a number of tall and large buildings and structures and a variety of uses. These industrial uses and structures are visible in views from both the outer defences and ramparts of Tilbury Fort, as well as The Parade Ground, thus firmly establishing a wider industrial setting in which Tilbury Fort is experienced. From within the Parade Ground, there are views of the wind turbines to the west and the remaining bulky and dominant structures of Tilbury B to the east, as well as larger structures associated with the Anglian Water site and substantial electricity pylons to the northeast. Large industrial vessels on the River Thames that are associated with the existing Port are also frequent in views from within Tilbury Fort.

5.3.20 From the higher ground such as the ramparts and bastions and from the outer moats, there are similar views towards the surrounding built development and across to Gravesend on the southern side of the river, where industrial uses are also visible. The Tilbury2 Site is, at present, partially visible to the east and northeast but by virtue of its existing undeveloped nature, it is largely screened from view by existing vegetation and intervening

Figure 45: View north from the southeast bastion towards the landscaped setting to the north of the Fort. The structures and buildings associated with the Anglian Water Recycling Centre are visible to the east, as are the aggregate stockpiles at Stobart's site to the north (these have increased significantly in size and the area has been hard-landscaped since this photograph was taken in August 2016—see Figure 26). The rooftops of the residential dwellings to the north of the railway line are also visible, further grounding the setting to the north within an existing built context. (Source: CgMs)

Figure 46: Panoramic view looking northeast in the direction of the Site. This view illustrates the wider landscaped setting to the north of Tilbury Fort and the existing industrial uses to the east, including the Anglian Water Recycling Centre, Tilbury B and the large electricity pylons to the north east of the Tilbury2 Site, which are prominent in the wider industrial setting in which the Fort is already experienced. (It is noted that the Tilbury B chimneys were demolished on 28 September 2017). (Source: CgMs)

built form provided by the structures and uses included within the Anglian Water and Stobart sites. In particular, there is an existing dense line of trees along much of the Tilbury2 Site's western boundary, thus partially screening the lower levels of the Tilbury2 Site from view. Views towards the Tilbury2 Site are thus experienced in the context of this existing development and the industrial character which surrounds Tilbury Fort.

5.3.21 Nonetheless, as previously mentioned, part of the flat and open historic marshland setting remains to the north of Tilbury Fort, principally around Fort Road. Figure 47 shows the extent of flat, low lying marshland surrounding Tilbury Fort in 1940, showing that during the mid-twentieth century the Site as a whole was characterised by marshland. The aerial photograph from 2015 (Figure 48) shows the area surrounding Tilbury Fort broadly as it is today, illustrating the considerable industrialisation of Tilbury Fort's setting. It is noted that the recent partially complete Stobarts development to the north of the Anglian Water Recycling Centre is not shown within Figure 48. This development has further industrialised the character of the land surrounding Tilbury Fort, as illustrated within Figures 30-32 on page 20.

5.3.22 Importantly, Figures 47 and 48 show that the historic marshland character of the main Tilbury2 Site to the east of Tilbury Fort was fundamentally altered and industrialised during the latter half of the twentieth century when Tilbury Power Station was established on the Site. Whilst the northern area of the Tilbury2 Site is currently landscaped, this is characterised by scrubland and a variety of trees and other vegetation, providing evidence of a former brownfield site. As shown in Figure 49, this area is distinctly different in character to the historic marshland which partially survives to the immediate north of Tilbury Fort on either side of Fort Road. Furthermore, by virtue of the existing intervening hard landscaping, built form and stockpiles associated with Stobart's land, the northern area of the Tilbury2 Site is experientially separate from the immediate landscape setting to the north of Tilbury Fort.

Contribution to Significance

5.3.23 Overall, it is considered that the elements of Tilbury Fort's setting that contribute to its significance include the River Thames and surrounding defensive forts, in particular New Tavern Fort and Gravesend Blockhouse on the southern bank as these were built for crossfire with Tilbury Fort. The landscape to the north of Tilbury Fort, surrounding Fort Road, also contributes towards its significance as evidence of the marshland landscape which historically surrounded the Fort and which has largely been developed over the twentieth century and more recently.

Figure 47: Aerial view dated 1940 of Tilbury Fort and the surrounding historic open marshland which includes the Site itself. (Source: Britain from Above)

Figure 48: Aerial view dated 2015 of Tilbury Fort and the surrounding landscape. The historic marshland landscape which is visible in the 1940 photograph (Figure 47) is limited to the area immediately north of Tilbury Fort on either side of Fort Road. The green/landscaped northern section of the Site is of a distinctly different character to the historic marshland. It is characterised by scrubland and a variety of vegetation and is evidence of a former brownfield site and has thus lost its former historic marshland character. (Source: Google Earth)

Figure 49: Aerial view of the Site and Tilbury Fort, emphasising the distinct difference in character between the open land within the north of the Site which has the character of a former brownfield site, and the historic marshland landscape which lies to the immediate north of Tilbury Fort and contributes towards its significance. As such, the land within the main Tilbury2 Site is considered to contribute little towards the significance of Tilbury Fort given that the historic marshland landscape has already been lost. (Source: PoTLL, Feb 2017)

5.3.24 Whilst the Site itself forms part of Tilbury Fort's setting, it is considered that the main Tilbury2 Site forms, at most, a negligible contribution towards the significance of the Scheduled Monument. Whilst it historically formed marshland this character has been all but lost and replaced by a largely industrial landscape character formed by the occupation of the land for the previous Tilbury A station; it now forms a brownfield site.

5.3.25 However, the boundary of the proposed infrastructure corridor crosses the surviving marshland to the north of Tilbury Fort in close proximity to the existing railway. As such, it is considered that this part of the Site forms a minor to moderate contribution towards the heritage asset's overall significance through forming part of the surviving historic marshland in proximity to Tilbury Fort and is evidence of the landscape in which it was historically experienced and related to.

Removal of Tilbury B

5.3.26 As noted, Tilbury B is due to be completely demolished by January 2019. On 28 September 2017 the 170m high (approx.) chimneys were demolished. The chimneys were slender, tall and therefore the most widely visible industrial features in the landscape within this area; their removal has therefore resulted in the loss of a substantial landmark feature. The substantial mass and bulk of the turbine hall remains in existence. The complete removal of the Tilbury B station will result in the removal of a prominent industrial building in proximity to Tilbury Fort. This is likely to have a beneficial impact on views from within and around Tilbury Fort through removing a prominent building of substantial mass and bulk from the backdrop, as shown within the 'as proposed' views in Appendix 9.F of the LVIA. Importantly, however, whilst the complete removal of Tilbury B will likely have a beneficial visual impact, Tilbury Fort will remain within a wider setting which is defined by an established industrial character, formed by the River, the existing Port to the west, and the Anglian Water Recycling Centre, Stobart site and other industrial structures/uses such as the large electricity pylons to the east. In addition, it is noted that numerous other industrial uses and industrial character defines the river bank along this part of the Thames, including oil refinery tanks and large, hill-like landfill sites, aggregates storage and facilities, and other industry.

Assessment of Impact

5.3.27 Given the proximity of the Proposals and their nature, they are likely to have an impact upon the setting of Tilbury Fort, through increasing the existing industrial character and built context in which the asset is currently experienced. The alteration of its setting will occur principally through visual impacts of berthed vessels, the infrastructure corridor and new structures and lighting on the main Site. The setting of Tilbury Fort also has the potential to be affected by noise, traffic and air quality impacts.

5.3.28 The potential visual impacts of the Proposals are shown within the accompanying wirelines (Appendix 9.F of the LVIA ES Chapter) and these illustrate the maximum parameters of the scheme, including maximum heights and AOD levels within different areas of the Site (i.e. the worst case scenario). Key views from Appendix 9.F of the LVIA are included within this report in order to assess the potential visual impacts of the Proposals upon the setting and significance of Tilbury Fort. However, it is recommended that this should be read in conjunction with Appendix 9.F of the LVIA.

5.3.29 As demonstrated within the accompanying wirelines, visual impacts upon the setting of Tilbury Fort are likely to principally derive from the highest elements of the Proposals, including: the 100m high silo in proximity to the river; berthed large vessels at the extended jetty, in particular those at the RoRo berth; the upper levels of the RoRo terminal container storage; the upper storeys of the RoRo terminal warehouse; upper levels of the aggregates stockpiling and CMAT processing facilities in the northwest area of the Tilbury2 Site; the new infrastructure corridor; the extension of Fort Road Bridge; and lighting throughout the Site.

Tilbury2 Site

5.3.30 The wirelines show that the 100m high silo and the berthed vessels at the extended jetty, in particular the western end of the RoRo berth, will form the most visibly prominent elements of the Proposal in close proximity to Tilbury Fort. This is particularly evident from higher ground such as the bastions and sea wall, as shown within Figure 51 (page 37) (Viewpoint 17 of Appendix 9.F of the LVIA), Figure 59 and 61 (page 40) (Viewpoint 59 north and east of Appendix 9.F of the LVIA), Figure 53 (page 37) (Viewpoint 20 of Appendix 9.F of the LVIA) and Figure 65 (page 42) (Viewpoint 62 of Appendix 9.F of the LVIA). However, these proposed elements are also visually prominent in views from the lower ground surrounding Tilbury Fort, as shown in Figure 55 (page 38) (Viewpoint 26 of Appendix 9.F of the LVIA) and Figure 57 (page 39) (Viewpoint 56 (East) of Appendix 9.F of the LVIA). In addition, the upper levels of other elements of the Proposals are also visible within these viewpoints, in particular the CMAT processing facilities in northern section of the Tilbury2 Site and the RoRo terminal container storage in the southern section. The RoRo container storage is particularly prominent from Viewpoint 17 (page 37) (Figure 51) and Viewpoint 59 east (page 40) (Figure 61), however, it should be noted that these images show the maximum parameters of the container storage, i.e. stacked up to 6 containers high (18m plus 4m AOD), when in reality the short dwell time in this area means they are unlikely to be stacked 6 containers high across the RoRo terminal. The dimensions of each container is also based on the largest type available (high cube' containers) when in reality these are unlikely to occupy the entire RoRo container storage area. Similarly, the CMAT processing facilities are shown up to a maximum of 30m high across a relatively wide area to allow for flexibility in terms of the location of buildings and structures in this area. In addition, and as noted in Section 5.2 (page 30) the 4m AOD ground level is likely to be able to be reduced in many areas across the Tilbury2 Site and, as such, the highest elements of the Proposals area likely to appear lower than that which is shown in the wirelines.

5.3.31 From within Tilbury Fort itself, the Proposals are likely to be visible to varying degrees. From higher ground such as the ramparts and bastions, more of the Proposals are likely to be visible, as shown in Figure 65 (page 42) (Viewpoint 62 of Appendix 9.F of the LVIA). This view from the west bastion enables an elevated view of Tilbury Fort; the key buildings within the Parade Ground are visible, including the Officers Barracks, the star-shaped form of Tilbury Fort is appreciable and part of the moats are also visible. It is thus a key view in which much of the significance of the heritage asset is experienced and appreciated. The distant landscape to the north and the river are appreciable in this view, however, this is within the context of the surrounding industrial character, including the large buildings at the Anglian Water Recycling Centre, the Stobart's site and the large electricity pylons. As shown within the 'existing' view (Figure 64, page 42) the turbine hall of Tilbury B is also dominant by virtue of its massing, however, this will be demolished prior to the construction of the Proposals.

5.3.32 Given the nature of the Proposals and the elevated location of this viewpoint, the upper levels of the Proposals are likely to be visible. As shown in Figure 65 (page 42), the most prominent elements are likely to be the CMAT processing facilities, the RoRo container storage, the RoRo terminal warehouse, the silo and vessels at the RoRo berth. The upper levels of these elements are likely to be visible and will break the skyline with the CMAT processing facilities and silo likely to be most visible. The upper levels of the RoRo container storage, if stacked up to six high, will also likely be visible behind the Grade II* Officers Barracks.

5.3.33 In addition, the infrastructure corridor is also likely to be visible to the north of Tilbury Fort, given the elevated location of Viewpoint 62 (Figure 65, page 42). This will be visible across the existing

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Figure 50: Viewpoint 17 of Appendix 9.F of the LVIA, as existing. Tilbury B dominates views to the east of Tilbury Fort and there is a clear industrial setting to the east. This is formed by Tilbury B, the Anglian Water buildings, high mast lighting and large pylons. (Source: DJA, Appendix 9.F of the LVIA)

Figure 51: Viewpoint 17 of Appendix 9.F of the LVIA, as proposed. The vessels at the extended jetty, 100m silo the RoRo container storage and upper levels of the CMAT processing facilities will be visible in this view from Tilbury Fort. (Source: DJA, Appendix 9.F of the LVIA)

Figure 52: Viewpoint 20 of Appendix 9.F of the LVIA, as existing. Tilbury B, a building within the Anglian Water Recycling Centre and large electricity pylons are visible within the background of Tilbury Fort in this view, grounding the Scheduled Monument within an existing industrial context to the east. (Source: DJA, Appendix 9.F of the LVIA)

Figure 53: Viewpoint 20 of Appendix 9.F of the LVIA, as proposed. The CMAT processing facilities in the north of the Site, upper levels of the RoRo container storage, 100m silo and vessels berthed at the extended jetty will be visible in the background of Tilbury Fort. Whilst this will alter and further increase the industrial character of its wider setting to the east, this is not fundamentally different to its existing setting.

landscape setting to the north of Tilbury Fort and the embedded noise barriers and landscape mitigation will ensure that any potential noise and visual effects are reduced. Overall, the Proposals will introduce further industrial character to this view, however, this will be appreciable as an extension of the industrial character which already surrounds Tilbury Fort, rather than a fundamental change.

5.3.34 In contrast, from within the Parade Ground the Proposals are likely to be less visible as this key area is surrounded by the substantial ramparts of Tilbury Fort; this is shown within Figure 63 (page 41) (Viewpoint 27 of Appendix 9.F of the LVIA). Within this view, only the top of the 100m high silo and possibly the upper levels of the CMAT processing facilities are likely to be visible. Importantly, the 100m high silo will appear as a slender structure and somewhat removed from the Grade II* listed building by virtue of its location within the Tilbury2 Site. A small part of the very upper limits of the RoRo container storage may also be visible behind the Grade II* Officers Barracks, just breaking the horizon of the fort ramparts. However, given the explanation above in terms of the maximum dimensions of the containers, the likelihood of not stacking them six high across the entire area and the ground levels, it is unlikely that the RoRo containers will be constantly visible within this view, if at all, in reality. The vessels at the RoRo berth are also unlikely to be visible, although it is possible that the tops of the ships may be visible from the northwest corner of the Parade Ground.

5.3.35 Figure 62 (page 41) shows the existing view from the Parade Ground where the 170m high twin chimneys of Tilbury B are visually dominant behind the Grade II* Officers Barracks, however, it is noted that these were demolished on 28 September 2017. Figure 62 further shows, however, that a significant amount of the upper levels of the substantial mass and bulk of the turbine hall is also visible above the Fort's ramparts. The complete removal of Tilbury B will result in the visibility of buildings/ structures in the backdrop of this view being removed and will result in a beneficial impact upon the setting of Tilbury Fort and the Officers Barracks. The proposed view (Figure 63, page 41) illustrates that the Proposals are unlikely to be overly visually obtrusive from within this view, however, elements of the Proposals will be visible, as assessed above.

5.3.36 Overall, the 100m high silo will form a new landmark on the river and will be visible from a wide area. Whilst the silo will be situated in close proximity to Tilbury Fort, the slender nature of the structure will ensure that it does not as adversely disrupt key views from Tilbury Fort in the same way that a cluster of smaller silos has the potential to do by virtue of their massing on the skyline; such an approach is likely to result in a visually dominant massing in views from within Tilbury Fort; it is further noted that such an approach is not operationally viable, as discussed in detail within the accompanying Masterplanning Statement (document reference 6.2 5A). Furthermore, there is already an existing appreciation of tall, slender structures in views from within Tilbury Fort, including the four wind turbines situated within the existing Port (see Figure 44, page 33). These are clearly visible from both the Scheduled Monument and its setting and thus the 100m high silo would therefore not fundamentally change the existing character of views from Tilbury Fort and its surroundings which are already appreciated within an industrial context. Whilst the proposed silo would form a new landmark on the river, its location within the Site will ensure that it appears

Figure 54: Viewpoint 26 of Appendix 9.F of the LVIA, as existing. Tilbury B and the Anglian Water Recycling Centre are visible to the east of Tilbury Fort and there is a clear industrial setting to the east. In particular, the turbine hall of Tilbury B forms a substantial bulk and mass on the skyline. (Source: DJA, Appendix 9.F of the LVIA)

Figure 55: Viewpoint 26 of Appendix 9.F of the LVIA, as proposed. The CMAT processing facilities in the north of the Site, part of the RoRo container storage, 100m silo and vessels berthed at the extended jetty will be visible the east of Tilbury Fort. Whilst this will alter and further increase the industrial character of its wider setting to the east, this is not fundamentally different to its existing setting (Source: DJA, Appendix 9.F of the LVIA)

visually separated from Tilbury Fort in views from Gravesend (see Figure 71, page 46; Figure 89, page 58; and Figure 93, page 60). In addition, the proposed silo will somewhat recall the landmark nature of the demolished Tilbury B chimneys and help to identify Tilbury's location on the river; this was identified as a positive element in some of the public consultation responses and is prominent with the local community's memory.

5.3.37 Tilbury Fort is already experienced within the context of frequent shipping movements, including large industrial vessels associated with the existing Port of Tilbury and substantial cruise liners. These ships are visible in views from within Tilbury Fort, both from the northern end of the Parade Ground and from the bastions and thus its setting is already formed by a prominent shipping context which is principally industrial in character. The extension of the jetty towards Tilbury Fort and the ability to berth two RoRo vessels will increase both the proximity and dwell time of vessels within the setting of Tilbury Fort. Whilst the ships will not fundamentally change the setting of Tilbury Fort, the wirelines show that they are likely to be visually prominent in views both from and to Tilbury Fort. This is likely to have more of an impact on views from Tilbury Fort itself given the proximity of the Tilbury2 Site. The views from Gravesend show that Tilbury Fort will largely be seen as visually separate from the Proposals and, in particular, the proposed vessels (see Figure 71, page 46; Figure 89, page 58; and Figure 93, page 60). Whilst the location of the extended jetty and the berthed RoRo vessels will partially impact upon Tilbury Forts historic crossfire sightlines (as shown within Figure 18, page 15), the key direct sightlines between Tilbury Fort and New Tavern Fort will not be impacted by the Proposals, as shown within Figure 71 on page 46 (Viewpoint 44 of Appendix 9.F of the LVIA). Whilst the vessels will be visible within the periphery of the views between the two forts, their historic functional and visual connection will remain extant and thus the impacts are considered to be minor. Furthermore, the wider sightlines will not be permanently lost given that vessel movements will occur throughout the day and thus there will be times when no ships are at the RoRo berth.

5.3.38 The wirelines further show that higher buildings and structures associated with the CMAT processing facilities and bulk storage area in the northern section of the Tilbury2 Site are also likely to be visible. This would visually extend the industrial character of the Tilbury2 Site to the northwest which is currently largely defined by scrubland typical of former brownfield sites. This area forms part of the wider landscaped setting of Tilbury Fort but, given its 'scrubland' character in comparison to the marshland character to the north of the Fort, is considered to form, at most, a negligible contribution towards the significance of the Scheduled Monument, as discussed above (page 36). Views towards the northern area of the main Tilbury2 Site are already experienced within an existing industrial context, formed by the partially complete Stobart's site, which includes hard landscaping, large stockpiles and processing plant, the Anglian Water Recycling Centre which includes numerous buildings, some of which are dominant, and visibility of numerous large electricity pylons.

Infrastructure Corridor

5.3.39 Fundamentally, the main landscaped setting to Tilbury Fort lies to its north and is defined by areas of open flat marshland on either side of Fort Road (see Figure 49, page 35). The proposed infrastructure corridor will be built within the northern part of this landscaped area, in close proximity to the existing railway line which is screened by existing vegetation. The design of the Proposals and embedded mitigation will ensure that the infrastructure corridor is located as close to the railway as possible and woodland scrub planting, similar to that which screens the existing railway, will be introduced to the south of the proposed road to screen/filter views of the road and traffic from Tilbury Fort. This vegetation is already apparent within the landscape surrounding Tilbury Fort and will therefore not be incongruous or visually distracting. Overall, the proposed infrastructure corridor will result in part of the northernmost section of Tilbury Fort's landscape setting being reduced however, crucially, the surviving historic marshland setting will still remain appreciable around Fort Road.

5.3.40 The industrial character of the railway and its landscape screening already exists to the north of the Fort; fundamentally, the proposed infrastructure corridor will be visible in a broadly similar manner only in a slightly closer proximity. However, as illustrated within the wirelines, visibility of the road is unlikely to result in any significant impacts in views of Tilbury Fort and the embedded landscape mitigation will ensure that views towards the vehicles on the new road and rail link from Tilbury Fort will be appropriately filtered. The raised Fort Road Bridge, which is necessary to facilitate the infrastructure corridor, is likely to be visible, however, this is already appreciable in views from and surrounding Tilbury Fort and thus the proposals will only represent a minor alteration to the existing condition; this is therefore unlikely to result in any significant visual impacts. Furthermore, the new infrastructure corridor will also likely result in the removal/down-grading of Fort Road from vehicular traffic, in

Figure 56: Viewpoint 56 (east) of Appendix 9.F of the LVIA, as existing. Tilbury B and the Anglian Water Recycling Centre are visible to the east of Tilbury Fort and there is a clear industrial setting to the east. (Source: DJA, Appendix 9.F of the LVIA)

Figure 57: Viewpoint 56 (east) of Appendix 9.F of the LVIA, as proposed. The CMAT processing facilities in the north of the Site, upper levels of the RoRo container storage, 100m silo and vessels berthed at the extended jetty will be visible the east of Tilbury Fort. Whilst this will alter and further increase the industrial character of its wider setting to the east, this is not fundamentally different to its existing setting. (Source: DJA, Appendix 9.F of the LVIA)

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Figure 58: Viewpoint 59 (north) of Appendix 9.F of the LVIA, as existing. The landscape setting to the north of Tilbury Fort is prominent, however, residential houses and towers are visible beyond the railway line. Large electricity pylons to the northeast are also visible. (Source: DJA, Appendix 9.F of the LVIA)

Figure 59: Viewpoint 59 (north) of Appendix 9.F of the LVIA, as proposed. The CMAT facilities are visible and likely to be prominent given the maximum parameter of their height. The proposed link road bridge is also likely to be visible but the proposed infrastructure corridor is likely to be screened from view due to the low lying nature of the ground and embedded landscape mitigation. (Source: DJA, Appendix 9.F of the LVIA)

Figure 60: Viewpoint 59 (east) of Appendix 9.F of the LVIA, as existing. Tilbury B, the Anglian Water Recycling Centre and electricity pylons are visible to the east of Tilbury Fort providing a wider industrial setting to the east. The Anglian Water Recycling Centre and the Tilbury2 Site are partially screened by existing vegetation. The existing jetty within the Tilbury2 Site is visible and there are existing views across the river to Gravesend. (Source: DJA, Appendix 9.F of the LVIA)

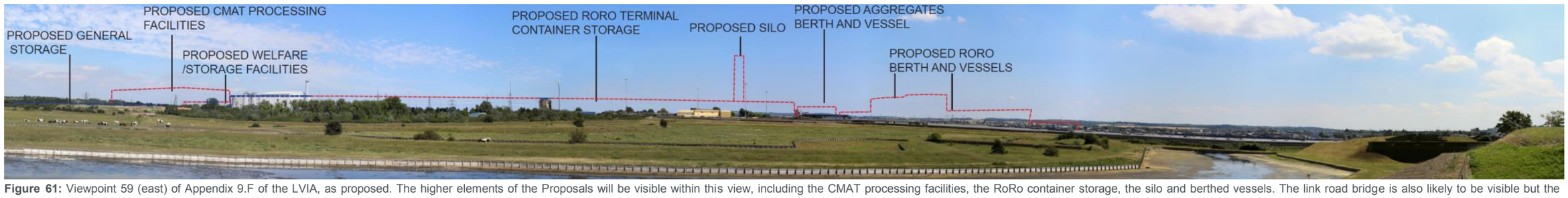

Figure 61: Viewpoint 59 (east) of Appendix 9.F of the LVIA, as proposed. The higher elements of the Proposals will be visible within this view, including the CMAT processing facilities, the RoRo container storage, the silo and berthed vessels. The link road bridge is also likely to be visible but the proposed infrastructure corridor is likely to be screened from view due to the low lying nature of the ground and embedded landscape mitigation. (Source: DJA, Appendix 9.F of the LVIA)

particular HGVs, thus helping to enhance the character of the immediate landscaped setting to the north of the Fort through minimising the proximity of traffic movements. This is likely to be beneficial to the setting of Tilbury Fort through a reduction in visual, noise and air quality effects caused by existing HGV traffic using Fort Road.

5.3.41 Whilst the historic marshland setting to the north of Tilbury Fort will remain appreciable, the proposed infrastructure corridor will inevitably lead to some reduction of this which is likely to have an adverse impact on the setting and significance of Tilbury Fort. However, given the embedded landscape mitigation to help visually screen/filter views towards the new road and the opportunity it presents to reduce HGV and vehicular traffic from Fort Road in close proximity to Tilbury Fort, it is considered that the infrastructure corridor will, overall, result in minor to moderate less than substantial harm to the overall significance of Tilbury Fort. The Landscape Strategy (Figure 9.9 of the LVIA) outlines the embedded landscape mitigation along the infrastructure corridor in detail.

Lighting

5.3.42 The Proposals will also result in an increase in lighting within the setting of Tilbury Fort. Lighting from existing industrial uses is already appreciable within the setting of Tilbury Fort, including the existing Port uses to the west, the Anglian Water Recycling Centre and partially complete Stobart's facility to the east, and uses across the river in Gravesend. As such, whilst the Proposals will result in an increase in lighting within the setting of Tilbury Fort and this will form an extension of the existing character, rather than a fundamental change.

5.3.43 In line with the Institute of Lighting Professionals: 'Guidance Notes for the Reduction of Obtrusive Light' (2011), the lighting is designed to avoid or reduce potential lightspill outside of the Order Limits. Relatively low column mounted luminaires would be located on the jetty with the higher mast lighting restricted to the main Tilbury2 Site. The main site container and trailer storage area would be floodlit, as would the lower levels of buildings for security and safety reasons. Elsewhere lighting within the main Tilbury2 Site would be restricted to localised operational areas. Lighting associated with the infrastructure corridor would be restricted to junctions with Ferry Road and Fort Road and would include the Fort Road bridge. A Preliminary Lighting Strategy and Impact Assessment accompanies the DCO application (Appendix 9.J of the ES); this explains and assesses the proposed lighting strategy in further detail.

5.3.44 Overall, the effects of lighting are likely to represent a considerable change in night time views both from and towards Tilbury Fort, increasing the existing character of industrial lighting which already forms part of the heritage asset's setting. This is likely to have an adverse effect upon Tilbury Fort's setting through an increase in industrial character.

Air Quality

5.3.45 The Air Quality Chapter of the ES (Chapter 18) considers the potential impacts of air quality and dust emissions associated with the construction and operation of the Proposals. Tilbury Fort has been included as a high sensitivity receptor within the various assessments.

Figure 62: Viewpoint 27 of Appendix 9.F of the LVIA, as existing. This is from within the Parade Ground of Tilbury Fort where the Grade II* Officers Barracks forms the central feature of the view. The 170m high chimneys of Tilbury B (demolished in September 2017) are prominent and visually distracting within the background of the Officers Barracks. The substantial massing and bulk of the turbine hall is also visible. (Source: DJA, Appendix 9.F of the LVIA)

Figure 63: Viewpoint 27 of Appendix 9.F of the LVIA, as proposed. The Proposals are largely unappreciable in this view, with the exception of the upper limits of the 100m high silo, the CMAT processing facilities and a negligible amount of the RoRo container storage. It is important to note that in reality containers are unlikely to be stacked up to six high across the whole RoRo container storage area. The wirelines are also based on 'worst case' visual parameters which adopt a 4m AOD across the whole Tilbury2 Site and in reality the Proposals may well appear lower in height throughout the Site. (Source: DJA, Appendix 9.F of the LVIA)

5.3 ASSESSMENT OF HERITAGE ASSETS: SCHEDULED MONUMENTS

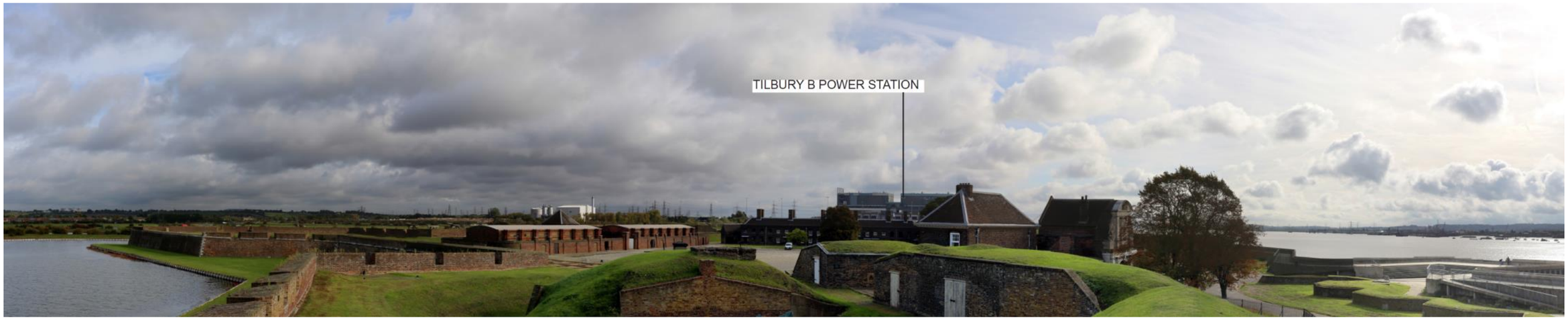

Figure 64: Viewpoint 62 of Appendix 9.F of the LVIA, as existing. This view is from the west bastion looking northeast towards the Site and provides an elevated view over Tilbury Fort. The existing industrial context to the east of Tilbury Fort is appreciable, including the buildings and structures associated with the Anglian Water and Stobart's sites, the large electricity pylons and the remaining turbine hall of Tilbury B; the latter is dominant in the background of the Officers Barracks. (Source: DJA, Appendix 9.F of the LVIA)

Figure 65: Viewpoint 62 of Appendix 9.F of the LVIA, as proposed. The upper levels of the Proposals are visible from this elevated view, with the most prominent elements being the CMAT facilities and the silo. The upper levels of the RoRo containers, if stacked to the maximum parameter of six high, will also be visible above the roofline of the Officers Barracks. Views of the proposed infrastructure corridor will be screened/filtered by the embedded landscape mitigation to reduce visual effects in views from Tilbury Fort. Overall the Proposals will represent an increase of the industrial character which is already appreciable to the east of Tilbury Fort. (Source: DJA, Appendix 9.F of the LVIA)

5.3.46 The proposals are considered to constitute a 'high risk' site with regard to dust emissions during construction, given the proximity of receptors to the Site Boundary and the extent of the proposed works. Construction dust will be appropriately controlled through the Construction Environmental Management Plan (CEMP).

5.3.47 An assessment undertaken in line with the Institute of Air Quality Management's 'Guidance on the Assessment of Mineral Dust Impacts for Planning' (2016) classified Tilbury Fort as "distant" from the dust sources associated with the Proposals; the site boundary is approximately 240 m south of the infrastructure corridor, 350 m west/north west of the aggregates berth, and more than 400 m south west of the proposed CMAT processing facilities, aggregate storage yard and conveyor. The focus of the assessment is on the potential for dust soiling and thus the heavier particle size fraction. These distances are based on the distance from the Tilbury Fort site boundary and thus are deemed to be conservative, as very substantial quantities of dust would need to settle within the moat so as to affect water quality (substantially more than that deemed to cause annoyance).

5.3.48 Dust particles that are more likely to travel longer distances during operation will be those related to the handling of the lightest materials, such as cementitious dust. Cement batching is a permitted process under the Environmental Permitting Regulations and thus is well mitigated. Off-site transport of materials will be in covered vehicles. The Air Quality assessment concluded a negligible residual dust risk for soiling at Tilbury Fort due primarily to the ineffective pathway (distance and direction of receptor relative to prevailing wind) and as a result of the designed-in mitigation. As such, it is considered not feasible that operational dust emissions associated with the Proposals would have a material impact on Tilbury Fort (either with regard to the moat, the building fabric or users' enjoyment of the site).

5.3.49 Mitigation will be secured in the Operational Management Plan (OMP) and, where appropriate, through the environmental permitting regulations for individual facilities. The OMP includes an air quality and dust management plan which sets out the approach to monitoring. This will include regular visual inspections at the site boundary and dust deposition monitoring at off site sensitive receptors. There will be a mechanism for complaints to be registered and addressed.

5.3.50 In addition, the considerable reduction in traffic on Fort Road once the Proposals are operational will result in a decrease in traffic emissions and associated dust emissions from current HGV movements in proximity to the Tilbury Fort boundary and will have a likely beneficial impact upon the setting of the Scheduled Monument.

5.3.51 Tilbury Fort is over 400 m from any potential sources from odour within the CMAT processing and storage areas and thus the potential impact is deemed to be negligible.

Noise and Vibration

5.3.52 The Noise and Vibration Chapter of the ES (Chapter 17) considers the potential likely significant effects with respect to noise and vibration as a result of the construction and operation (including maintenance) of the Proposals. Within the assessment Tilbury Fort has been identified as a Noise Sensitive Receptor (NSR). The assessment concludes that there are unlikely to be any significant noise impacts upon Tilbury Fort during either construction or operation.

5.3.53 The CEMP outlines how noise and vibration will be monitored, controlled and mitigated during the construction phase. In particular, this notes that prior to the commencement of any piling activities (either terrestrial or marine), if deemed necessary in consultation with English Heritage and Historic England, the Contractor will develop and implement a monitoring and mitigation regime to monitor and mitigate the vibration effects of piling on historic assets, in consultation with English Heritage and Historic England. An Operational Management Plan will ensure that management and operational procedures will be put in place to minimise the noise impacts arising from the operation of Tilbury2.

Summary

5.3.54 Overall, it is considered that the Proposals will alter the wider setting of Tilbury Fort through increasing the industrial character and activity within its setting, however, this will importantly be experienced as an extension of the existing industrial activity surrounding Tilbury Fort, in particular the uses situated between Tilbury Fort and the Tilbury2 Site provided by the partially complete Stobart's wood processing facility and the Anglian Water Recycling Centre. The large electricity pylons to the east of the Tilbury2 Site are also prominent in views from Tilbury Fort, further adding to this industrial character, as do the existing Port uses to the west of Tilbury Fort. As such, the Proposals will not fundamentally change the wider industrial context of the future baseline in which the heritage asset will be experienced. Whilst the 100m high silo on the river front will likely form a new landmark structure, it will be slender in appearance to reduce its overall massing dominance and will not be out of character with other tall structures that lie within Tilbury Fort's setting, such as the wind turbines to the west of the Fort.

5.3.55 Shipping activity in proximity to Tilbury Fort will increase as a result of the Proposals and in particular the scheme will introduce large stationary vessels in close proximity to Tilbury Fort at the extended jetty. Together with the RoRo terminal, CMAT facilities and 100m silo, this will result in an overall increased industrial character to the east of Tilbury Fort, within its setting. The wirelines indicate that this has the potential to have an impact upon views both to and from the Fort. Furthermore, berthed vessels will have some impact on disrupting the historic crossfire sightlines between Tilbury Fort and New Tavern Fort. However, this is not considered to be significantly harmful to the significance of Tilbury Fort given that the key sightlines will be retained and thus the visual connection between the two assets will remain understood (see Figure 71, page 46). In addition, vessels will not be berthed constantly and therefore the visual disruption of these sightlines will be temporary.

5.3.56 The proposed infrastructure corridor will impact upon the historic landscape setting to the north of Tilbury Fort and lead to a reduction of this land. However, the marshland character and connection with Tilbury Fort will remain appreciable surrounding Fort Road and the embedded mitigation will reduce the visual and noise impacts of the infrastructure corridor. Whilst the proposed infrastructure corridor will harm the setting of Tilbury Fort through reducing the historic marshland to its north, it will also result in a reduction of HGV traffic on Fort Road which passes Tilbury Fort in close proximity. This change in character to Fort Road will have a beneficial impact on the landscape setting immediately surrounding Tilbury Fort.

5.3.57 **It is thus considered that the Proposals are likely to have an overall moderate adverse impact upon the setting of Tilbury Fort,** due to an increase in the industrial character of the land surrounding the Scheduled Monument. The greatest visual impacts are likely to be from large berthed vessels, the 100m high silo, the CMAT facilities and aggregates storage, RoRo container storage, RoRo warehouse and increases in lighting. However, given that the Scheduled Monument will remain physically unaffected by the Proposals and the key positive elements of its setting which contribute towards its significance will be largely retained—i.e. the river, key views across to Gravesend and New Tavern Fort, the historic functional association with the other riverside defences, and the majority of the surviving historic landscaped setting to the north around Fort Road, including the areas closest to the designation—it is considered that the Proposals will represent an overall extension of the established wider industrial character which surrounds Tilbury Fort, and its principal significance formed by its historic, evidential and aesthetic values, will remain understood.

5.3.58 **It is thus considered that the Proposals are, overall, likely to result in a medium level of less than substantial harm to the significance of Tilbury Fort through further industrialising its setting.**

5.3 ASSESSMENT OF HERITAGE ASSETS: SCHEDULED MONUMENTS

New Tavern Fort, including Milton Chantry (NHLE no.:1013658)

Description

5.3.59 New Tavern Fort lies on the southern bank of the River Thames and in close proximity to the east of Gravesend town. The Scheduled Monument includes the upstanding and below ground remains of New Tavern Fort which includes within its grounds the earlier chapel or chantry associated with the Leper Hospital of St Mary the Virgin at Milton by Gravesend. Both the fort and the chantry are also Listed Grade II* and, for the avoidance of repetition, an assessment of their significance as both a Scheduled Monument and Listed Buildings is contained here.

5.3.60 New Tavern Fort was built as a result of the 1778 survey of the defensive requirements of the Thames. Fear of a French invasion led to the fort being built to provide crossfire with Tilbury Fort on the opposite side of the river. Originally New Tavern Fort consisted of a battery on two faces forming an angle towards the river with a strip of rampart joining it to a smaller, straight battery. The fort was designed for an armament of heavy, smooth-bore cannon firing through embrasures. The rear of the fort was originally open and unprotected but before the end of the century a brick wall, with loopholes for musketry, was added.

5.3.61 Although the initial construction was between 1780 and c.1783, the armament of the fort was updated and increased at intervals throughout the nineteenth century and in the 1840s the fort was modernised to take a heavier armament. A magazine designed to hold 250 barrels of powder was built close to the chantry building, and another smaller magazine, for 50 barrels, was established nearby. Other new buildings constructed at this time included a wash-house, coal store and a guardroom.

5.3.62 In the north west corner of the fort is the earlier chantry building and associated priests' house, known as Milton Chantry. The Chantry chapel (Grade II*) is all that remains of the leper hospital of Milton which was founded by Aymer de Valence, Earl of Pembroke, about 1322. This was converted into a dwelling at the Reformation and became a public house called the New Tavern in the late-seventeenth/early-eighteenth century. The stone building has been dated to c.1300, and still retains its original fourteenth century arch-braced roof. Both the Chantry building and the priests' house were encased in red and yellow brick in the eighteenth and nineteenth centuries when they were part of the barracks of the fort.

5.3.63 By the end of the nineteenth century emphasis was placed on strengthening defences downstream from Gravesend, and thus New Tavern Fort lost some of its strategic importance and subsequently became a secondary line of defence with Tilbury

Figure 66: Aerial view of New Tavern Fort. Milton Chantry (Grade II*) is highlighted in red. (Source: Google Maps)

Figure 67: Milton Chantry (Grade II*) is situated on lower ground and largely screened from view by fortifications of New Tavern Fort. It's setting is thus principally formed by New Tavern Fort itself and it has little visual relationship or historic connection with the river. (Source: CgMs)

Figure 68: View north from New Tavern Fort looking across the river to Tilbury. Tilbury Fort, to which New Tavern Fort was built for crossfire, is partially visible to the left of the centre of this photograph; it is partially screened by the existing late-twentieth century substantial sea wall on the north side of the river. Tilbury B and the Anglian Water Recycling Centre are visible to the right, grounding the view within an existing wider industrial context. It is noted that the chimneys were demolished on 28 September 2017. (Source: CgMs)

Figure 69: View north from New Tavern Fort looking across the river to Tilbury. Tilbury Fort, to which New Tavern Fort was built for crossfire, is visible but partially screened by the existing late-twentieth century substantial sea wall on the north side of the river. (Source: CgMs)

Fort. In 1930 it was purchased by the Gravesend Corporation who laid it out as a pleasure garden for the public and it remains in this use today. Milton Chantry today forms Gravesend's Heritage Centre with displays and artefacts telling the story of the town.

Significance

5.3.64 New Tavern Fort is an unusually complete example of an eighteenth century fortification which underwent development in the nineteenth and twentieth centuries. The Fort displays a complete sequence of mounted guns representing each stage in its development, and contains a number of unusual features which have been preserved in situ. The site is known for its connection with General Charles Gordon who lived here from 1865-71 and was later killed at Khartoum.

5.3.65 New Tavern Fort, along with Tilbury Fort on the opposite bank of the Thames, illustrates the strategic importance of the Thames Estuary and the methods employed to defend it over a period of 170 years. It was built for crossfire with Tilbury Fort and the two defences became a secondary line of defence in the nineteenth century with the establishment for Coalhouse Fort, Cliffe Fort and Shornemead Fort further downstream.

5.3.66 In the north west corner of the Fort is Milton Chantry (Grade II*), a fourteenth century building representing the chapel of a medieval hospital. Milton Chantry has a well documented history from the early fourteenth century onwards and has undergone a variety of uses. Despite this, the building has survived largely intact and contains numerous well preserved architectural features dating from the fourteenth to the nineteenth centuries. Although Milton Chantry follows one of the more common plans of chantry foundations, very few of these have survived intact or are as well preserved.

5.3.67 Overall, New Tavern Fort, including Milton Chantry, is considered to be of high significance and this is principally derived through it historic, evidential and aesthetic value.

Setting

5.3.68 New Tavern Fort has an important historic and functional relationship with the River Thames which forms the key part of the setting as the Fort was, fundamentally, built to protect the river from enemy attack. The river has an established industrial character and frequent large shipping movements, including vessels associated with the Port of Tilbury and cruise liners, are a regular feature in views from New Tavern Fort.

5.3.69 The Scheduled Monument similarly has an important historic relationship with Tilbury Fort which is situated on the opposite side of the river. New Tavern Fort was built to provide crossfire with Tilbury Fort and the asset therefore has an important military connection with the northern bank of the River Thames. Figure 18 (page 15) provides a map of the historic crossfire sightlines between Tilbury Fort and New Tavern Fort in 1778. Views between the two forts remain appreciable today and are particularly prominent from the elevated ground within New Tavern Fort. The Heritage Quays residential development, built in the 2000s, is situated to the northwest of New Tavern Fort on the river. This development is on the site of a former nineteenth century development which was of a similar scale. The Heritage Quays development is an attempt to replicate the style of the earlier Wates Hotel built in 1819 on the river front and which was rebuilt as the Gravesend Sea School in 1918. Despite this site having been built on since at least the early nineteenth century, views from New Tavern Fort to Tilbury Fort have nonetheless been altered by the presence of Heritage Quays, the wide promenade (laid out in the nineteenth century), and the substantial late-twentieth century sea wall on the north side of the river. These built elements somewhat reduce an appreciation of the historic sightlines between the two forts in views from New Tavern Fort.

5.3.70 Views towards Tilbury Fort from New Tavern Fort are also experienced within an existing industrial context. The buildings and structures associated with the Anglian Water Recycling Centre are visible in close proximity to the east of Tilbury Fort. The remaining structures associated with the Tilbury B Power Station are dominant in views from New Tavern Fort and the southern river bank in general. Whilst it is noted that the landmark chimneys were demolished recently in September 2017, the bulk and massing of the turbine hall remains a dominant feature in views from New Tavern Fort.

5.3.71 However, the same is not true for Milton Chantry, which lies inside New Tavern Fort. The Chantry has a more contained setting of which the north river bank does not form a prominent part of, and there are reduced views of and from the Chantry to the north; as such, the industrial context of the northern bank is less visible and prominent in the Chantry's surroundings. By virtue of its scale, however, Tilbury B is visible in some views of the rear elevation of the Chantry but this does not materially impact upon its significance. Furthermore, there are no substantial or appreciable historic relationships between the Chantry and the north bank, including the Site.

5.3.72 On the landside, New Tavern Fort is surrounded by a variety of built development, including 9-storey residential slab blocks overlooking the monument. The proximity of the existing built context, together with its use as a public garden, has resulted in the monument having a semi-suburban character on the edge of the town. This has somewhat impacted upon its significance as the fort would historically have been experienced in isolation; today it has become largely enveloped by surrounding development and modern uses associated with a town.

Contribution to Significance

5.3.73 Overall, it is considered that the elements of New Tavern Fort's setting that contribute to its significance include the River Thames and surrounding defensive forts, in particular Tilbury Fort on the northern bank, to which New Tavern Fort was built to provide crossfire. Whilst the nineteenth century defences of Coalhouse Fort, Cliffe Fort and Shornemead Fort are unappreciable from New Tavern Fort (with the possible exception of long distance glimpses towards Coalhouse Fort), these have group value with New Tavern Fort and help to understand its strategic and historic position as a defence structure on the Thames; as such, the later forts forms part of New Tavern Fort's wider setting and provide a small contribution towards its significance.

5.3.74 The Site itself is partially visible in long views from the elevated areas of the Scheduled Monument, however, this is principally limited to the area of the main Tilbury2 Site closest to the river and of the existing jetty. Importantly, these views are experienced within the existing industrial built context outlined above. The area of the Site boundary which includes the infrastructure corridor is not appreciable from New Tavern Fort, given the distance and intervening built form of Tilbury Fort and industrial uses to the east. Given New Tavern Fort's historic functional and visual connection with Tilbury Fort and the visibility of the Tilbury2 Site within these views, it is thus considered to form part of the wider setting to New Tavern Fort and is considered to form a neutral contribution towards its significance.

Removal of Tilbury B

5.3.75 As noted, Tilbury B is due to be completely demolished by January 2019. On 28 September 2017 the 170m high (approx.) chimneys were demolished. The chimneys were slender, tall and therefore the most widely visible industrial features in the landscape within this area; their removal has therefore resulted in the removal of a substantial landmark feature on the river front. The substantial mass and bulk of the turbine hall remains in existence. The complete removal of the Tilbury B station will result in the removal of a prominent industrial building in the wider setting of New Tavern Fort and which is a dominant feature in views across the river. This is likely to have a beneficial impact on views from New Tavern Fort through removing a prominent building of substantial mass and bulk from the background, as

shown within Figure 71. Importantly, however, whilst the complete removal of Tilbury B will likely have a beneficial impact on views from New Tavern Fort, the appreciable established industrial character of the northern river bank, formed by the River, the existing Port to the west, the Anglian Water Recycling Centre and visible large electricity pylons directly opposite New Tavern Fort, will remain and thus continue to provide an industrial character to the heritage asset's wider setting. In addition, it is noted that numerous other industrial uses and character define the river bank along this part of the Thames, including oil refinery tanks and large, hill-like landfill sites, aggregates storage and facilities, and other industry.

Assessment of Impact

5.3.76 The Proposals are likely to have an impact on the wider setting of New Tavern Fort principally through potential visual effects of new buildings and structures, large berthed vessels, port-related activity and lighting. Other environmental effects that could impact upon setting, such as noise, vibration, dust and traffic, are less likely to impact the setting of New Tavern Fort, given its considerable distance from the Site.

5.3.77 Figure 71 (Viewpoint 44 of Appendix 9.F of the LVIA) illustrates the potential visual impacts of the Proposals in views from New Tavern Fort. This shows that the key visual impacts of the Proposal are likely to be from the large vessels at the RoRo berth and CMAT berth and the 100m silo on the river front. There may also be distant views of the upper levels of the RoRo container storage and CMAT processing facilities further in land, particularly when no vessels are berthed at the jetty. The Proposals will extend the existing industrial character of the north shore which is already visible in views from New Tavern Fort. Whilst this will alter the wider setting of New Tavern Fort it will not fundamentally change its character.

5.3.78 When vessels are at the western end of the RoRo berth there will be direct partial interruption of the wider historic crossfire lines downstream of the Thames from Tilbury Fort, however, this will not be permanent (given that ships will come and go) and the majority of the crossfire lines as shown within Figure 18 (page 15) will not be impacted. Furthermore, the key sightlines between New Tavern Fort and Tilbury Fort will remain unaffected; Figure 71 (Viewpoint 44 of Appendix 9.F of the LVIA) shows that whilst the Proposal will be visible to the east of Tilbury Fort, direct views towards Tilbury Fort and the Water Gate in particular will remain extant. The Proposals will, however, increase the industrial character of the river, both during the day and at night, and will therefore alter the wider setting of New Tavern Fort.

5.3.79 By virtue of the intervening presence of Tilbury Fort, the proposed new infrastructure corridor is unlikely to be appreciable in views from New Tavern Fort. With the exception of potential long distance glimpses of vehicles using the corridor, this element of the Proposals is unlikely to have an impact upon the setting of New Tavern Fort.

5.3.80 **Overall, it is thus considered that the Proposals are likely to have a minor adverse impact upon the setting of New Tavern Fort through further industrialising the northern river bank and partially disrupting the wider crossfire sightlines between New Tavern Fort and Tilbury Fort. This is likely to result in a low level of less than substantial harm to its overall significance.**

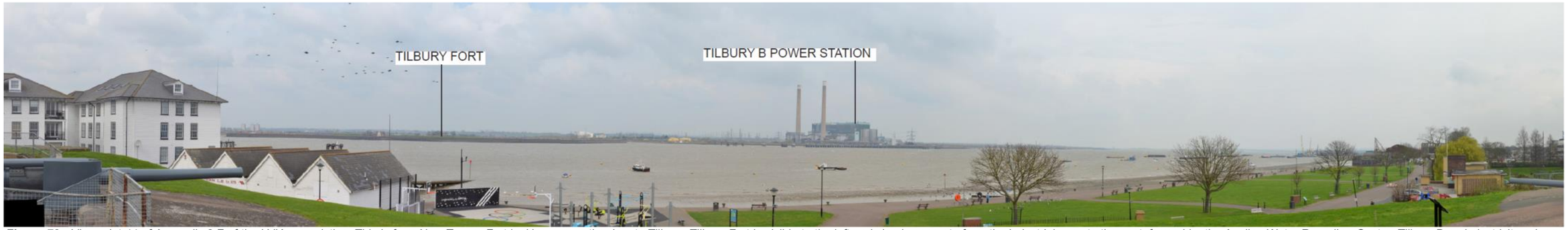

Figure 70: Viewpoint 44 of Appendix 9.F of the LVIA, as existing. This is from New Tavern Fort looking across the river to Tilbury. Tilbury Fort is visible to the left and clearly separate from the industrial uses to the east, formed by the Anglian Water Recycling Centre, Tilbury B and electricity pylons. (Source: DJA, Appendix 9.F of the LVIA)

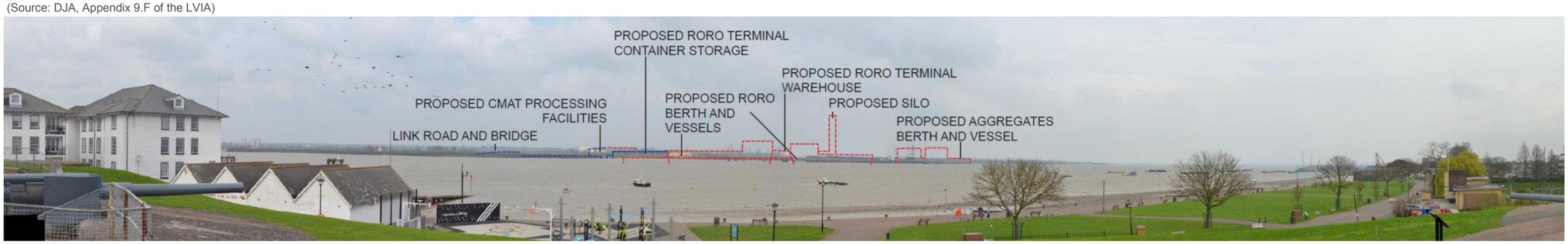

Figure 71: Viewpoint 44 of Appendix 9.F of the LVIA, as proposed. Berthed vessels and the 100m high silo will be the most visible elements in views from New Tavern Fort, with glimpses of the upper levels of the CMAT processing facilities, RoRo container storage and warehouse. However, the Proposals will appear distinctly separate from Tilbury Fort, despite the westward extension of the jetty. (Source: DJA, Appendix 9.F of the LVIA)

5.3 ASSESSMENT OF HERITAGE ASSETS: SCHEDULED MONUMENTS

Gravesend Blockhouse (NHLE no.: 1005120)

Description

5.3.81 Gravesend Blockhouse is situated on the south bank of the River Thames at Gravesend, to the southwest of the Site. The monument includes a sixteenth century artillery blockhouse surviving as upstanding and buried remains. Only the foundations of the blockhouse survive; these are in the form of the partially excavated remains of truncated walls, in a low/sunken area that is set within a small, fenced off compound at the riverside.

5.3.82 Gravesend Blockhouse was built for Henry VIII in 1539 as part of his chain of coastal defences in response to the threat of invasion. It was one of five artillery blockhouses built along this stretch of the River Thames to defend the approach to London and the dockyards at Woolwich and Deptford; the others being at Tilbury, Higham, Milton and East Tilbury. The blockhouse at Milton was originally located to the east of Gravesend Blockhouse, at the north western corner of the Gravesend Canal Basin. Milton Blockhouse was demolished in 1557-8 and there are no surviving above-ground or visible remains. The surviving archaeological remains are today marked in outline by studs in the road, similarly to the archaeological remains of Gravesend Blockhouse beneath Royal Pier Road.

5.3.83 The Gravesend Blockhouse crossed its fire with Tilbury Blockhouse on the north bank of the river and also guarded the ferry crossing between Gravesend and Tilbury. The appearance of the blockhouse is known from a plan by John Romer made in 1715. There were earthen gun lines along the river bank on either side of the blockhouse, collectively armed with 21 guns. Repairs were carried out to the blockhouse in 1588 and 1667. By 1665 quarters for the Duke of York as Lord High Admiral had been provided behind the blockhouse. This subsequently became the Ordnance Storekeepers Quarters and, much later, the Clarendon Royal Hotel when it was converted in the mid-nineteenth century. The present building for the Clarendon Royal Hotel dates from around 1860.

5.3.84 By the late seventeenth century the blockhouse had been converted into a storage magazine for gun powder, although the eastern arm of the gun lines was still armed. The gun lines were remodelled in the 1780s before being levelled in 1834. The blockhouse was partially demolished in 1844. In 1975-6 partial excavation revealed some of the footings of the blockhouse.

5.3.85 The blockhouse was originally D-shaped in plan; it had a curved front facing the river, two angled faces on the landward (south) side and a curved bastion on the west side. The western part of the semi-circular front wall survives as visible remains and has been consolidated following partial excavation. The gunports are visible as blockings in the main brick wall. Several walls within the interior of the blockhouse are likely to represent alterations following the conversion of the building into a storage magazine.

Significance

5.3.86 Blockhouses are defensive structures of widely varying design built specifically to house a small artillery garrison and to protect the gunners and ammunition from attack. Usually stone built, each structure was designed and built to protect a particular feature or area; typically they were located to command a river, harbour entrance or anchorage. The main components of blockhouses were a tower and bastions or gun platforms, although in some cases only the tower or the bastion was present. The earliest known blockhouse dates to 1398, but the majority were built in the first half of the sixteenth century by Henry VIII.

5.3.87 Distributed along the east, south and south west coasts, there are 27 examples which are known to survive in various states of repair, mostly now destroyed or incorporated into later military constructions. Surviving examples will illustrate the development of military defensive structures and of tactics and strategy during this period of rapid change following the introduction of firearms. They will also preserve something of the life and experience of the common soldier who was required to live and work within them. All examples with substantial archaeological remains are considered to be of national importance and will be worthy of conservation.

5.3.88 Despite having been partially demolished in the past, substantial remains survive of Gravesend Blockhouse. These provide information as to the original function and layout of the

Figure 72: Surviving foundations of the Gravesend Blockhouse. Views across the river to Tilbury Fort are prominent. The blockhouse crossed its fire with Tilbury Fort and therefore has a historic functional relationship with it. This is largely unappreciable today given that only the foundations of the blockhouse survive. (Source: CgMs)

Figure 73: View across the river to Tilbury Fort and the Site from close proximity to Gravesend Blockhouse, the approximate location of which is indicated by the red arrow. The north riverbank is already characterised by a variety of industrial uses. (Source: CgMs)

blockhouse, as well as its sixteenth century construction. The Gravesend Blockhouse has group value as part of a chain of defences built by Henry VIII and forms a visual link to that of Tilbury Fort on the opposite side of the Thames. It has further group value with the Clarendon Royal Hotel (Grade II), which is situated on the opposite side of Royal Pier Road, to which it has a historic connection as the present hotel was built on the site of the quarters that were provided for the Lord High Admiral of the blockhouse.

5.3.89 The Gravesend Blockhouse is thus of significance principally due to its high level of historic and evidential value.

Setting

5.3.90 Gravesend Blockhouse was designed to overlook the river, and the land immediately beyond it, on the north bank can therefore be taken to form part of its wider setting. However, all that remains now is the foundations of the blockhouse; without any above ground fabric (particularly shooting apertures and other evidence of its military use and sightlines) it is difficult to extrapolate a close visual or functional relationship between the foundations and the land on the northern bank other than general context and an understanding of its intended crossfire and functional relationship with Tilbury Fort, in particular the earlier blockhouse there which is no longer visible.

5.3.91 As a result, the blockhouse has a more limited setting today than would have been the case, had the entire structure survived, complete with gun apertures and sight lines. The relationship between the foundations and the river is therefore perhaps the most significant part of the monument's setting, although it is acknowledged that views towards Tilbury Fort also form part of its wider setting. These views have, however, been somewhat reduced due to the substantial late twentieth century sea wall on the north side of the river which forms a considerable visual barrier.

5.3.92 Furthermore, views across the river are experienced within an existing modern industrial context formed by the existing Port of Tilbury to the west of Tilbury Fort and the Anglian Water Recycling Centre, remaining structure of Tilbury B and large electricity pylons to the east. Tilbury B in particular forms a substantial visual landmark although it is noted that the chimneys were recently demolished on 28 September 2017. Views of the Site itself are largely limited to the southern-most section of the Tilbury2 Site and the jetty and it is visible within an established industrial built context. The Tilbury2 Site is thus considered to form part of the wider setting of Gravesend Blockhouse, given its proximity to Tilbury Fort to which the blockhouse has a historic connection, however, the Tilbury2 Site itself is considered to form a neutral contribution towards the significance of the blockhouse.

Contribution to Significance

5.3.93 Overall, it is considered that the elements of the setting of Gravesend Blockhouse that contributes to its significance, principally include the River Thames, views across the river to Tilbury Fort and the Royal Clarendon Hotel (Grade II) to which it has a historic connection and a group value. As noted above, the Tilbury2 Site, whilst forming part of the wider setting of Gravesend Blockhouse, is considered to form a neutral contribution towards its significance.

Removal of Tilbury B

5.3.94 As noted, Tilbury B is due to be completely demolished by January 2019. On 28 September 2017 the 170m high (approx.) chimneys were demolished. The chimneys were slender, tall and therefore the most widely visible industrial features in the landscape within this area; their removal has therefore resulted in the loss of a substantial landmark feature on the river front. The substantial mass and bulk of the turbine hall remains in existence. The complete removal of the Tilbury B station will result in the removal of a prominent industrial building in the wider setting of Gravesend Blockhouse and which is a dominant feature in views across the river. This is likely to have a beneficial impact on views from Gravesend Blockhouse through removing a prominent building of substantial mass and bulk. Importantly, however, whilst the complete removal of Tilbury B will likely have a beneficial impact on views from Gravesend Blockhouse, the appreciable established industrial character of the northern river bank, formed by the River, the existing Port to the west, the Anglian Water Recycling Centre and the large electricity pylons directly opposite Gravesend Blockhouse, will remain and thus continue to provide an industrial character to the heritage asset's wider setting. In addition, it is noted that numerous other industrial uses and character define the river bank along this part of the Thames, including oil refinery tanks and large, hill-like landfill sites, aggregates storage and facilities, and other industry.

Assessment of Impact

5.3.95 The Proposals are likely to have an impact on the wider setting of Gravesend Blockhouse principally through potential visual effects of new buildings and structures, vessels, port-related activity and lighting. Other environmental effects that could impact upon setting, such as noise, vibration, dust and traffic, are less likely to impact the setting of Gravesend Blockhouse, given its considerable distance from the Site.

5.3.96 Visual impacts are likely to be limited to the riverside related uses and activities and, in particular, of the 100m high silo which is likely to form a landmark on the river front, the extended jetty and stationary vessels, the upper levels of the RoRo terminal warehouse, container storage and possibly the CMAT facilities to the north, and lighting masts. The Proposals will extend the existing industrial character of the north shore which is already visible in views from Gravesend Blockhouse. Whilst this will alter the wider setting of Gravesend Blockhouse it will not fundamentally change its character.

5.3.97 Importantly, the historic sightlines between Gravesend Blockhouse and Tilbury Fort will remain unaffected by the Proposals, however, by virtue of the extension of the jetty, it is acknowledged that industrial activity and visibility of stationary vessels for prolonged periods of time will encroach closer to Tilbury Fort. Whilst this could form a distracting element in views north from Gravesend Blockhouse to Tilbury Fort, fundamentally, the historic functional sightlines between the two forts will be retained, albeit appreciated in an altered wider context. It is further acknowledged that an appreciation of these historic military sightlines has already been somewhat reduced by the installation of the substantial late-twentieth century sea wall on the north side of the river and the fact that Gravesend Blockhouse survives in a fragmentary condition.

5.3.98 By virtue of the intervening presence of Tilbury Fort and low-lying position of Gravesend Blockhouse, the proposed new infrastructure corridor is unlikely to be appreciable and is therefore unlikely to have an impact upon the setting of the fort.

5.3.99 **Overall, it is thus considered that the Proposals are likely to have a minor impact upon the setting of Gravesend Blockhouse, resulting in a negligible impact upon its significance.**

5.3 ASSESSMENT OF HERITAGE ASSETS: SCHEDULED MONUMENTS

Coalhouse Fort battery and artillery defences (NHLE no.: 1013943)

Description

5.3.100 Coalhouse Fort is located on the northern bank of the River Thames to the east of the Site. It is situated at Coalhouse Point where the river bends and the Scheduled Monument comprises the Victorian Coalhouse Fort at East Tilbury, with its associated railway link and jetty and its rifle range, as well as the foundations of an Henrician blockhouse coastal battery, a late nineteenth century Quick-Firer battery and a low-level radar tower dating from World War II.

5.3.101 Coalhouse Fort is located on the site of a Henrician blockhouse. Nothing is visible of the structure itself but the landward ditch survives as a creek, and timber palisading running along the shore in the area may belong to this phase. Beside the blockhouse a jetty was built, perhaps initially to support the blockhouse but later to land coal. After several phases of rebuilding, the jetty served Coalhouse Fort, to which it was joined by a full-gauge railway line which survives almost intact but for the tracks themselves.

5.3.102 The first phase of the fort, begun in 1799, was replaced in 1847-55 by a more complex structure which was in turn superseded by the present buildings between 1861-74. This latest fort was added to in the First and Second World Wars and only went out of military use in 1949. Near the waterfront a little distance from the fort are a nineteenth century battery for Quick-Firer guns and searchlights, a rifle range and a World War II low-level radar tower.

Significance

5.3.103 Coalhouse Fort is a remarkably well preserved late nineteenth century fort built on the recommendation of the Royal Commission on the Defence of the UK in 1860. It is one of the finest examples of an armoured casemate fort in England and is well documented historically.

5.3.104 The jetty and railway line are an integral part of Coalhouse Fort. The Henrician blockhouse is well documented historically and has high archaeological potential due to waterlogging. Such a site adds to the knowledge of the coastal fortifications made by Henry VIII. The Quick-Fire battery, built in 1893, is the sole surviving purpose-built battery of its type in the Thames basin. The rifle range is an unusual survival which adds to the known range of earthwork monuments and is closely associated with the fort. Virtually intact World War II radar installations of the type at East Tilbury are known at only two other places in England, making this an extremely rare survivor of a once widespread system. The group of structures demonstrate the former strategic importance of Coalhouse Point and demonstrate the changing approaches to defence over 400 years. Furthermore the sites formed elements of wider defence systems designed to protect the Thames Estuary and especially London.

Figure 74: Aerial view of Coalhouse Fort, looking eastwards. (Source: webbaviation.co.uk, 2010)

Figure 75: View towards the site from the carpark at Coalhouse Fort. Tilbury B forms a prominent and substantial landmark in these view, providing a wider industrial setting to the west of the fort. (Source: DJA)

Figure 76: View west from the Two Forts Way public footpath which connects Tilbury Fort with Coalhouse Fort. Tilbury B is prominent within views along the footpath and screens views towards Tilbury Fort. (Source: DJA)

5.3.105 Coalhouse Fort is thus of significance principally due to its high level of historic, aesthetic and evidential value.

Setting

5.3.106 Coalhouse Fort is surrounded in part by a 'wet ditch' defensive feature which is included within the designation and forms Coalhouse Fort's immediate landscaped setting. This landscape today forms a public park. The River Thames forms a key part of Coalhouse Fort's setting; the Fort is strategically placed at a bend in the river, at which point Coalhouse Fort was sited to overlook the river from the south/southwest and around the bend to the northeast.

5.3.107 The surrounding coastal forts further form an important part of the setting of Coalhouse Fort and provide group value. Cliffe Fort and Shornemead Fort, both situated on the opposite side of the river, were built for crossfire with Coalhouse Fort as part of the Royal Commission in the nineteenth century. As such, both Cliffe Fort and Shornemead Fort have historic crossfire sightlines to Coalhouse Fort, although it is acknowledged that Shornemead Fort is now derelict. The principal setting of Coalhouse Fort is thus formed by the bend in the river to which the Fort is orientated and which it historically defended, and through its historic functional and visual connections with Cliffe Fort and Shornemead Fort.

5.3.108 Upon the establishment of the nineteenth century Coalhouse Fort, Tilbury Fort became a secondary line of defence on the northern river bank and, as such, it forms a part of the wider setting of Coalhouse Fort. Whilst there is a degree of existing long distance inter-visibility between Coalhouse Fort and Tilbury Fort in views from the Two Forts Way public footpath, views have been significantly reduced through the establishment of intervening built form provided by the industrial premises of the Anglian Water Recycling Centre and, most notably, the turbine hall of Tilbury B Power Station which forms a prominent landmark that largely screens views westwards towards Tilbury Fort. Furthermore, as Coalhouse Fort principally related to the section of the river in the vicinity to Cliffe Fort and Shornemead Fort, it is considered that these longer distance inland views towards Tilbury Fort are arguably less important in understanding the significance of Coalhouse Fort.

5.3 ASSESSMENT OF HERITAGE ASSETS: SCHEDULED MONUMENTS

5.3.109 The Two Forts Way forms a public footpath that follows the river between Coalhouse Fort and Tilbury Fort, with heritage interpretation boards provided at various points along the way. This footpath is thus considered to form part of the wider setting of Coalhouse Fort and enables the two forts to be appreciated as a kinetic experience for walkers and cyclists. Views along the Two Forts Way are across the river to Gravesend and towards Tilbury Town; these are experienced within an established industrial built context defined by a variety of buildings and structures, including the four wind turbines at Tilbury Port.

5.3.110 The Site itself is situated at a considerable distance from Coalhouse Fort and adjoins the existing industrial character of land to the east of Tilbury Fort. Long distance partial views towards the Tilbury2 Site are appreciable and, given its proximity to Tilbury Fort which forms part of the wider setting of Coalhouse Fort, the Tilbury2 Site itself is also considered to form part of the fort's wider setting, although it is considered to provide a neutral contribution towards its significance.

Contribution to Significance

5.3.111 Overall, it is considered that the elements of the setting of Coalhouse Fort that contributes to its significance include the River Thames, the immediate landscape surrounding Coalhouse Fort, the wider surrounding marshland and the surrounding coastal defences, in particular Cliffe Fort and Shornemead Fort for which it was built to have crossfire. The Tilbury2 Site forms part of the wider setting to Coalhouse Fort and forms a neutral contribution towards its significance.

Removal of Tilbury B

5.3.112 As previously noted, Tilbury B is due to be completely demolished by January 2019. On 28 September 2017 the 170m high (approx.) chimneys were demolished. The chimneys were slender, tall and therefore the most widely visible industrial features in the landscape within this area; their removal has therefore resulted in the loss of a substantial landmark feature on the river front. The substantial mass and bulk of the turbine hall currently remains in existence. The complete removal of the Tilbury B station will result in the removal of a prominent industrial building in the wider setting of Coalhouse Fort.

5.3.113 Whilst this will reduce the industrial character of Coalhouse Fort's wider setting, particularly in views from the parkland surrounding the Fort (see Figure 80, page 51), visibility of industrial structures and buildings in proximity to Tilbury Town will remain appreciable, including the large pylons and Anglian Water buildings (see Figure 78). In addition, it is noted that numerous other industrial uses and character define the river bank along this part of the Thames, including oil refinery tanks and large, hill-like landfill sites, aggregates storage and facilities, and other industry.

Assessment of Impact

5.3.114 The Proposals are likely to have an impact on the wider setting of Coalhouse Fort principally through potential visual effects of new buildings and structures, vessels, port-related activity and lighting. Other environmental effects that could impact upon setting, such as noise, vibration, dust and traffic, are less likely to impact the setting of New Tavern Fort, given its considerable distance from the Site.

5.3.115 Figure 78 (Viewpoint 54 of Appendix 9.F of the LVIA) and Figure 80 (Viewpoint 55 of Appendix 9.F of the LVIA) illustrate the potential visual impacts of the Proposals on Coalhouse Fort from the roof and landscape surrounding Coalhouse Fort, respectively. These wirelines show that the upper storeys of the Proposals are likely to be visible at a considerable distance from Coalhouse Fort, including the 100m high silo, berthed vessels and upper levels of the container storage and CMAT processing facilities. The majority of the Proposals are likely to be screened by the existing mature trees within the parkland surrounding Coalhouse Fort, however, further long distance views filtered by the trees are likely during the winter months. The Proposals will extend the existing industrial character of the north shore which is already appreciable in views from Coalhouse Fort. Whilst this will alter the wider setting of Coalhouse Fort it will not fundamentally change its character.

5.3.116 Furthermore, the Proposals are likely to be visible from Coalhouse Fort during the night due to the required lighting at Tilbury2, however, this will be visible in conjunction with the lighting at Gravesend and the existing Port of Tilbury in views upstream from Coalhouse and will thus not fundamentally change its setting.

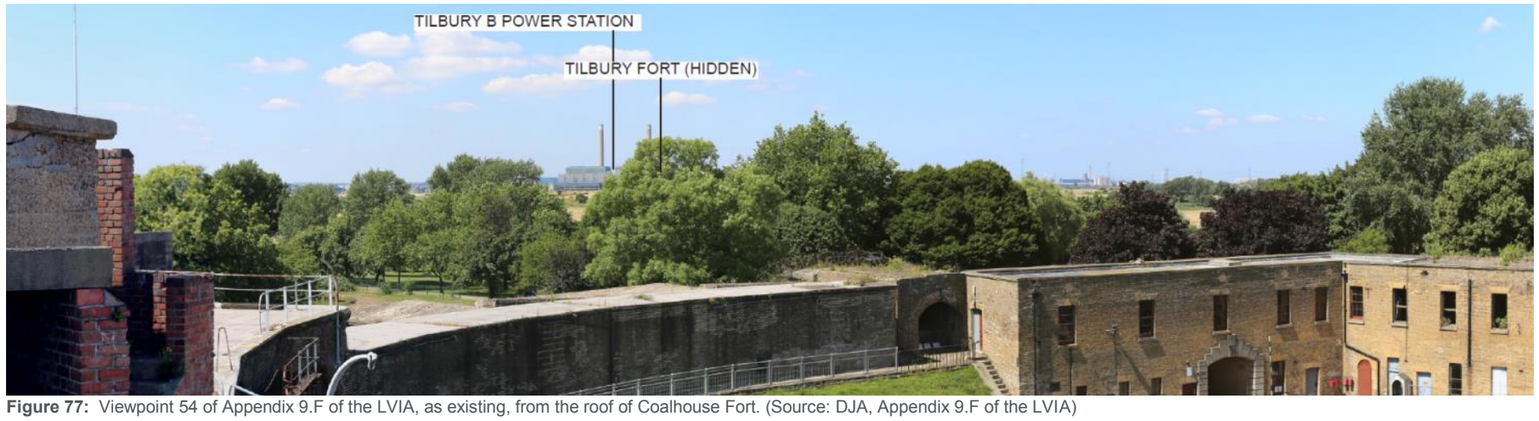

Figure 77: Viewpoint 54 of Appendix 9.F of the LVIA, as existing, from the roof of Coalhouse Fort. (Source: DJA, Appendix 9.F of the LVIA)

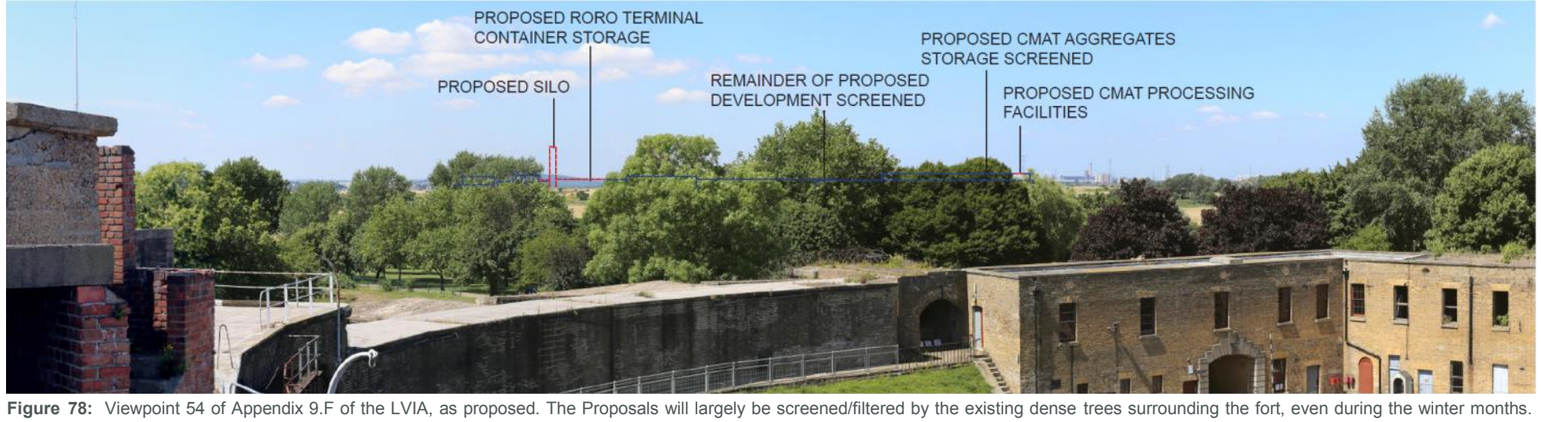

Figure 78: Viewpoint 54 of Appendix 9.F of the LVIA, as proposed. The Proposals will largely be screened/filtered by the existing dense trees surrounding the fort, even during the winter months. However, the 100m high silo and upper levels of the RoRo container storage will be visible at a considerable distance. (Source: DJA, Appendix 9.F of the LVIA)

5.3 ASSESSMENT OF HERITAGE ASSETS: SCHEDULED MONUMENTS

Figure 79: Viewpoint 55 of Appendix 9.F of the LVIA, as existing, from the landscape setting of Coalhouse Fort. Tilbury B and the pylons are visible thus indicating a wider industrial setting to the west of the Fort. It is noted that the chimneys were demolished on 28 September 2017. (Source: DJA, Appendix 9.F of the LVIA)

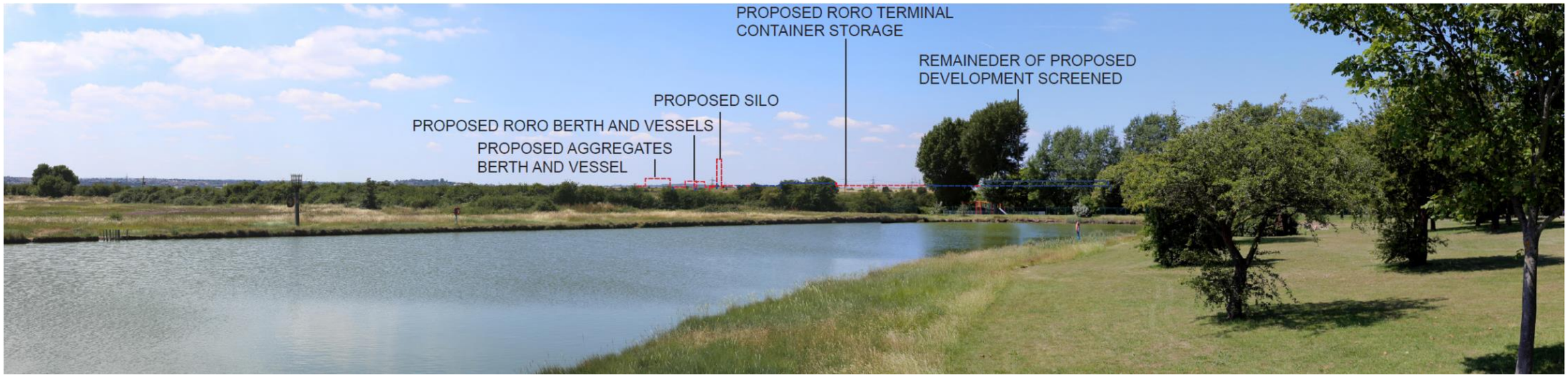

Figure 80: Viewpoint 55 of Appendix 9.F of the LVIA, as proposed. The 100m high silo and upper levels of the berthed vessels and upper levels of the RoRo container storage are likely to be visible in views from the parkland surrounding Coalhouse Fort. (Source: DJA, Appendix 9.F of the LVIA)

5.3.117 Visibility between Coalhouse Fort and Tilbury Fort is already unappreciable due to the low-lying nature of Tilbury Fort and the existing intervening built form and vegetation. As such, the Proposals will not impact upon any visual relationship between Coalhouse Fort and Tilbury Fort. The principal historic military sightlines that contribute towards the monument's significance are those with Cliffe Fort and Shornemead Fort, its contemporaries and to which is provided crossfire. These sightlines will remain unaffected by the Proposals and thus the principal outlook and setting of Coalhouse Fort will be preserved. Any visual impacts will thus be upon Coalhouse Fort's wider setting.

5.3.118 By virtue of the intervening proposed built form within the main Site, the proposed new infrastructure corridor is unlikely to be appreciable in views from Coalhouse Fort and thus this element of the Proposals is not considered to have an impact upon its setting.

5.3.119 **Overall, it is thus considered that the Proposals are likely to have potential minor visual impacts upon the wider setting of Coalhouse Fort through further industrialisation.** However, it is noted that Coalhouse Fort lies at a considerable distance from the Site and views towards the Proposals will be visible within the existing industrial built context. Furthermore, the key elements of Coalhouse Fort's setting which contribute towards its significance will remain unaffected by the Proposals. **As such, it is considered that the Proposals will have a negligible to neutral impact upon the significance of Coalhouse Fort.**

Cliffe Fort (NHLE no.: 1003403)

Description

5.3.120 Cliffe Fort is located on the southern bank of the River Thames at the point where the river bends and at a considerable distance to the east of the Site. The Scheduled Monument is a casemented coastal fort built in the 1860s as a consequence of the Royal Commission of 1859. It was built to provide crossfire with Coalhouse Fort on the opposite side of the river and was supported by Shornemead Fort.

5.3.121 Cliffe Fort incorporated the latest in fortification theory and technology and was one of the last casemated forts with iron shields to be completed. Despite some almost immediate alterations to the basement magazines, a lack of alteration in the twentieth century, including the incorporation of rooftop guns, has preserved a number of areas in the fort that reflect its late-nineteenth century use. The fort also contains one of the best preserved examples of the rare Brennan torpedo installations, including the remains of a unique rising observation tower.

Figure 81: Aerial view of Cliffe Fort looking south, showing its landside setting which is defined by marshland, Cliffe and Alpha Pools and an aggregates facility in close proximity to the Fort.

Figure 82: View towards the Site from the Saxon Shore Way which runs in close proximity to Cliffe Fort. Whilst Tilbury B is clearly visible, it is situated at a considerable distance from the fort and forms a removed part of its wider setting. The Site, at present, is unappreciable. (Source: DJA)

5.3.122 Cliffe Fort ceased to be a coastal battery on the recommendation of the 1906 Owen Committee report and was subsequently used for a variety of ancillary functions, such as a First World War examination battery and as a base for the Royal Naval Auxiliary Patrol service during the Second World War.

5.3.123 The Fort is in poor condition due to flooding, vandalism and collapse; it currently resides on the Heritage At Risk Register and is inaccessible to the public.

Significance

5.3.124 Cliffe Fort, along with its contemporaries Shornemead Fort and Coalhouse Fort, is the last of the coastal forts with casemated batteries and iron shields to be completed in the United Kingdom as a result of the recommendations of the 1860 Royal Commission. Unlike earlier forts it was built from the outset as a casemated work for the mounting of large calibre, 9-inch and above, Rifled Muzzle Loaders with dispersed ammunition stores in the basement connected to the gun floor above by winches and lift shafts.

5.3.125 Given its use for ancillary functions after it ceased from being a coastal battery, a large amount of the original nineteenth century fabric survives. A major element contributing to the Fort's significance is the survival of its Brennan torpedo installation which is one of the best preserved examples in the UK, including the remains of a unique rising observation tower. The other significant group of features is the Test Room, the battery store and control room for a section of moored submarine minefield to be laid in the Thames, in the event of war, from the 1870s onwards.

5.3.126 Cliffe Fort is thus of significance principally due to its high level of historic, aesthetic and evidential value.

Setting

5.3.127 The setting of Cliffe Fort is principally formed by the River Thames to which it was built to protect from attack. The surrounding nineteenth century coastal defences of Coalhouse Fort and Shornemead Fort also form an important part of Cliffe Fort's setting as these were all built in the 1860s as a result of the Royal Commission on the Defence of the UK. Coalhouse Fort in particular contributes towards its significance as it provided crossfire with Cliffe Fort.

5.3.128 Tilbury Fort and New Tavern Fort formed a secondary line of defence upon the establishment of Cliffe Fort, Coalhouse Fort and Shornemead Fort. As such, it is considered that Tilbury Fort and New Tavern Fort form part of the wider setting of Cliffe Fort

through providing an understanding of the historic development of the coastal defences on this part of the Thames. However, given that Cliffe Fort was not built to have crossfire with either Tilbury Fort or New Tavern Fort, these defences arguably contribute less towards the significance of Cliffe Fort than its contemporaries. Together the five coastal forts have considerable group value.

5.3.129 There is very limited inter-visibility between Cliffe Fort and Tilbury Fort; this is limited to extremely long distance views across the river and given the low-lying position of Tilbury Fort, it is almost entirely unappreciable without binoculars. Tilbury B is currently visible in these long distance views by virtue of its bulk, massing and height and provides a wider industrial context to the river. The large electricity pylons are also visible (see Figure 82, page 52). Whilst visibly prominent, Tilbury B does not impact upon key views to Coalhouse Fort given its considerable distance from the Fort.

5.3.130 Given its considerable distance from Cliffe Fort and its undeveloped nature, the Site is currently unappreciable in long distance views from Cliffe Fort and thus does not contribute towards understanding its significance.

5.3.131 The landside setting of Cliffe Fort is formed by open marshland, Alpha Pool and Cliffe Pools and an aggregates storage facility. These latter elements provide a neutral contribution towards the fort's setting whereas the historic marshland provides a partial understanding of Cliffe Fort's solidarity within the landscape, therefore in part contributing towards its significance.

Contribution to Significance

5.3.132 Overall, it is considered that the elements of the setting of Cliffe Fort that contributes to its significance include the River Thames, the inland marshland landscape surrounding the Fort and the surrounding coastal defences, in particular its contemporaries Coalhouse Fort (to which it was built for crossfire) and Shornemead Fort. The Tilbury2 Site forms part of the wider setting to Cliffe Fort but is not considered to contribute towards its significance.

Removal of Tilbury B

5.3.133 As noted, Tilbury B is due to be completely demolished by January 2019. On 28 September 2017 the 170m high (approx.) chimneys were demolished. The chimneys were slender, tall and therefore the most widely visible industrial features in the landscape within this area; their removal has therefore resulted in the loss of a substantial landmark feature on the river front. The substantial mass and bulk of the turbine hall currently remains in existence. The complete removal of the Tilbury B station will result in the removal of a prominent industrial building in the wider setting of Cliffe Fort.

5.3.134 Whilst this will reduce the industrial character of Cliffe Fort's wider setting, the large electricity pylons and long distance views towards the existing Port of Tilbury will remain appreciable, thus retaining an industrial character within the wider setting of the heritage asset. In addition, it is noted that numerous other industrial uses and character define the river bank along this part of the Thames, including oil refinery tanks and large, hill-like landfill sites, aggregates storage and facilities, and other industry.

Assessment of Impact

5.3.135 The Proposals are likely to have an impact on the wider setting of Cliffe Fort principally through the potential visual effects of new buildings and structures, vessels, port-related activity and lighting. Other environmental effects that could impact upon setting, such as noise, vibration, dust and traffic, are less likely to impact on the setting of Cliffe Fort, given its considerable distance from the Site.

5.3.136 Visual impacts are likely to form a distant element in views from Cliffe Fort and visibility is likely to be limited to the largest structures and buildings on the Site, given the considerable distance that the Fort lies from the Site. This is likely to include the 100m high silo which is likely to form a landmark on the river front and large vessels berthed at the extended jetty. The upper levels of the RoRo terminal warehouse, container storage and lighting masts may also be visible but at a considerable distance and are unlikely to be prominent.

5.3.137 Whilst the Proposals will introduce increased industrial activity to the wider setting of Cliffe Fort, this will be appreciable at a considerable distance from the heritage asset and will not adversely impact upon the way in which it is experienced. As such, whilst the Proposals will alter the wider setting of Cliffe Fort in appearance, they will not fundamentally change its character, as the River Thames in this area is already distinctly industrial in character.

5.3.138 By virtue of its considerable distance from Cliffe Fort the proposed new infrastructure corridor will not be visible and will therefore have no impact upon the setting of Cliffe Fort.

5.3.139 **Overall, it is thus considered that the Proposals are likely to have a negligible impact upon the wider setting of Cliffe Fort and a neutral impact upon its significance.**

Second World War anti-aircraft battery at Bowaters Farm (NHLE no.: 1012185)

Description

5.3.140 The Scheduled Monument is located to the northeast of the Site and is a Second World War anti-aircraft battery. The designation includes eight concrete gun emplacements with their connecting roads and vehicle parks, magazine and command post. The battery forms two groups of anti-aircraft artillery. The earlier group comprises four octagonal emplacements of concrete covered by asphalt, which measure some 16m across. Two entrances are located on opposite sides of the emplacements and earthen banks protect their outer sides. Inside the emplacements, the ten bolts which fixed the guns to the ground survive, as do the ammunition lockers against the walls. Between the middle two emplacements is a rectangular magazine building some 12m long with five compartments for shells with different fuses.

5.3.141 At the rear of the group is a larger building which formed a command post and which included height and range-finding equipment, although this no longer survives. This group housed 4.5 inch guns from mid-1940 to 1944. To the east is a second group of four emplacements, these examples comprising a deep circular pit lined with concrete, again measuring some 16m across, with an adjoining sunken engine room to the west or south-west. A gun turret, which no longer survives, capped the circular pit, and housed a 5.25 inch gun. This group superseded the 4.5 inch guns in 1944 and continued in use until after the war.

Significance

5.3.142 Anti-aircraft batteries are small clusters of artillery dedicated to firing at aerial targets. They were constructed from the First World War to the 1950s, after which time missile batteries took over from artillery as fixed weaponry while anti-aircraft artillery became increasingly mobile. They were constructed in large numbers in the immediate pre and early Second World War periods in response to the threat of air attack. Many took the form of simple sandbagged emplacements which left no substantial remains when they were abandoned. Others took the form of concrete emplacements arranged around a command post, while the latest types of battery were fully automatic and included radar-guidance equipment. Artillery of 3.7 inch and 4.5 inch and later 5.25 inch calibre was the usual armament of these batteries. Anti-aircraft batteries were widely distributed around England, with a marked concentration in the South East around London. As a result of development pressure in the South East few have survived.

5.3.143 The example at Bowaters Farm is the last surviving example of such batteries in this area of Essex. It forms the latest part of a series of important defensive installations at Coalhouse Point which illustrate the development of coastal defences from the Tudor period to the mid-twentieth century.

5.3.144 The Second World War anti-aircraft battery at Bowaters Farm is thus of significance principally due to its historic and evidential value

Setting

5.3.145 The monument lies within wooded surroundings which significantly limits views in all directions, thus resulting in an insular setting. Long distance glimpses of the remaining Tilbury B structures may be visible, particularly during the winter months, however, this does not impact upon the significance of the monument, which is principally derived from its historic and evidential value. The Site itself is situated at a considerable distance from the monument and shares no inter-visibility or historic relationship with it. As such, the Site does not contribute in any appreciable way to the significance of the anti-aircraft battery, or one's ability to understand its significance.

Figure 83: View of the semi-sunken control bunkers at the Second World War anti-aircraft battery at Bowaters Farm. (Source: subterraneanhistory.co.uk)

Assessment of Impact

5.3.146 Given the considerable distance between the Site and the anti-aircraft battery and the intervening vegetation which surrounds the monument, potential inter-visibility with the Proposals is likely to be negligible and limited to potential long distance glimpses of the tallest structures, such as the proposed silo. **However, this negligible alteration to the wider setting of the monument would not have any impact upon the Scheduled Monument's significance.**

5.4 ASSESSMENT OF HERITAGE ASSETS: CONSERVATION AREAS

5.4.1 The following provides an assessment of the significance of the surrounding conservation areas, including any contribution of their settings, and has been informed by the councils' adopted conservation area appraisals, where relevant, and supported by walkover surveys and professional judgement.

West Tilbury Conservation Area

Character and Appearance

5.4.2 West Tilbury Conservation Area was designated in 1991 and the West Tilbury Conservation Area Character Appraisal adopted by Thurrock Borough Council in March 2007. The Conservation Area is situated to the north of the Site on an escarpment and comprises two separate areas of development, one of which encompasses the historic core of the village, The Green, and the other to the east, centred around Low Street.

5.4.3 The Conservation Area includes a number of listed buildings, including the Grade II * listed Church of St James (NHLE no.: 1111541), Marshall's Cottages (an early fifteenth century hall house with crosswings, NHLE no.: 1337058), and numerous Grade II listed buildings. It also includes Scheduled earthworks near the Church of St James (NHLE no.: 1002199). The principal character and appearance of the Conservation Area is formed by the historic buildings grouped along Church Road and around The Green, providing evidence of the small historic settlement of West Tilbury and has a somewhat rural character.

Setting

5.4.4 Given its location on an escarpment to the north of the Site, there are long views to and from the former marshes to the south and west and from the north and east across the agricultural land. St James' church tower (Grade II*) and trees around the churchyard are an important silhouette and landmark from all directions, including views along Coopers Shaw Road to the south where the top of the church tower is visible above the trees.

5.4.5 Long views towards the south, including across the river to Gravesend, are particularly visible in locations along Rectory Road and Muckingford Road, although from Rectory Road views are considerably filtered by the tall vegetation and trees that border the southern side of the road. Vegetation along the southern side of Muckingford Road is less dense, enabling long distance views towards Gravesend on the southern side of the river, which is visible across the marshland to the south of the Conservation Area and the existing industrial uses on the northern bank of the river, including the existing pylons, Anglian Water Recycling Centre and, most notably, the substantial Tilbury B Power Station which currently partially remains. Given its position on an escarpment, there are long distance views across the river from the tower of the Grade II* St James' Church. The Site, Tilbury Fort and existing industrial uses in proximity to the Site are visible from the church tower, thus grounding both the listed building and the Conservation Area within a wider industrial built context associated with the River Thames.

Figure 84: View of St James' Church, West Tilbury, from across the marshland to the south of the listed building and conservation area, showing its elevated location.

Figure 85: View across The Green within West Tilbury Conservation Area.

5.4.6 The largely undeveloped land to the south of the Conservation Area provides a setting which contributes towards its rural character, however, this is appreciable within an existing wider and distant built context defined by industrial uses. The Site itself is visible in long distance views as forming undeveloped land on the river bank and surrounded by a variety of industrial uses. Whilst the Site therefore forms part of the Conservation Area's wider/extended setting, it is considered to form a neutral contribution towards its special character or appearance and to the setting of the Grade II* Church of St James.

Removal of Tilbury B

5.4.7 Whilst the complete removal of Tilbury B by January 2019 will remove the dominant mass and bulk of the remaining turbine hall from views from the Conservation Area, the wider industrial setting which characterises the river front will remain appreciable in long distance views from the Conservation Area. This will be due to visibility of the existing Port of Tilbury, the Anglian Water Recycling Centre, Stobart's site, the large electricity pylons and the industrial character of the river. In addition, it is noted that numerous other industrial uses and character define the river bank along this part of the Thames, including oil refinery tanks and large, hill-like landfill sites, aggregates storage and facilities, and other industry.

Assessment of Impact

5.4.8 Given the location of the Conservation Area on higher ground to the north of the Site, the Proposals are likely to be partially visible in long distance views from within and in proximity to the West Tilbury Conservation Area, in particular from the tower of the Grade II* St James' Church. Given the considerable distance between the Conservation Area and the listed buildings and scheduled monument included within it, long distance views are likely to be limited to the upper levels of the tallest buildings and structures within the main Tilbury2 Site, such as the 100m silo, lighting masts, CMAT processing facilities, RoRo container storages and large berthed vessels.

5.4 ASSESSMENT OF HERITAGE ASSETS: CONSERVATION AREAS

5.4.9 The 100m silo is likely to form a new landmark structure on the river front. Whilst the Proposals are thus likely to be partially eye-catching in some isolated long distance views from the Conservation Area and St James' Church, they will not fundamentally alter the wider setting of the Conservation Area which is already defined by industrial uses in proximity to the river and which are visible in long distance views from the Conservation Area. Given the elevated land on which the Conservation Area and Grade II* listed church are situated, the Proposals are unlikely to obscure or significantly impact on views across the river to Gravesend. Furthermore, any potential impacts of the Proposals will be limited to long distance visual impacts from tall structures and lighting; no effects are considered likely from other environmental factors such as noise, traffic, dust and vibration.

5.4.10 **Overall, its is considered that the Proposals will have a negligible to minor impact upon the wider setting of the Conservation Area** and the listed buildings and scheduled monument included within its boundary, in particular the Grade II* listed Church of St James, through introducing long distance views of new industrial development. However, due to the nature of the Proposals views towards Gravesend are likely to remain appreciable and the Proposals will be visible within the existing context of long distance views towards industrial development along the river front. As such it is considered that the Proposals will have an **overall neutral impact upon the character and appearance of the Conservation Area**.

Gravesend Riverside Conservation Area

Character and Appearance

5.4.11 Gravesend Riverside Conservation Area was first designated in 1980 and extended in 2009; it is supported by the Gravesend Riverside Conservation Area Character Appraisal, adopted by Gravesham Borough Council in 2009. The Conservation Area includes numerous Grade II listed buildings, the Scheduled Monuments of New Tavern Fort (including Milton Chantry) and Gravesend Blockhouse, and the Grade II* listed buildings of New Tavern Fort and Milton Chantry.

5.4.12 The Gravesend Riverside Conservation Area encompasses a long stretch of the Thames river frontage to the east of the town of Gravesend. The Conservation Area celebrates the river and the relationship that the people of the town have had with it for many centuries. The historic buildings within the Conservation Area track the earliest settlement in the Parish of Milton to the beginnings of the New Town that was part of the early 19th

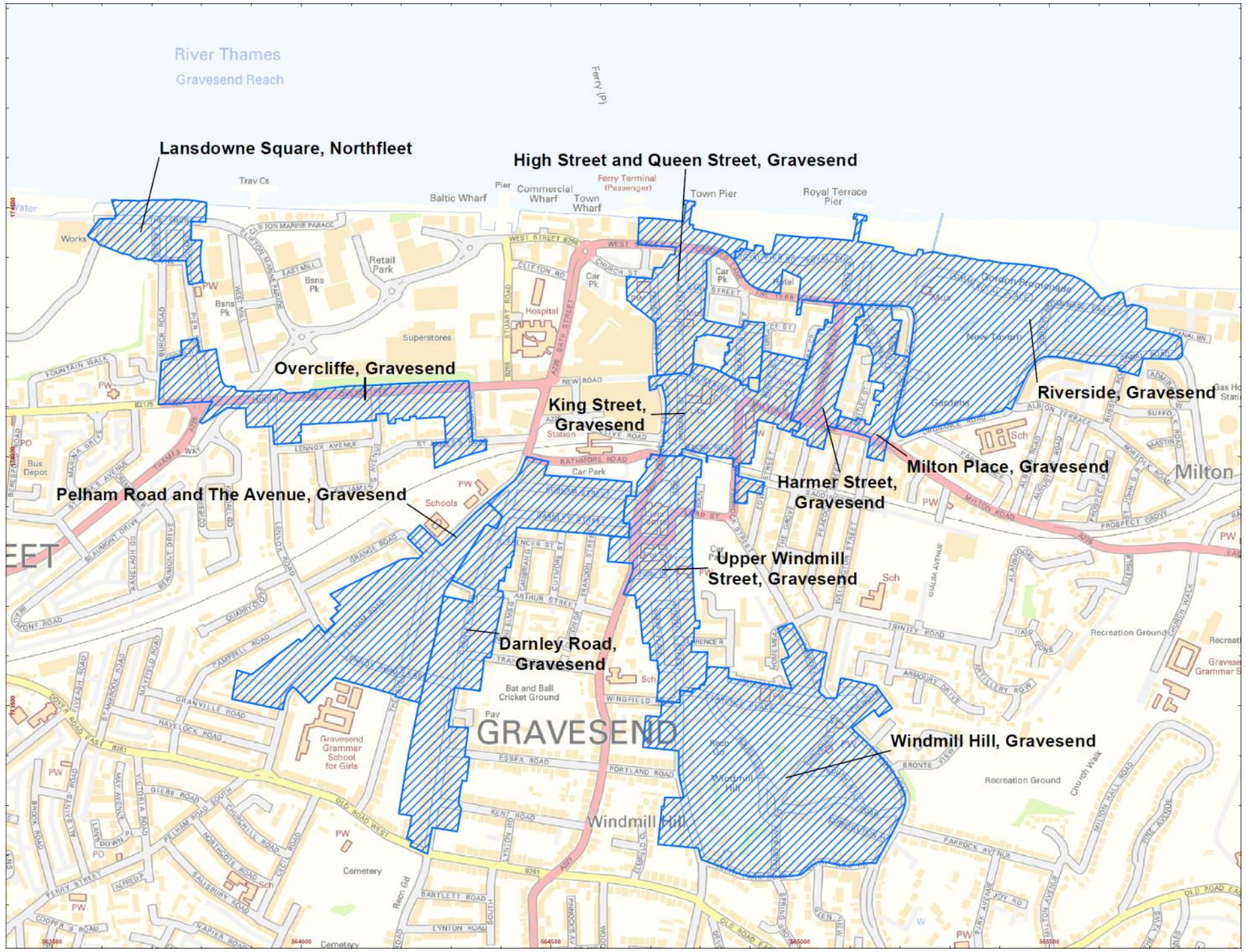

Figure 86: Detail map indicating the locations and boundaries of the conservation areas within Gravesend, as shown within Figure 38 on page 28. (Source: CgMs)

century expansion of Gravesend. From the modest beginnings of a hospital and religious order at Milton Chantry, through a period of serving the commercial and official activities in the wharves and piers close by, to an established military and naval centre, the riverside has grown.

5.4.13 The section between the two historic cores has, since the late-nineteenth century been provided for the enjoyment of the local people and its landscaped green open spaces have led to the area having a dominantly leisure based character. This character has extended to the Fort Gardens and the Canal Basin so that the primary characteristic is one of relaxation in a heritage setting close to the ancient thoroughfare and trading route of the River Thames. The wide open spaces and abundant trees, shrubs and flowers within the Conservation Area are as important as the panorama and historic uses of the waterway with which it connects.

5.4.14 The riverside location itself is instrumental in the development of the town of Gravesend and the views out mark the important role the area has played in international travel, trade and expansion for many centuries. Gravesend, Milton and Tilbury were key strategic positions close to the Thames estuary and the New Tavern Fort, located within the Conservation Area, is of national historic importance.

5.4.15 The promenade provides a clear connection with the river that has produced most of the town's prosperity and the positive features of the environment, such as generous open spaces and groups of mature trees that have encouraged the once declining industrial parts of the area to be regenerated into modern residential communities.

5.4.16 The western part of the Conservation Area includes the later nineteenth century houses along The Terrace, Royal Pier Road and Clarendon Road which were developed on the site of the former Terrace Gardens. Their more formal urban arrangement in rows with front gardens is typical for its time and marks them as later infill during a period when many of the remaining open spaces within the town were developed to cater for a rapidly growing population at the end of the nineteenth century.

5.4.17 Key focal points within the Conservation Area are the well maintained gardens and lake, the armaments on top of the fort ramparts, the Promenade, the Canal Basin and the piers reaching out into the river.

Setting

5.4.18 Given the location of the Conservation Area and its historic connection with the watercourse, the River Thames forms the principal setting to the Conservation Area and contributes considerably towards its special interest. The wide expanse of the river further enables views towards Tilbury on the northern bank and this therefore also forms part of the wider setting of the Conservation Area.

5.4.19 The principal positive views identified within the Conservation Area Appraisal and that are most relevant to this assessment include:

- From the top of the fort across the river to Tilbury;
- Along the Promenade and the river in both directions;
- From River Thames/Essex shore towards The Promenade/New Tavern Fort; and
- From open space on the east side of the Canal Basin across marina to the river.

5.4.20 The expansive northerly views over the river from innumerable locations in the Conservation Area, in particular those listed above, draw the eye. In views along the riverfront, the settlement and the river are appreciable as interconnected. The river clearly forms a historically significant aspect of the settlement's development and one's perception of the area is influenced to varying degrees by the characteristics of both sides of the river.

5.4.21 Within the key views mentioned above the Tilbury2 Site and surrounding development on the north side of the river are visible. This includes views towards the existing Port of Tilbury and wind turbines to the west, Tilbury Cruise Terminal (the historic Grade II* Riverside Station), Tilbury Fort (although this is partially screened by the substantial late-twentieth century sea wall on the north side of the river), the Anglia Water site, the Tilbury2 Site itself including the existing jetty, and the substantial Tilbury B Power Station which forms a dominant feature on the river bank. These uses thus form part of the wider setting to the Conservation Area and the listed buildings and Scheduled Monuments contained within its boundary, grounding it within a wider industrial built context.

<u>Removal of Tilbury B</u>

5.4.22 As noted, Tilbury B is due to be completely demolished by January 2019. On 28 September 2017 the 170m high (approx.) chimneys were demolished. The chimneys were slender, tall and therefore the most widely visible industrial features in the landscape within this area; their removal has therefore resulted in the loss of a substantial landmark feature on the river front. The complete removal of the Tilbury B station will result in the removal of a prominent industrial building which forms part of the setting of the Gravesend Riverside Conservation Area and which is dominant in views across the river. Whilst the complete removal of Tilbury B will likely have a beneficial impact on views from the Conservation Area, the established industrial character of the northern river bank, formed by the River, the existing Port to the west, the Anglian Water Recycling Centre and visible large electricity pylons directly opposite The Promenade, will remain visible and thus continue to provide an industrial character to the heritage asset's wider setting. In addition, it is noted that numerous other industrial uses and character define the river

Figure 87: View north towards Tilbury from New Tavern Fort; this forms a key positive view within the Gravesend Riverside Conservation Area. Given the elevated position, there is a better view towards Tilbury Fort from here, however, the significant sea wall on the north side of the river still limits views to an extent. Tilbury B and the Anglian Water Recycling Centre are clearly visible, providing a wider industrial setting to the Conservation Area. It is noted that the complete demolition of Tilbury B is due to be completed by January 2019. (Source: CgMs)

bank along this part of the Thames, including oil refinery tanks and large, hill-like landfill sites, aggregates storage and facilities, and other industry.

Assessment of Impact

5.4.23 Given the Conservation Area's location on the riverfront and the key contribution that the river makes towards its special character and appearance, the Proposals are likely to have an impact upon the setting of the Conservation Area as the location of the Tilbury2 Site on the river front of the north bank means that they will be visible in key views from the Conservation Area. The principal potential impacts of the Proposals are thus likely to be visual and views will largely be towards the buildings and structures located in proximity to the river front, including the 100m silo, extended jetty and stationary vessels, and the upper levels of container stacks, the RoRo terminal warehouse, the CMAT aggregate stockpiles and plant facilities to the north and lighting masts. Given the distance between the Site and the Conservation Area, other environmental impacts that could impact upon the setting of the Conservation Area, including noise, traffic, air quality and vibration, are less likely to result in any harmful impacts.

5.4.24 These elements of the Proposal are likely to be most visible in views from The Promenade and the top of New Tavern Fort; long distance views towards the new infrastructure corridor might also be possible from the elevated ground of New Tavern Fort. Figure 71 (page 46; Viewpoint 44 of Appendix 9.F of the LVIA) demonstrates the likely potential visual impacts of the Proposals from New Tavern Fort. Figure 89 (Viewpoint 45 of Appendix 9.F of the LVIA) illustrates the likely potential visual impacts of the Proposals from The Promenade. These wireline images illustrate that the proposed 100m high silo, RoRo and CMAT berths and vessels, and upper levels of the RoRo terminal warehouse and container storage are likely to be the most visible elements of the scheme.

5.4.25 Whilst the Proposals will alter the wider setting of the Conservation Area and key views from it towards Tilbury by introducing increased industrial uses, buildings, structures and lighting to key views from within the Conservation Area, they will be visible within an existing appreciable industrial built context which already characterises views north out of the Conservation Area. This is shown within Figure 89 where the existing Port of Tilbury is visible in views from the Promenade, including the four landmark wind turbines. Also visible is the tall electricity pylons to the east of the Tilbury2 Site and the Anglian Water Recycling Centre to the west. As such, whilst these views will be altered in appearance, their overall industrial character will not be fundamentally changed. Whilst the proposed silo is likely to form a new landmark by virtue of its height, this will be visible as a slender addition to the skyline, similarly to the existing wind turbines to the west. Whilst the Proposals will be visually and physically closer to Tilbury Fort in views from the Conservation Area, in particular the berthed RoRo vessels, views of the seventeenth century fort will remain broadly unaltered and the crucial historic sightlines between Tilbury Fort and New Tavern Fort retained, as discussed in detail in the previous section. Ultimately, views towards Tilbury Fort will remain and it will be visible as a low lying structure which is separate from the industrial port uses to the west and east.

5.4.26 **Consequently, the Proposals are likely to have a potential minor to moderate impact upon the character and appearance of the Conservation Area through altering the appearance of a number of key views north across the river which contribute towards the Conservation Area's significance.** Whilst the Proposals will lead to an increase in industrial activity and character within the wider setting of the Conservation Area, they will not fundamentally alter the existing wider context in which the Conservation is experienced. **As such, the Proposals are likely to result in a negligible to low level of less than substantial harm to the significance of the Conservation Area.**

Figure 88: Viewpoint 45 of Appendix 9.F of the LVIA, as existing. View across the river towards Tilbury from The Promenade within the Gravesend Riverside Conservation Area. Views from The Promenade form key positive views within the Conservation Area. The industrial uses of the north river bank are clearly visible: the Port of Tilbury is visible to the left and the Anglian Water Recycling Centre and dominant Tilbury B (due to be demolished) to the right. Near the centre is Tilbury Fort, however, views towards Tilbury Fort are somewhat reduced due to the substantial late-twentieth century sea wall on the north side of the river. (Source: DJA, Appendix 9.F)

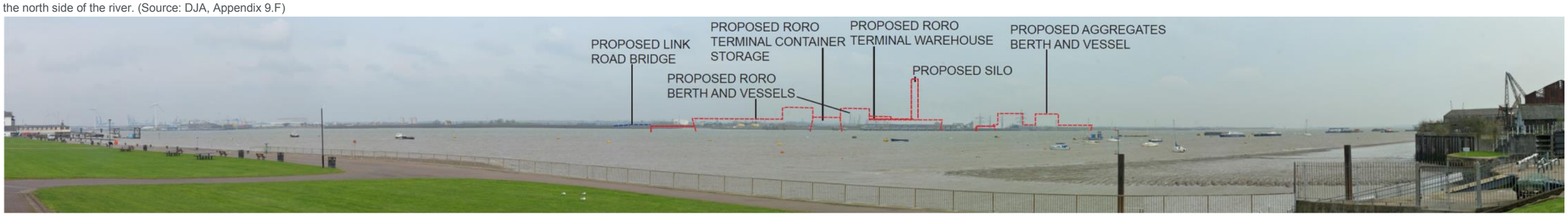

Figure 89: Viewpoint 45 of Appendix 9.F of the LVIA, as proposed. Berthed vessels and the 100m high silo will be the most visible elements in views from The Promenade within the Gravesend Riverside Conservation Area, with glimpses of the upper levels of the CMAT processing facilities, RoRo container storage and warehouse. (Source: DJA, Appendix 9.F)

5.4 ASSESSMENT OF HERITAGE ASSETS: CONSERVATION AREAS

High Street and Queen Street Conservation Area

Character and Appearance

5.4.27 The High Street and Queen Street Conservation Area originally formed two separate Conservation Areas: High Street was first designated in 1970 and Queen Street was first designated in 1990; it is supported by the High Street and Queen Street Conservation Area Character Appraisal, adopted by Gravesham Borough Council in 2009. The Conservation Area includes a number of Grade II listed buildings and five Grade II* listed buildings, including the Church of St George, the Town Pier, 79 High Street, 80 High Street and the Town Hall.

5.4.28 The High Street and Queen Street Conservation Area lies in the historic centre of the town of Gravesend. The Conservation Area extends north and east from High Street to include the Town Pier (Grade II*) and the abutting riverside areas, and recognises the important historic link between the commercial heart of Gravesend and the maritime activities along the Thames. The High Street has a predominantly Victorian and commercial character, which contrasts with the openness of the river frontage.

5.4.29 High Street was established by early medieval times due to its position next to the river landing stage (later developed into the pier). This street became the hub of the settlement for many centuries and its special character is defined by its long straight path rising from the riverside with tall, tightly packed historic buildings lining either side.

Setting

5.4.30 Given the location of the Conservation Area and its historic connection with the watercourse, the River Thames forms part of the setting of Conservation Area and contributes towards its special interest. The wide expanse of the river further enables views towards Tilbury on the northern bank and this therefore also forms part of the wider setting of the Conservation Area.

5.4.31 Within the Conservation Area, there are extensive views from both High Street and the riverside out over the pier and river. The principal positive views identified within the Conservation Area Appraisal and that are most relevant to this assessment include:

- Along High Street in both directions, particularly towards the Town Pier and river;
- From St Andrews Gardens to the river and Tilbury;
- From Elizabeth Gardens: the river and Tilbury;
- To St George's Church from the River Thames;

Figure 90: View towards the High Street and Queen Street Conservation Area from the river. This is a key positive view into the Conservation Area. The Proposals will have no impact upon this view. (Source: CgMs)

Figure 91: Long distance view along the enclosed High Street towards the Essex countryside to the north of the river. The Site is not visible in these long distance views. (Source: CgMs)

- From Royal Pier Road to the river and Tilbury; and
- From the River Thames and Essex shore to the Town Pier, St. George's Spire and into the Conservation Area in general.

5.4.32 Given the enclosed character of High Street, there are limited views towards the north bank of the river. The affordable views are from the higher ground of the street and are channelled specifically to an area of countryside to the west of the Site itself. The Site therefore is not visible in views along High Street looking north.

5.4.33 Views towards Tilbury and the Tilbury2 Site are most prominent from St Andrews Gardens and the Town Pier (Grade II*) where there are expansive views across the Thames. The Tilbury2 Site is seen here within the surrounding existing built industrial character of the northern river bank, defined by the substantial Tilbury B Power Station, the Anglian Water Recycling Centre and large electricity pylons, and to the west of Tilbury Fort by the substantial existing Port of Tilbury and four large wind turbines. The Tilbury2 Site and riverside uses located on the northern bank of the river thus form part of the wider setting of the Conservation Area, however, it is noted that, overall, the whole character of the High Street and Queen Street Conservation Area is influenced to a lesser degree by the river than the Gravesend Riverside Conservation Area; within the former it is the historic commercial character of the High Street and Queen Street that are the defining characteristics.

Removal of Tilbury B

5.4.34 As noted, Tilbury B is due to be completely demolished by January 2019. On 28 September 2017 the 170m high (approx.) chimneys were demolished. The chimneys were slender, tall and therefore the most widely visible industrial features in the landscape within this area; their removal has therefore resulted in the loss of a substantial landmark feature on the river front. The complete removal of the Tilbury B station will result in the removal of a prominent industrial building which forms part of the wider setting of the High Street and Queen Street Conservation Area and which is dominant in views across the river. Whilst the complete removal of Tilbury B will likely have a beneficial impact on views from the Conservation Area, the established industrial character of the northern river bank, formed by the River, the existing Port to the west, the Anglian Water Recycling Centre and large electricity pylons, will remain visible and thus continue to provide an industrial character to the heritage asset's wider setting. In addition, it is noted that numerous other industrial uses and character define the river bank along this part of the Thames, including oil refinery tanks and large, hill-like landfill sites, aggregates storage and facilities, and other industry.

5.4 ASSESSMENT OF HERITAGE ASSETS: CONSERVATION AREAS

Assessment of Impact

5.4.35 Given the Conservation Area's location on the riverfront and the existing key positive views across the river to Tilbury, the Proposals are likely to impact upon the wider setting of the Conservation Area as the location of the Tilbury2 Site on the river front of the north bank means that they will be visible in key views from the Conservation Area.

5.4.36 The principal potential impacts of the Proposals are thus likely to be visual and views will largely be towards the buildings and structures located in proximity to the river front, including the 100m silo, large vessels berthed at the extended jetty, and the upper levels of container stacks, the RoRo terminal warehouse, the CMAT aggregate stockpiles and plant facilities to the north and lighting masts. Given the distance between the Tilbury2 Site and the Conservation Area, other environmental impacts that could impact upon the setting of the Conservation Area, including noise, traffic, air quality and vibration, are less likely to result in any significant effects.

5.4.37 These visual elements of the Proposal are likely to be most prominent in views from St Andrew's Gardens and the Town Pier (Grade II*). Long distance views towards the new infrastructure corridor are less likely, given the low-lying nature of the land and intervening Tilbury Fort. Figure 93 (Viewpoint 39 of Appendix 9.F of the LVIA) illustrates that the visual impacts of the Proposals upon the setting of the High Street and Queens Street Conservation Area will be similar to the impacts upon the Gravesend Riverside Conservation Area. The berthed vessels and 100m high silo will form the most visible elements of the Proposals; the upper levels of the CMAT processing plant and RoRo container storage are also likely to be visible. Furthermore, the Proposals are likely to result in considerable increases in lighting in views across the river.

5.4.38 Whilst the Proposals will alter the wider setting of the Conservation Area and key views across the river, they will be appreciable within the existing industrial built context which already defines views north out of the Conservation Area in proximity to the river front, formed by the existing Port of Tilbury, the Anglian Water Recycling Centre and large electricity pylons. As such, whilst these views will be altered in appearance, their overall existing industrial character will not be fundamentally changed. Whilst the proposed silo is likely to form a new landmark by virtue of its height, this will be visible as a slender addition to the skyline. Whilst the Proposals will be closer to Tilbury Fort in views from the Conservation Area, views of the seventeenth century fort will remain visible within an extended industrial context and, it is important to note, these views are already somewhat limited by the existing late-twentieth century sea wall on the north side of the river.

5.4.39 The key positive views from the River Thames and Tilbury towards the Conservation Area, including views of St George's and the Town Pier will remain unaffected. The principal and most pleasing views towards the Conservation Area are from the landing stage of the Grade II* listed Riverside Station in Tilbury and on the passenger ferry which runs from here to the Town Pier on the southern side. The Proposals will be visible in oblique views but will not fundamentally impact upon the key views directly towards the Conservation Area. Importantly, where visible, the Proposals will be understood within the wider existing built industrial context of the area.

Figure 92: Viewpoint 39 of Appendix 9.F of the LVIA, as existing. View north across the river to Tilbury from St Andrew's Gardens within the High Street and Queen Street Conservation Area. The industrial uses of the northern river bank are clearly visible, including Tilbury B, the Anglian Water Recycling Centre and large structures and buildings at the Port of Tilbury (left). Whilst there are views towards Tilbury Fort, these are somewhat reduced by the substantial sea wall on the north side of the river. It is noted that the Tilbury B chimneys were demolished in September 2017. (Source: DJA, Appendix 9.F)

Figure 93: Viewpoint 39 of Appendix 9.F of the LVIA, as proposed. The berthed vessels, 100m high silo and upper levels of the RoRo container storage and CMAT facilities are likely to be visible in views from the riverfront within the High Street and Queen Street Conservation Area. (Source: DJA, Appendix 9.F)

5.4.40 **Consequently, the Proposals are likely to have a potential minor to moderate impact upon the character and appearance of the Conservation Area through altering the appearance of a number of key views north across the river which contribute towards the Conservation Area's significance, further industrialising the character of the northern river bank.** Whilst the Proposals will lead to an increase in industrial activity within the wider setting of the Conservation Area, they will not fundamentally change the existing character in which the Conservation Area is experienced. Furthermore, the Conservation Area's principal character and appearance which is defined by the historic commercial character of High Street and Queen Street will remain unaffected by the Proposals. **As such, the Proposals are likely to result in a negligible to low level of less than substantial harm to the significance of the Conservation Area.**

Kings Street Conservation Area

Character and Appearance

5.4.41 Kings Street Conservation Area was first designated in 1980 and extended in 1998, 2001 and 2009; it is supported by the Kings Street Conservation Area Character Appraisal, adopted by Gravesham Borough Council in 2009. The Conservation Area includes numerous Grade II listed buildings.

5.4.42 The King Street Conservation Area encompasses much of the eighteenth and nineteenth century commercial expansion of Gravesend. It is focused on the central east-west highway of New Road, King Street and Milton Road that was firmly established when New Road was laid in 1801. The streets are lined with commercial buildings, most of them ground floor shops and accommodation above, interspersed with civic buildings and some residential houses.

5.4.43 King Street itself is a broad shopping street with two, three and four storey buildings on either side in continuous rows. The mix of nineteenth and twentieth century buildings have a range of styles and heights but retain a solid frontage that presents a firm enclosure to this wide busy shopping street. The Conservation Area has a rich variety of architecture and the appearance of the buildings is mixed, although there are many key historic buildings, such as the County Court and some nineteenth century banks and inns remaining. The mixture of shopfronts and building styles is accommodated within a spacious street scene, particularly in King Street, that has enjoyed varying degrees of regeneration to promote a cohesive character and quality design.

Setting

5.4.44 The setting of Kings Street Conservation Area is principally defined by the surrounding urban townscape. This includes large surface car parks to the south and Gravesend Civic Centre, a large multi-storey car park and modern shopping centre to the west, the High Street, Queen Street and the River Thames to the north, and the New Town of Gravesend with further commercial and residential streets. The surrounding conservation areas contribute positively to the setting of Kings Street Conservation Area.

5.4.45 There are very few visual connections with the land on the north side of the river and the Tilbury2 Site is not appreciable from within the Conservation Area. As such, it is considered that the Site does not form part of the wider setting of the Conservation Area or the listed buildings contained within its boundary.

Removal of Tilbury B

5.4.46 At present, Tilbury B is almost entirely unappreciable from Kings Street Conservation Area, particularly since the removal of the twin chimneys in September 2017. As such, its complete removal by January 2019 will have little to no impact on the wider setting of the Conservation Area.

Assessment of Impact

5.4.47 Given the above assessment, it is unlikely that the Proposals will be appreciable from within the Conservation Area or form part of its wider setting. **As such, it is considered likely that the Proposals will have no impact upon the settings or significance of the Kings Street Conservation Area or the listed buildings included within its boundary.**

Harmer Street Conservation Area

Character and Appearance

5.4.48 Harmer Street Conservation Area was first designated in 1970 and extended in 1990 and 2009; it is supported by the Harmer Street Conservation Area Character Appraisal, adopted by Gravesham Borough Council in 2009. Almost all of the buildings included within the Conservation Area are Grade II listed buildings.

5.4.49 The Harmer Street Conservation Area is centred on the buildings which form a planned development of 1840. Harmer Street is a prestigious development of four storey terraced townhouses that was built on a newly created road and to overlook the River Thames. The architect, A.H. Wilds, created a classical design with regular placement of windows and doors that extend along the road in a visually pleasing vista. The development was the beginning of an enterprise to build a "New Town" in the largely undeveloped Milton-next-Gravesend next to the crowded town and wharf area. The Conservation Area retains much of its prestigious nineteenth century character. The Conservation Area designation acknowledges this extant collection of architecture from one of the most prosperous periods in Gravesend's history which in extent and coherence is unmatched elsewhere in town.

Setting

5.4.50 The setting of the Harmer Street Conservation Area is principally defined by the surrounding urban townscape, much of which is designated as conservations areas. The Conservation Area is surrounded by a number of historic roads with a variety of historic and modern development.

5.4.51 Historically, there were views across the former Royal Terrace Gardens, which once occupied the area from The Terrace down to the river bank. However, these views have long been inhibited by terraced houses and the Port of London Authority buildings, largely preventing long views across the river. A long distance glimpse towards the Essex countryside, however, does remain visible and in the direction of the Tilbury2 Site. This channelled vista includes a view of one of the large industrial buildings included within Anglian Water Recycling Centre, thus introducing a long distance industrial character to the view. The Tilbury2 Site therefore forms a small part of the wider setting of the Conservation Area through its partial distant visibility within this key view.

Removal of Tilbury B

5.4.52 At present, Tilbury B is almost entirely unappreciable from Harmer Street Conservation Area, particularly since the removal of the twin chimneys in September 2017. As such, its complete removal by January 2019 will have little to no impact on the wider setting of the Conservation Area.

Assessment of Impact

5.4.53 Limited long distance views of the Proposals are likely to be visible from within the Conservation Area. These are likely to principally be restricted to the vista along Harmer Street. This view already incudes one of the large buildings within the Anglian Water Recycling Centre and thus there is an existing distant industrial context. Visibility of the Proposals is likely to be limited to the upper levels of the CMAT processing facilities, if visible at all. It is thus likely that the Proposals might add a further industrial 'layer' to this long distance view, however, they are unlikely to

completely obscure any views of the Essex countryside beyond and thus a partial green backdrop will be retained.

5.4.54 Whilst the Proposals could potentially somewhat alter the appearance of this view, they are unlikely to fundamentally change its character. Whilst the view along Harmer Street is a positive feature within the Conservation Area, the special character and appearance is principally defined by the listed buildings themselves, their relationship with each other and the layout of the streets. **As such, the Proposals are considered likely to have an overall negligible impact upon the wider setting of the Conservation Area, resulting in an overall neutral impact upon its significance.**

Milton Place Conservation Area

Character and Appearance

5.4.55 Milton Place Conservation Area was first designated in 1990 and extended in 2001; it is supported by the Milton Place Conservation Area Character Appraisal, adopted by Gravesham Borough Council in 2009. The Conservation Area includes a number of Grade II listed buildings.

5.4.56 The Milton Place Conservation Area lies to the east of the historic centre of Gravesend. Milton Place itself leads north from the junction of Milton Road and Ordnance Road towards Milton Chantry and the New Tavern Fort, major surviving pieces of Gravesend's historic defence heritage by the Thames riverside. The designation includes some of the shopping parades on the busy Milton Road.

5.4.57 Milton Place was laid out in the early nineteenth century across early footpaths and farmland tracks that surrounded the Gravesend fortifications. It connects with The Terrace, which formed the first eastern expansion of Gravesend in the 1790s and led the way to the creation of the New Town. From the 1820s the Milton Place properties were built as desirable residences with extensive views across the Kent countryside towards Cobham and Gravesend Reach. Milton Place retains many of these fine early and mid-nineteenth century houses with interesting Italianate and classical architectural features and proportions.

5.4.58 East Terrace follows a winding path from Milton Place to the north-west to The Terrace, which connects the New Tavern Fort and central Gravesend. East Terrace features an interesting mix of historic buildings with some modern development inserted between and generally has a tighter built form than Milton Place.

5.4.59 The combination of tall prestigious buildings and modest terraced houses on varying building lines, and of wide open spaces close

Figure 94: View north along Harmer Street towards Tilbury on the opposite side of the river. This view is likely to include views of the taller elements of the Proposals within the northern section of the Site. Existing industrial structures are already visible within this view. (Source: CgMs)

Figure 95: View of a terrace of historic buildings included on Milton Place, adjacent to a poor quality late-twentieth century 9-storey residential slab block. (Source: CgMs)

to tightly packed urban areas is indicative of the Conservation Area's history as nineteenth century development at the former rural edge of Gravesend. The mixture of styles and forms creates an exciting architectural juxtaposition that in a few places is let down by buildings that have been heavily altered or less successful twentieth century additions to the street scene.

Setting

5.4.60 The immediate surroundings of the Conservation Area are urban townscape, historic fortifications and formal public gardens, and these are largely designated as separate conservation areas. Its setting is formed by a variety of historic and modern development within a largely surviving historic street layout. The River Thames forms part of the wider setting to the Conservation Area.

5.4.61 The Conservation Area overlooks the Thames to the north and there are a number of views from within the Conservation Area across the river to Tilbury. These views are generally channelled along streets rather than wide views across the river. The Tilbury2 Site is partially visible within these views, although it is not prominent at present due to its undeveloped nature. However, long views of the surrounding industrial built context are visible, including the structures at Anglian Water and the Tilbury B Power Station which forms a dominant landmark on the northern river bank. The Tilbury2 Site is thus considered to form part of the wider setting of the Conservation Area but does not form a significant contribution towards its special interest.

<u>Removal of Tilbury B</u>

5.4.62 As noted, Tilbury B is due to be completely demolished by January 2019. On 28 September 2017 the 170m high (approx.) chimneys were demolished. The chimneys were slender, tall and therefore the most widely visible industrial features in the landscape within this area; their removal has therefore resulted in the loss of a substantial landmark feature on the river front. The complete removal of the Tilbury B station will result in the removal of a prominent industrial building which forms part of the wider setting of the Milton Place Conservation Area and which is dominant in views across the river. Whilst this is likely to have a beneficial impact on views from the Conservation Area, the established industrial character of the northern river bank, formed by the River, the existing Port to the west, the Anglian Water Recycling Centre and large electricity pylons, will remain visible and thus continue to provide an industrial character to the heritage asset's wider setting. In addition, it is noted that numerous other industrial uses and character define the river bank along this part of the Thames, including oil refinery tanks and large, hill-like landfill sites, aggregates storage and facilities, and other industry.

5.4 ASSESSMENT OF HERITAGE ASSETS: CONSERVATION AREAS

Assessment of Impact

5.4.63 Long distance views of the Proposals are likely to be visible from within the Conservation Area. Visibility is likely to be limited to glimpsed views of the uses and structures associated with the riverside, including berthed vessels at the extended jetty, the 100m silo and the upper levels of other buildings and structures. Whilst the Proposals will form the largest structures across the river within these views and stationary vessels are likely to attract the eye, these will be appreciable within the existing industrial built context which characterises the northern bank of this area of the river and is provided by the Anglian Water Recycling Centre and large electricity pylons. Furthermore, frequent shipping movements which include large vessels associated with the existing Port of Tilbury and cruise liners are already visible in views from the Conservation Area.

5.5.64 Therefore, whilst the Proposals are likely to alter the wider setting of the Conservation Area to an extent, they will not fundamentally change the character of its setting or harm any key or intended views. **As such, the Proposals are likely to have an overall negligible impact upon the setting of the Conservation Area and result in a neutral effect upon its significance.** In addition, whilst the Proposals may result in the alteration of the wider settings to the listed buildings contained within the Conservation Area, given their set-back from the river frontage, surrounding built form, limited visibility across the river and the existing industrial character of the northern river bank, the Proposals are unlikely to have an adverse impact upon their significance.

Windmill Hill Conservation Area

Character and Appearance

5.4.65 Windmill Hill Conservation Area was first designated in 1980 and extended in 2001; it is supported by the Windmill Hill Conservation Area Character Appraisal, adopted by Gravesham Borough Council in 2009. The Site is situated at a considerable distance to the north of the Conservation Area. The Conservation Area includes a number of Grade II listed buildings.

5.4.66 Windmill Hill has been an observation point and the location for warning beacons since at least the fourteenth century. The area lay outside the town of Gravesend and was rural in character, with activities such as flour milling taking place on the hill until the middle of the nineteenth century. With the growth in Gravesend as a resort from the late eighteenth century, Windmill Hill became a visitor attraction and the area developed to serve this, and the southerly expanding town through the nineteenth century. Windmill Hill owes its name to the windmills built upon its summit at various times from the fourteenth century onwards; although no windmills survive today one is visible in an eighteenth century print as seen within Figure 16 (page 14).

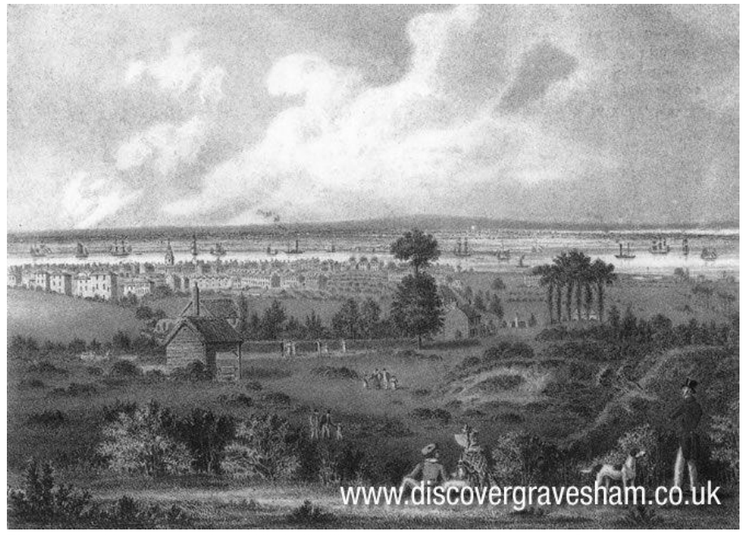

Figure 96: Historic view from Windmill Hill c.1825 looking north across Gravesend town and the River Thames towards Essex. (Source: discovergravesham.co.uk)

Figure 97: View north along Shrubbery Road within the Conservation Area. The 170m high twin chimneys of Tilbury B are visible in the background beyond the terrace of listed buildings, indicating the broad location of the Site and the River Thames. (Source: CgMs)

5.4.67 The Windmill Hill Conservation Area lies to the south of the historic centre of Gravesend in Kent. The lower slopes of the hill are circuited by two of the historic arterial routes (Windmill Street and Parrock Road/Parrock Street) into the riverside town from the London to Rochester road. The character of the Conservation Area is of a residential suburb, containing a large number of buildings of architectural and historic interest.

5.4.68 The topography has shaped the street pattern, with narrow lanes meandering up the steep slopes of the hill, and buildings arranged to take full effect of attractive views, both of Windmill Hill, across the countryside of Kent, of the River Thames, and across the water to Essex. Windmill Hill Gardens and Windmill Hill itself are significant green spaces within the town, and cater to various leisure and recreational uses.

Setting

5.4.69 Within the Conservation Area extensive views are obtainable from the top of Windmill Hill. These are most far reaching to the north, where the view extends panoramically across the town, the River Thames and to the county of Essex on the far river bank. The substantial mass and bulk of the Tilbury B turbine hall are particularly prominent, as were the twin chimneys until recently (demolished in September 2017). The Water Gate and some of the ramparts of Tilbury Fort are visible, however, the Scheduled Monument is partially screened behind the existing and substantial late-twentieth century sea wall on the north side of the river. The existing Port of Tilbury to the west of Tilbury Fort is also visible, further increasing the industrial character of the northern river bank in elevated views from Windmill Hill. Views north across the town and river to Essex on the opposite river bank are identified within the Conservation Area Appraisal as forming principal positive views and these are principally obtained from the top of Windmill Hill public park.

5.4.70 Given the role that far reaching vistas of the north bank plays in one's experience of the Conservation Area, the Site can be considered to form part of its wider setting, as the Conservation Area is visited and valued specifically for its panoramic, northerly views, and this can be described as a communal value unique to the area.

Removal of Tilbury B

5.4.71 As noted, Tilbury B is due to be completely demolished by January 2019. On 28 September 2017 the 170m high (approx.) chimneys were demolished. The chimneys were slender, tall and therefore the most widely visible industrial features in the

landscape within this area; their removal has therefore resulted in the loss of a substantial landmark feature on the river front. The complete removal of the Tilbury B station will result in the removal of a substantial industrial building which forms part of the setting of the Windmill Hill Conservation Area and which is particularly prominent in key views from Windmill Hill. Whilst the removal of the Tilbury B turbine hall will likely have a beneficial impact on views from Windmill Hill through removal of a building of substantial bulk and mass which breaks the landscape horizon, the established industrial character of the northern river bank, formed by the River, the existing Port and wind turbines to the west, the Anglian Water Recycling Centre and the large electricity pylons, will remain visible and thus continue to provide an industrial character to the northern river bank and key views from the Conservation Area. In addition, it is noted that numerous other industrial uses and character define the river bank along this part of the Thames and area appreciable from these elevated views, including oil refinery tanks and large, hill-like landfill sites, aggregates storage and facilities, and other industry.

Assessment of Impact

5.4.72 Long distance views across the main Tilbury2 Site and the land for the proposed infrastructure corridor are appreciable from the top of Windmill Hill, as shown within Figure 98. The removal of the dominant bulk and mass of Tilbury B will have a positive effect upon the character of these important views and, therefore, upon the setting of the Conservation Area. The Proposals will subsequently re-introduce further industrial uses and structures to this part of the view, some of which are tall and large.

5.4.73 As shown within Figure 99 (Viewpoint 51 of Appendix 9.F of the LVIA), given the elevated position of Windmill Hill, the majority of the Proposals will be visible from this vantage point, including the 100m high silo, vessels berthed at the extended jetty, upper levels of the RoRo container storage, the RoRo terminal warehouse, the CMAT aggregates storage, the CMAT processing facilities, general storage area, and potentially the new link road. As such, the Proposals will be almost wholly visible from this viewpoint, albeit at a considerable distance. Whilst the Proposals will increase the industrial character of the northern river bank within views from Windmill Hill, crucially, the nature of the Proposals means that longer views towards the Essex countryside north of Tilbury will remain visible and thus the 'green horizon' in these views will be retained.

5.4.74 Furthermore, an existing industrial riverside character is already appreciable and prominent in views from Windmill Hill and, as such, the Proposals will not fundamentally change the character of this view. Additionally, Tilbury Fort will remain visible and separate from the main Tilbury2 Site; the infrastructure corridor may be visible in the background, however, this is unlikely to have any significant visual impact given the distance and embedded landscape mitigation to screen/filter potential views of traffic on the road. This will ensure that Tilbury Fort remains visible in relative isolation within views from Windmill Hill.

5.4.75 Given that views north from the listed buildings within the Conservation Area are more restricted, it is unlikely that the Proposals will considerably impact upon their settings. Where

Figure 98: Viewpoint 51 of Appendix 9.F of the LVIA, as existing. View from the top of Windmill Hill across Gravesend and the river towards Tilbury. Tilbury Fort is visible given the high ground and its wider setting is clearly formed by an existing established industrial built context which characterises the river front; this is formed by the existing Port of Tilbury, the Anglian Water Recycling Centre, large electricity pylons and the substantial Tilbury B (although the latter will be demolished by January 2019). (Source: DJA, Appendix 9.F)

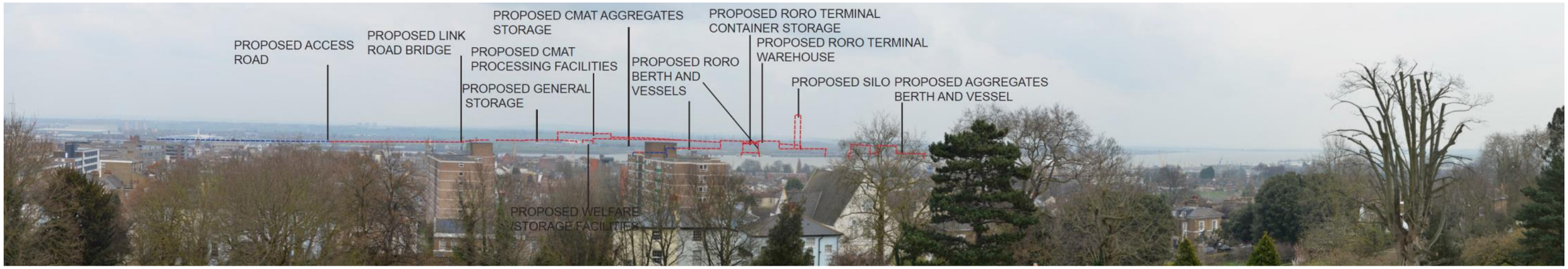

Figure 99: Viewpoint 51 of Appendix 9.F of the LVIA, as proposed. The majority of the Proposals will be visible given the elevated location of this viewpoint, however, importantly the Proposals will not break the landscaped horizon in the distance. (Source: DJA, Appendix 9.F)

long distance glimpses are likely to be visible (see Figure 97), the Proposals are considered unlikely to have a harmful impact upon the significance of the listed buildings included within the Conservation Area boundary.

5.4.76 Overall, the Proposals will alter important long distance views from Windmill Hill, however, they will not fundamentally change the character of these views. **Consequently, the Proposals are therefore likely to have a minor to moderate adverse impact on these views and a negligible to minor adverse impact upon the overall character and appearance of the Conservation Area, resulting in a negligible to low level of less than substantial harm.**

Upper Windmill Street Conservation Area

Character and Appearance

5.4.77 Upper Windmill Street Conservation Area was first designated in 1975 and extended in 1991 and 2001; it is supported by the Upper Windmill Street Conservation Area Character Appraisal, adopted by Gravesham Borough Council in 2009. The Conservation Area includes a number of Grade II listed buildings.

5.4.78 The Upper Windmill Street Conservation Area lies to the south of the historic centre of Gravesend. Windmill Street links directly through to the High Street and Town Pier in the north, and became the principal thoroughfare for visitors arriving to the town by steam boat in the nineteenth century and proceeding to the resort attractions on Windmill Hill.

5.4.79 The buildings which line the streets contained within the Conservation Area were principally laid out during the first half of the nineteenth century, many of which are to the design of a local architect or builder. The buildings are typically of two, three and four storeys in height. They are characterised by the use of stock brick, stucco and sash windows, with underlying or overt references to the Classical style. At the centre of the Conservation Area lie three twentieth century civic buildings.

5.4.80 The topography also contributes to the character of the Conservation Area; the land rises gradually along the length of Windmill Street to Windmill Hill in the south. Views southwards along Windmill Street encompass an aspect of terraces and villas gently climbing up the slopes of the hill.

Setting

5.4.81 The immediate surroundings of the Conservation Area are urban townscape. The King Street Conservation Area borders the north of this Conservation Area, while Windmill Hill Conservation Area borders the area to the south.

5.4.82 Whilst there are long views north and down Windmill Street towards the river, the river itself and north bank of Tilbury are not visible in views from within the Conservation Area. The Tilbury2 Site is not appreciable and it does not form part of the wider setting of the Conservation Area.

Removal of Tilbury B

5.4.83 At present, Tilbury B is almost entirely unappreciable from the Upper Windmill Street Conservation Area, particularly since the removal of the twin chimneys in September 2017. As such, its complete removal by January 2019 will have little to no impact on the wider setting of the Conservation Area.

Assessment of Impact

5.4.84 Given that the Tilbury2 Site and surrounding substantial structures such as Tilbury B are not visible from within the Conservation Area at present, by virtue of their nature the Proposals are unlikely to be appreciable or form part of the Conservation Area's setting. **Therefore, the Proposals are likely to have no impact upon the special interest of the Conservation Area or the significance of the listed buildings included within its boundary.**

Darnley Road Conservation Area

Character and Appearance

5.4.85 Darnley Road Conservation Area was first designated in 1990 and extended in 2001 and 2009; it is supported by the Darnley Road Conservation Area Character Appraisal, adopted by Gravesham Borough Council in 2009. The Site is situated at a considerable distance to the southwest of the Site. There are no listed buildings within the Conservation Area.

5.4.86 The Darnley Road Conservation Area includes part of the nineteenth century residential expansion around the site of the Earl of Darnley's manor farm to the south of Gravesend town centre. The Conservation Area features two relatively distinct parts: Darnley Road, a broad highway leading south to Old Road; and Cobham Street and Darnley Street, two east-west residential roads that connect Darnley Road and Wrotham Road. The special interest is provided by the historic layout, including remnants of the manor farm (the open green), since overlain with a nineteenth century urban street pattern. These streets contain small groups and terraces of high quality two- and three-storey nineteenth century houses, many of which display elaborate architectural detailing. The buildings of the Conservation Area represent high quality nineteenth century architecture typical of an affluent Victorian and Edwardian suburb such as this.

Setting

5.4.87 The Conservation Area is surrounded by an urban townscape. Due to the relatively close proximity of buildings to one another and the flat topography, the views into and out of the Conservation Area are limited to the vistas along roads and across the main road junction at the green, from where the factories of Northfleet in the north-west are visible.

5.4.88 There are no views across the river towards Tilbury and neither the Site, nor the surrounding existing industrial sites, are visible from the Conservation Area and do not form part of its setting.

Removal of Tilbury B

5.4.89 At present, Tilbury B is entirely unappreciable from the Darnley Road Conservation Area. As such, its complete removal by January 2019 will have no impact on the wider setting of the Conservation Area.

Assessment of Impact

5.4.90 Given that the Site at present and surrounding substantial structures such as Tilbury B are not visible from within the Conservation Area, it is unlikely that the Proposals will be appreciable or form part of its setting. **Therefore, the Proposals are likely to have no impact upon the special interest of the Conservation Area.**

Pelham Road and The Avenue Conservation Area

Character and Appearance

5.4.91 Pelham Road and The Avenue Conservation Area was first designated in 1995 and extended in 2001 and 2009; it is supported by the Pelham Road and The Avenue Conservation Area Character Appraisal, adopted by Gravesham Borough Council in 2009. The Site is situated at a considerable distance to the southwest of the Site. There are no listed buildings within the Conservation Area.

5.4.92 The Pelham Road/The Avenue Conservation Area comprises part of a distinctive nineteenth century suburb to Gravesend, with predominantly large houses laid out in generous plots. The high quality nineteenth century buildings within the Conservation Area are represented by detached and paired houses which provide an eclectic range of elaborate architectural detailing. The variety of the architecture, which contains references to the late nineteenth century Arts and Crafts Movement and the Gothic Revival style, contributes considerably to the special interest of the Conservation Area.

5.4 ASSESSMENT OF HERITAGE ASSETS: CONSERVATION AREAS

5.4.93 The buildings and layout of the Conservation Area have survived relatively unaltered since their construction in the late nineteenth century, when the area was developed as a desirable suburb to the more industrialised and urban town centre. With the trees and gardens, the whole area provides a good example of a well preserved late-nineteenth/early-twentieth century suburb.

Setting

5.4.94 The immediate surroundings of the Conservation Area are suburban townscape. Due to the relatively close proximity of buildings to one another, and also to the flat topography, the views into and out of the Conservation Area are generally limited to the vistas along roads and across the main road junction. There were some negligible long distance glimpsed views towards the twin chimneys of Tilbury B in views along Pelham Road but these do not impact upon the special interest of the Conservation Area. The Site is unappreciable and thus does not form part of the Conservation Area's setting.

Removal of Tilbury B

5.4.95 Since the removal of Tilbury B's twin chimneys on 28 September 2017, the building is no longer visible in long distance glimpses from the Conservation Area. As such, it no longer forms part of the Conservation Area's wider setting.

Assessment of Impact

5.4.96 Given the flat topography and proximity of the built form, there are no views of the river from within the Conservation Area. By virtue of its height and location on the river front, the top of the 100m silo may be visible in long distance views along Pelham Road. However, this is not considered to be harmful to the character and appearance of the Conservation Area.

5.4.97 **The overall visual impact of the Proposals upon the Conservation Area is likely to be negligible/neutral, resulting in a neutral/no impact upon the special interest of the Conservation Area**.

Overcliffe Conservation Area

Character and Appearance

5.4.98 Overcliffe Conservation Area was first designated in 1990 and extended in 2001; it is supported by the Overcliffe Conservation Area Character Appraisal, adopted by Gravesham Borough Council in 2009. It is situated within Gravesham on the southern side of the river and at a considerable distance to the southwest of the Site. There are no listed buildings in the Conservation Area.

5.4.99 The Conservation Area encompasses part of the early-nineteenth century Rosherville New Town development in Northfleet and the mid-nineteenth century houses along Overcliffe which were developed as part of this prestigious suburb, directly to the west of Gravesend Town Centre. The fine, large houses which line the roads are a mixture of villas and terraced residences, some sited to take advantage of the views northwards towards the River Thames.

5.4.100 The Overcliffe villas, which were built from 1864 to 1870 along the south side of the road, look out over the steep chalk cliffs to the river Thames. The built form on the south side of Overcliffe mainly consists of pairs of broad semi-detached villas built over two or three storeys on wide plots. Their views to the river are partially obscured by the trees that line the north side of the road which also screen the retail and industrial sites that now occupy the land on the north side of the road.

5.4.101 The Conservation Area retains much of its original architectural character from the prestigious nineteenth century residential suburb. The survival of the historic layout and the many historic buildings, together with the dramatic location on the top of chalk cliffs, all provide positive features.

Setting

5.4.102 The immediate surroundings of the Conservation Area are urban townscape, including a heavily industrialised foreshore. Views northwards across the river are limited by intervening vegetation and built form and those from Overcliffe have been compromised by the existing retail and industrial sites on the north side of the road.

5.4.103 Furthermore, views across the river are characterised by the existing industrial character of the northern river bank, principally provided by the Port of Tilbury. Glimpsed long distance views of the former twin chimneys at Tilbury B were also visible (until their recent demolition in September 2017). The Site is largely unappreciable at present, given its low lying and undeveloped nature, however, where long distance glimpses are possible they are within the context of surrounding industrial development.

Removal of Tilbury B

5.4.104 Since the removal of Tilbury B's twin chimneys on 28 September 2017, the building is no longer visible in long distance glimpses from the Conservation Area. As such, it no longer forms part of the Conservation Area's wider setting.

Assessment of Impact

5.4.105 The principal interest of the Conservation Area is defined through its character as an area of planned nineteenth century residential development. Glimpsed long distance views of and across the river form part of its wider setting and these are already have an industrial character. By virtue of the relative distance and existing intervening built form and vegetation which limits views northwards, the Proposals are likely to be largely screened from view. Isolated long distance views may be possible in some locations, however, these will be limited to the upper levels of the development, such as the 100m silo on the riverfront.

5.4.106 **As such, the Proposals are likely to have a negligible/neutral impact upon the wider setting of the Overcliffe Conservation Area, resulting in a neutral/no impact upon its special character and appearance**.

Lansdowne Square Conservation Area

Character and Appearance

5.4.107 The Lansdowne Square Conservation Area was first designated in 1995 and extended in 2009; it is supported by the Lansdowne Square Conservation Area Character Appraisal which was adopted by Gravesham Borough Council in 2009. The Site is situated at a considerable distance to the southwest of the Site. The Conservation Area includes one Grade II listed building, the Rosherville quay walls, steps, drawdock and WWII mine watching post (NHLE no.: 1396396).

5.4.108 The Lansdowne Square Conservation Area is centred on the historic core of the Rosherville New Town. This was a small residential development overlooking the River Thames, built from the 1830s onwards on land owned by the Rosher family. The development was planned to cater for businessmen who would be able to commute to London by steamboat from development's private pier. The area was also associated with the Rosherville Gardens that were laid out in 1837 over old chalk pits next to Lansdowne Square. They became some of the most popular pleasure gardens in Victorian Times and during their mid-nineteenth century heyday were visited by thousands of day-trippers, arriving by steamboat from London at the Rosherville Pier. It seems that after an initial building phase development works came to a halt and subsequently the scheme was never fully realised.

5.4.109 During the nineteenth century, the Northfleet foreshore transformed to a base for heavy industry that gradually

encroached from both sides on Lansdowne Square. While the pleasure gardens eventually fell victim to the industrialisation of the area, much of the original Rosherville residential development and lay-out is still in place and is the focus of the Conservation Area. Lansdowne Square consists of four detached three storey villas arranged symmetrically two behind two, with a wide square next to them. Despite some significant losses, notably the western enclosure of the square, Lansdowne Square has retained the character of an prestigious nineteenth century riverside development.

Setting

5.4.110 The River Thames makes a significant contribution to the setting of the Conservation Area, and clear views of the waterway are particularly impressive taken from the broad balustraded terrace on the north side of Lansdowne Square. There are extensive views up and down river and across to Tilbury. These views are principally characterised by the existing industrial Port of Tilbury and its associates uses, including the four substantial wind turbines opposite the Conservation Area. Views northeast towards the Site are also industrial in character; structures within the Anglian Water Recycling Centre, the large electricity pylons and Tilbury B Power Station are also visible. Tilbury Fort is visible at a considerable distance but largely unappreciable, given its low lying position and the substantial late twentieth century sea wall on the north side of the river which partially screens views of the Fort from Gravesend. Furthermore, the Conservation Area is immediately surrounded by a variety of industrial uses. It is thus principally experienced within an immediate and wider industrial setting.

5.4.111 The Site itself is largely unappreciable, given the distance and its currently undeveloped nature. Whilst it forms part of the wider setting of the Conservation Area and listed building, it is not considered to contribute towards their significance.

Removal of Tilbury B

5.4.112 As noted, Tilbury B is due to be completely demolished by January 2019. On 28 September 2017 the 170m high (approx.) chimneys were demolished. The chimneys were slender, tall and therefore the most widely visible industrial features in the landscape within this area; their removal has therefore resulted in the loss of a substantial landmark feature on the river front. The complete removal of the Tilbury B station will result in the removal of a prominent industrial building which forms part of the wider setting of the Lansdowne Square Conservation Area through forming a dominant feature in views across the river. Whilst the complete removal of Tilbury B will be noticeable in views from the Conservation Area, the established industrial character of the northern river bank, formed by the River, the existing Port and tall wind turbines to the west, the Anglian Water Recycling Centre and large electricity pylons to the east, will remain visible and thus continue to provide an industrial character to the heritage asset's wider setting. In addition, it is noted that numerous other industrial uses and character define the river bank along this part of the Thames, including oil refinery tanks and large, hill-like landfill sites, aggregates storage and facilities, and other industry.

Assessment of Impact

5.4.113 Given the existing expansive views across the river and the Conservation Area's location, the Proposals are likely to be visible and will form part of the wider setting of the Conservation Area and listed building. It is likely, however, that visibility will be limited to the upper levels of the highest structures within the main Site, the 100m high silo and of stationary vessels at the jetty. Fundamentally, the Proposals will be appreciable within an existing industrial built context which already defines views across the river from the Conservation Area and will therefore form an extension of this established character. Given the distance between the Site and the Conservation Area, its setting is less likely to be effected by other environmental factors beyond visual impact, such as noise.

5.4.114 **As such, it is considered that the Proposals will likely result in a potential negligible impact upon the setting of the Conservation Area, and will have an overall neutral impact upon its significance**.

5.5 ASSESSMENT OF HERITAGE ASSETS: STATUTORY LISTED BUILDINGS

Introduction

5.5.1 The following provides an assessment of the significance of the statutory listed buildings surrounding the Site, including any contribution of their settings. As identified within Section 5.2 and illustrated in Figure 38 (page 28), 132 listed buildings lie within a 2km search radius of the Site boundary.

5.5.2 Desk-based research combined with a number of site visits and walkover surveys has identified those listed buildings whose settings are most likely to experience significant effects as a result of the Proposals and which could harm their significance. The settings of a large number of the surrounding listed buildings are considered unlikely to be impacted by the Proposals and thus their significance will not be affected. These listed buildings have therefore been scoped out from detailed assessment. Furthermore, the majority of the listed buildings are situated within the surrounding conservation areas and therefore an assessment of the likely impacts upon their settings has been covered within the previous section.

5.5.3 The following thus provides an assessment of the likely potential impacts of the Proposals upon the surrounding listed buildings that are most likely to experience significant effects and which have been identified for detailed assessment within the Scoping exercise, the PEIR and in consultation with key statutory consultees. These principally form listed buildings which share considerable inter-visibility with the Site or Proposals, or which have a historic connection with the Site or clear views towards the northern bank of the river.

Officers Barracks (Grade II*; NHLE no.: 1375568)

Significance

5.5.4 The Grade II* Officers Barracks is situated in close proximity to the west of the Site and lies within Tilbury Fort, a Scheduled Monument. The listed building is a terrace of approximately 22 officers' houses within Tilbury Fort and is now in use as 7 houses and museum. It was built in 1772, by the Board of Ordnance and was altered in the early nineteenth century. The building is in mid-Georgian style and of yellow stock brick with brick ridge stacks and a steep slate hipped valley roof. It is of 2-storeys with a symmetrical front and has brick cornice and parapet.

5.5.5 The building is believed to have been rebuilt on the site of the late seventeenth century officers' range, itself rebuilt in 1742, and is a good and rare example of Ordnance Board housing at this time. It is also of interest for its use of the terrace plan for providing officers' lodgings.

Figure 100: Principal key view of the Officers Barracks from the Parade Ground. The tall chimneys of Tilbury B are visible in the background, however, it is noted that these were demolished in September 2017. The proposed 100m silo will be visible in the background. This will, however, be visible to the right rather than directly behind the building in this key view. (Source: CgMs)

Figure 101: View from the southwest corner of the Parade Ground looking east in the direction of the Site. The existing Tilbury B Power Station is prominent within the background of the Officers Barracks (Grade II*), although it is noted that the chimneys were demolished in September 2017 and the remaining structures will be demolished by January 2019. The upper levels of one of the large plant buildings at the Anglian Water Recycling Centre are also visible to the north, as are the pylons to the northeast of the Tilbury2 Site. (Source: CgMs)

5.5.6 The principal significance of the Officers Barracks is thus principally derived from its aesthetic and historic values.

Setting

5.5.7 The principal façade of the listed building addresses the Parade Ground of Tilbury Fort and thus is not orientated towards the Site. The immediate and most significant part of its setting extends throughout the whole of the part of the fort within the Inner Moat, but particularly the Parade Ground and areas in which the Officers' Barracks has a strong presence and where it can be appreciated as an integral part of Tilbury Fort. Beyond the Inner Moat, the listed building is less visible and its wider setting thus contributes less towards its significance, except in views of the listed building from the west over the East Bastion.

5.5.8 The existing industrial uses to the east of the listed building and surrounding the Site are visible in key views of the listed building from the Parade Ground, particularly as one moves further west away from the listed building. Visibility of the existing industrial uses is principally limited to the upper levels of the largest buildings, including one of those within the Anglian Water Recycling Centre and the electricity pylons, thus grounding the wider setting of the listed building within an industrial built context. The twin chimneys and upper levels of the turbine hall of Tilbury B were, until recently, most prominently visible in the background of the listed building and formed a dominant feature. Whilst the chimneys were demolished in September 2017, the substantial bulk and mass of the turbine hall remains in existence (see Figure 64, page 42).

5.5.9 At present, the Site is unappreciable in key views of the listed building due to the screening provided by the earthworks of Tilbury Fort. Whilst the Site forms part of the listed building's wider setting, it is not considered to contribute towards understanding its significance.

Removal of Tilbury B

5.5.10 As noted above and shown with Figure 64 (page 42), the visually dominant twin chimneys of Tilbury B were demolished on 28 September 2017. Whilst the substantial mass of the turbine hall currently remains, this will be demolished by January 2019, prior to the construction of the Proposals. The complete removal of Tilbury B will have a positive impact on the setting of the Officers Barracks through the removal of a building of substantial bulk and mass which is visually dominant in the background of key views of the listed building, such as from the Parade Ground and the West Bastion of Tilbury Fort. Whilst the demolition of the remaining buildings is likely to be beneficial, importantly, the wider industrial context which currently characterises the setting of the listing building will remain appreciable; the Anglian Water building

and electricity pylons will be visible to the east in key views of the listed building, and the existing Port of Tilbury and associated wind turbines will remain visible to the west.

Assessment of Impact

5.5.11 Given the proximity of the Site to the listed building the Proposals are likely to have a potential impact upon its setting which is principally formed by Tilbury Fort itself, through a likely increase in light pollution and visual effects of high structures on site, specifically including the 100m high silo, stationary vessels at the extended jetty and the upper levels of the RoRo container storage, RoRo warehouse and CMAT facilities. The visual impacts of the Proposals will be particularly appreciable in views of the Officers Barracks from elevated ground, such as the West Bastion (see Figure 103).

5.5.12 Key views of the Officers Barracks are from standing within the Parade Ground of Tilbury Fort and are of the main façade of the building. From the 1970s onwards, these views were disrupted by the substantial 170m (approx.) high twin chimneys of Tilbury B Power Station, visible directly behind the Officers Barracks in views from the Parade Ground, however, the power station will have been completely demolished before commencement of the construction of the Proposals. Furthermore, vessels are also already visible moving past Tilbury Fort and wind turbines are visible to the west. The listed building has thus long been experienced within a wider built industrial context defined by tall structures and shipping movements. The proposed 100m high silo in proximity to the river will likely be visible in views from the Parade Ground, this will appear as a relatively slender structure and positioned to the edge of central views of the listed building from the Parade Ground.

5.5.13 This is shown within Figure 102, (Viewpoint 27 of Appendix 9.F of the LVIA), which further illustrates that due to the surrounding earthworks of Tilbury Fort, the Proposals are unlikely to be significantly visible in key views of the listed building from within the Parade Ground. The upper levels of the CMAT processing facilities, RoRo container storage and vessels at the RoRo berth may be visible in views, however, it is important to note that the wirelines illustrate the maximum visual parameters of the scheme (i.e. the worst case scenario). As explained previously, during operation the RoRo containers may not be stored up to six high across the entire RoRo area and, as such, the upper levels of the containers are unlikely to be glimpsed at all times above the ramparts in views from the Parade Ground, as indicated within Figure 102.

5.5.14 Figure 103 (Viewpoint 62 of Appendix 9.F of the LVIA) shows that the Proposals are likely to be prominent in views of the Officers Barracks from elevated ground within the Tilbury Fort, in particular from the West Bastion. The upper levels of the RoRo container storage may be visible directly behind the listed building, however, it is noted that in reality the containers are unlikely to be stacked up to six high throughout the RoRo terminal at all times. The CMAT processing facilities are also likely to be visually prominent to the north, however, as above the structures may not be built up to 30m high above ground level across this whole area. Nonetheless, it is likely that due to their nature, the Proposals will be visible in the background of the Officers Barracks. As such, the Proposals are likely to increase the industrial character surrounding the listed building and thus result in a noticeable alteration to its setting. They will, however, be appreciable as an extension of the existing surrounding industrial character formed by the Anglian Water and Stobart's site and electricity pylons to the east of the listed building.

5.5.15 **Overall, it is considered that the Proposals will increase the proximity and degree of industrial uses and character surrounding the listed building and are thus likely to have a potential moderate adverse impact upon its setting. This is likely to result in a low to medium level of less than substantial harm to the listed building's significance. It's key significance will remain appreciable, as will the contribution of its immediate setting which formed by Tilbury Fort itself. Ultimately, the Officers Barracks will remain appreciable as an important building within Tilbury Fort and thus its significance as a heritage asset in its own right, as well as its contribution to the significance of the Scheduled Monument, will remain understood.**

Figure 102: Viewpoint 27 of Appendix 9.F of the LVIA, as proposed. The Proposals are largely unappreciable in this view, with the exception of the upper limits of the 100m high silo, the CMAT processing facilities and a negligible amount of the RoRo container storage. It is important to note that in reality containers are unlikely to be stacked up to six high across the whole RoRo container storage area. The wirelines are also based on 'worst case' visual parameters which adopt a 4m AOD across the whole Tilbury2 Site and in reality the Proposals may well appear lower in height throughout the Site. (Source: DJA, Appendix 9.F of the LVIA)

Figure 103: Viewpoint 62 of Appendix 9.F of the LVIA, as proposed. The upper levels of the Proposals are visible from this elevated view, with the most prominent elements being the CMAT facilities and the silo. The upper levels of the RoRo containers, if stacked to the maximum parameter of six high, will also be visible above the roofline of the Officers Barracks. Views of the proposed infrastructure corridor will be screened/filtered by the embedded landscape mitigation to reduce visual effects in views from Tilbury Fort. Overall the Proposals will represent an increase of the industrial character which is already appreciable to the east of Tilbury Fort. (Source: DJA, Appendix 9.F of the LVIA)

5.5 ASSESSMENT OF HERITAGE ASSETS: STATUTORY LISTED BUILDINGS

Riverside Station (including floating landing stage) (Grade II*; NHLE no.: 1111547)

Significance

5.5.16 The Grade II* listed Riverside Station is situated to the west of the Site and in relatively close proximity. The listing includes the railway station and baggage hall, ticket office, and floating landing stage which were built in 1924 to designs by Sir Edwin Cooper for the Port of London Authority (PLA) in a neo-Georgian style; it is a fine example of his work in this role.

5.5.17 The existing station was built to replace an earlier station, built in 1854 as part of the London Tilbury & Southend Railway developments. Following the First World War the number of passengers coming through Tilbury docks (which was constructed downstream in the 1880s) was rapidly increasing. At this time it was realised that no central facilities existed for passengers at the docks and as large liners could navigate and berth in the river at Tilbury, it was decided that Tilbury would become the centre of passenger operations for London. As such, a new Riverside Station was built to cater for significantly increased passenger numbers.

5.5.18 The Riverside Station is associated with a significant historic event as the landing place in 1948 of the SS Empire Windrush, the first ship to bring a large group of migrants from the Caribbean to the UK, the first generation of what was to become Britain's permanent black community.

5.5.19 The station is constructed of English band reddish-brown brick with rusticated quoining, and dressings of Portland stone and hand-made red tiles. The Baggage Hall is attached to the west of Riverside Station, both are open plan the southern elevations front the River Thames; a smaller block is attached to west. The single storey elevations are raised on cylindrical concrete piers with span arches. There is a large decorative fanlight over the entrance to the Riverside Station.

5.5.20 Historically, ships embarked at the floating stage to the south, which was connected to the Baggage Hall and Riverside Station by four steel booms and two walkways, each with boarded walls and glazing bar lights. The floating passenger landing stage, part of Sir Edwin Cooper's design, is said to be the only 2 storey pier on the River Thames. This landing stage was constructed so that it could be floated away, dry docked and refurbished.

5.5.21 The principal significance of the listed building is derived from its aesthetic, historic and communal values as an important transport node, connecting passengers arriving by river to the capital by train. However, the historic railway links to the former station building have been severed and, as such, an appreciation of its importance as a historic transport node has already been somewhat eroded.

Setting

5.5.22 The listed building's setting is formed principally by the River Thames and views towards Gravesend on the south side of the river and the Town Pier (Grade II*) on the opposite side to which is shares a historic functional and visual connection. Views of the listed building from ships berthing at the landing stage also contribute towards understanding its significance as one of the first buildings that was historically encountered by passengers arriving to this part of England by river. The Riverside Station is experienced within a prominent existing industrial built context formed by the surrounding Tilbury Docks, industrial estate and Fortress Distribution Park. The building faces north/south and its architectural composition is best appreciated in direct frontal views.

5.5.23 From the landing stage there are views towards the Anglian Water Recycling Centre and Tilbury B to the east; the substantial wind turbines are also visible to the west, further characterising the wider industrial setting of the listed building. The Tilbury2 Site itself has no appreciable bearing on the significance of this building, although its location is visible in views downstream from the landing stage. The Tilbury2 Site thus forms part of the wider setting to the listed building, but does not contribute towards understanding its significance.

Figure 104: Tilbury Riverside Station in 1930, showing the historic train lines which once adjoined the station (now severed) and the raised circular link road which has been demolished. (Source: Britain From Above)

Figure 105: The main building of the Grade II* listed Riverside Station. (Source: CgMs)

Figure 106: View from the landing stage of the Grade II* listed building in the direction of the Site. Tilbury Fort is visible to the left, however, views are limited by the existing substantial sea wall on the north side of the river. Tilbury B is prominent in this view and structures included within Anglian Water are also visible. Views east are thus already appreciable within an industrial context. (Source: CgMs)

5.5 ASSESSMENT OF HERITAGE ASSETS: STATUTORY LISTED BUILDINGS

Removal of Tilbury B

5.5.24 As previously noted, the twin chimneys of Tilbury B were demolished on 28 September 2017, resulting in the loss of a substantial landmark which identified Tilbury's location on the River Thames. The complete removal of the remaining Tilbury B structures by January 2019 will result in the removal of a building of substantial mass and bulk in views from the Riverside Station. Importantly, however, the existing industrial character of the listed building's setting will remain wholly appreciable and prominent through the existing Port of Tilbury in immediate proximity to the listed building, and views towards the Anglian Water Recycling Centre and large electricity pylons to the east.

Assessment of Impact

5.5.25 The Proposals will further alter the wider setting of the Riverside Station through introducing increased shipping activity in proximity to the listed building and views of further industrial buildings and uses from the landing stage. These views are principally likely to be from the floating landing stage and of the vessels berthed at the extended jetty, the 100m high silo on the river front and potentially the upper levels of the RoRo terminal warehouse, shipping containers and CMAT facilities, however, given the distance between this part of the Tilbury2 Site and the listed building, these are less likely to be visible.

5.5.26 The listed building's principal setting which is formed by the river and views across to Gravesend will, however, remain largely unaffected by the Proposals, although berthed ships at the extended jetty and the proposed silo may be visible in the peripheral of these views, this will not fundamentally alter the character of the river or an appreciation of key views from the listed building. Furthermore, the existing traffic on Fort Road in proximity to the listed building will likely be reduced through the creation of the new infrastructure corridor, thus reducing HGV vehicular movement and noise in proximity to the listed building; this could result in an enhancement to the immediate setting of the listed building through reducing the immediate industrial character of its setting to an extent.

5.5.27 Figure 107 provides an indicative view of the Proposals from the upper decks of cruise ships (see Appendix 9.H of the LVIA). From this high vantage point the majority of the Proposals will be visible beyond Tilbury Fort. Whilst the Proposals would further ground Tilbury Fort within an industrial built context, views from the upper decks of cruise ships would enable clear high level views into Tilbury Fort and this would be largely unaffected by the Proposals. Similarly, views looking down onto the Riverside Station will be retained and would not be adversely impacted by the Proposals. Overall, the Proposals would result in further industrialisation of views from the upper deck of cruise ships and within the settings of heritage assets in both Tilbury and Gravesend, however, this will not fundamentally change the character of these views which are already experienced within an established industrial context.

5.5.28 Whilst the increase in lighting will further alter the surroundings of the Riverside Station, it is acknowledged that given the listed building's proximity to the existing Tilbury Fort and the expansive views across the river to Gravesend, it is already experienced within relatively 'bright' surroundings at night. Given the distance of the listed building from the Tilbury2 Site, any increase in lighting is therefore likely to have a negligible impact upon the setting of the listed building.

5.5.29 The Proposals will also result in the existing rail siding leading south towards the Riverside Station to be closed as it will be crossed by the infrastructure corridor. As shown within Figure 104, the railway was historically connected to the listed building, transporting passengers arriving by boat to the City and vice versa. However, this rail link was severed when the Fortress Distribution Centre was built, leading to the removal of the Arrol Bridge and the truncation of the railway lines to the station. As such, the historic connection between the listed building and this railway siding is largely unappreciable and it is considered that its closure will not result in any further harm to the significance of the building as this link has already been severed.

5.5.30 **As such, the Proposals are likely to have a minor adverse visual impact upon the wider setting of the listed building through visibility of increased industrial uses and structures.** However, the Proposals will be appreciable within an already established existing industrial context surrounding the listed building and defined by the existing Port of Tilbury. The Proposals will thus be experienced as an extension to this existing character. Furthermore, the construction of the infrastructure corridor will result in reduce HGV traffic along Fort Road thus removing substantial traffic effects from the immediate vicinity of the listed building and resulting in a beneficial impact upon its setting. **Overall, it is thus considered that the Proposals are likely to result in a negligible level of less than substantial harm to the significance of the listed building.**

The Town Pier (Grade II*; NHLE no.: 1089004)

Significance and Setting

5.5.31 The Grade II* listed Town Pier is situated on the southern side of the river in Gravesend and to the southwest of the Site at a considerable distance. The listed building was built as a Pleasure Pier in 1831-4 by WT Clark, Civic Engineer. It is a T-shaped construction of cast iron resting on 2 rows of 4 cast iron Doric columns at the shore end and 3 rows of 6 columns on the river

Figure 107: Indicative view of the Proposals from the upper deck of a cruise ship docked at Tilbury Riverside Station. (Source: DJA, Appendix 9.H of the LVIA)

side with cast iron arched ribs. These had 2 pavilions at the angles of the T-portion with shipped roofs supported on decorative columns with cast iron cupolas above with urn shaped finials. It is said to probably be the world's oldest surviving cast iron pier.

5.5.32 There are wide views across the river towards Tilbury from the listed building. Most prominent within these views are the existing Port of Tilbury and the four large wind turbines to the west and the Tilbury B Power Station to the east (due to be demolished by January 2019). The large buildings and structures within the Anglian Water Recycling Centre and large electricity pylons are also visible. There are clear views towards the Riverside Station (Grade II*) in Tilbury to which the listed building shares a historic connection and from which the Tilbury-Gravesend passenger ferry runs. Tilbury Fort is visible to the north, however, views of Tilbury Fort are somewhat limited due to the existing intervening late-twentieth century sea wall on the north side of the river. The existing jetty within the Tilbury2 Site boundary is visible, however, at present the remainder of the Tilbury2 Site is largely unappreciable given its currently undeveloped character. By virtue of the existing clear inter-visibility, the Tilbury2 Site is considered to form part of the wider setting to the listed building, however, it does not provide an important contribution towards its significance.

5.5.33 Whilst the Town Pier was clearly designed to allow extensive views over the river, unlike the forts the pier did not have significant functional or visual relationships with the north bank, and its significance is more closely associated with its construction (as probably the earliest surviving example of its type in the world) than its wider context, other than the river itself. Panoramic views from the pier are integral to its design, but the significance is more related to the fact that the pier facilitates such views, than specific sight lines or the exact contents of the views.

5.5.34 Overall, the significance of the Grade II* Town Pier is principally derived from its aesthetic, historic and evidential values associated with its construction.

Removal of Tilbury B

5.5.35 As previously noted, the twin chimneys of Tilbury B were demolished on 28 September 2017, resulting in the loss of a substantial landmark which identified Tilbury's location on the River Thames. The complete removal of the remaining Tilbury B structures by January 2019 will result in the removal of a building of substantial mass and bulk in views from The Town Pier. Importantly, however, the existing industrial character of the listed building's wider setting and views across the river will remain wholly appreciable and prominent through the existing Port of Tilbury to the northwest, and views towards the Anglian Water Recycling Centre and large electricity pylons to the northeast.

Figure 108: The Grade II* listed Town Pier at Gravesend with a view towards Tilbury. (Source: CgMs)

Figure 109: The Grade II* listed Town Pier at Gravesend with a view towards the Site. Tilbury B (due to be demolished) forms a dominant landmark on the river front. The Anglian Water Recycling Centre and large pylons are also visible and form part of the industrial character of the northern river bank. (Source: CgMs)

Assessment of Impact

5.5.36 Given the existing inter-visibility between the listed building and the Tilbury2 Site, the Proposals are likely to be visible and will represent a visual alteration to the wider setting of the listed building.

5.5.37 Views will largely be limited to the proposed taller buildings or structures within the Tilbury2 Site, particularly those in proximity to the river, including the 100m silo, vessels berthed at the extended jetty, the shipping containers if stacked up to six high and the upper levels of the RoRo terminal warehouse. The upper levels of aggregates stockpiles and CMAT processing facilities in the northern section of the Tilbury2 Site may also be visible, though likely to be less so given the comparative distance and proposed intervening built form of the remainder of the Tilbury2 Site, however, the tallest lighting masts will likely to visible with lighting effects likely to be considerable after dark. Given the existing industrial character of the northern river bank, in particular the existing Port of Tilbury, views across the river from the Town Pier at night are already characterised by considerable lighting and, as such, the Proposals will form an extension to this and will therefore not fundamentally change the setting of the listed building after dark. The infrastructure corridor and lower level uses are less likely to be visible from the Town Pier.

5.5.38 The stationary vessels and the 100m high silo are likely to be the most prominent elements in views from the Town Pier, given their scale and location of the river front. As such, the Proposals will represent an alteration to the wider setting through increasing industrial uses within views from the listed building. Given the distance between the Tilbury2 Site and the Town Pier, other environmental impacts such as noise, vibration and air quality, are less likely to impact upon the settings of these heritage assets. Whilst the wider setting of the Town Pier is thus likely to be altered by the Proposals, the significance of the listed building is unlikely to be significantly effected, given that this principally relates to the history and construction of the building itself and the river; views northwards contribute less to its overall significance.

5.5.39 **Overall, the Proposals are thus likely to have a minor adverse impact upon the wider setting of the Town Pier through increased industrialisation of the character of the river, however, this is likely to result in a negligible impact upon its significance.**

5.5 ASSESSMENT OF HERITAGE ASSETS: STATUTORY LISTED BUILDINGS

Church of St George (Grade II*; NHLE no.:1089034)

Significance and Setting

5.5.40 The Grade II* listed Church of St George was built in 1731-2 by Charles Sloane. The chancel was rebuilt and extended eastwards in 1892 and the north aisle added in 1895-9 to designs by William and Charles Basset-Smith. The church was initially built under the 'Fifty New Churches Act'. It is constructed of yellow stock brick with stone dressings in a Classical style with relatively simple detailing. A tall, four stage western tower is located at the west end of the nave. The slender spire which crowns the tower has a ball finial and weathervane and is widely visible in views from Gravesend, the River Thames and across the river in Tilbury.

5.5.41 The American Indian princess, Pocahontas, died in Gravesend in 1614 and is said to have been buried in the old church, which burned down in 1727. The present church was funded out of the dues on coal coming into London as part of the 50 New Churches Act in 1711.

5.5.42 The building stands apart from any other in Gravesend and is located behind the tall continuous frontage of High Street and next to a large modern shopping centre, providing a unique setting. Its principal setting is derived from the churchyard and surrounding historic buildings. The tall spire of St George's is visible in long views from across the river in Tilbury and within Gravesham and forms a prominent building within the conservation area. Views of the spire are best appreciated from the water and, as historical illustrations of Gravesend show, it has determined the townscape for centuries.

5.5.43 The Site itself is not visible from the church of within its immediate surroundings, however, there are views from the Tilbury2 Site and in particular from the Two Forts Way public footpath which runs along the river frontage towards the spire of St George. The spire is also prominent in views from the landing stage of the Riverside Station (Grade II*) and the passenger ferry to Gravesend. The Tilbury2 Site is thus considered to form a minor part of the church's extended setting, given that views towards St George's spire are appreciable from the northern side of the river and the Tilbury2 Site itself is also visible in the periphery of some of these views.

Removal of Tilbury B

5.5.44 Whilst Tilbury B is currently appreciable in the periphery of views towards St George's Church from Tilbury and the River Thames it is not considered to harmfully impact upon the listed building's setting. The removal of Tilbury B is thus considered to have little impact upon the setting of St George's Church and no impact upon its significance. The existing wider industrial uses of the northern river bank will remain part of the listed building's wider setting following the removal of Tilbury B.

Figure 110: St George's Church (Grade II*). (Source: CgMs)

Figure 111: View from the passenger ferry towards Gravesend. The red arrow indicates the position of the spire of St George's Church (Grade II*) in views from the river. (Source: CgMs)

Assessment of Impact

5.5.45 The Proposals will not be visible from the listed building itself or appreciable within its immediate setting. They may, however, be visible within part of the listed building's extended setting through forming part of the views south towards the listed building's spire. The Proposals are likely to form part of the wider periphery of views from the passenger ferry to Gravesend and from other vessels on the river, as well as from the landing stage of the Riverside Station, which is also Grade II*.

5.5.46 In particular, the Proposals are likely to have an impact upon views from the Two Forts Way public footpath towards Gravesend and the spire of St George's Church, particularly in close proximity to the Tilbury2 Site. Large vessels berthed at the extended jetty are likely to screen views from the path towards the church in close proximity, however, it is noted that these impacts will be isolated to a very small area and views will not be lost along the entire footpath by any means.

5.5.47 The Proposals will result in an increase in the industrial character of the church's extended setting to the north. Fundamentally, however, key views of the church spire from the river and the northern bank are unlikely to be significantly affected by the Proposals and therefore they are likely to have a **negligible impact upon the extended setting of the church and thus a neutral impact upon its significance**.

World's End Inn (Grade II; NHLE no.: 1111632)

Significance and Setting

5.5.48 The World's End Inn is situated to the west of the Tilbury2 Site, on the western side of Tilbury Fort. The building is a seventeenth or early-eighteenth century house, altered in nineteenth century. It is timber framed and weatherboarded, with a grey slate roof and is of 2-storeys with a three window range double hung vertical sliding sashes with glazing bars. There are extensions on north side, and a late nineteenth century lean-to on south front. The inn is one of the oldest buildings in the area and was built before Tilbury Town was laid out.

5.5.49 The World's End Inn's setting is formed by Fort Road, Tilbury Fort, the River Thames and the area of surviving historic marshland to the north of Tilbury Fort (around Fort Road). This is

the historic setting in which the listed building was experienced up until the development of Tilbury Docks and the surrounding associated industrial uses and housing. Today, it is principally experienced within an established industrial context with views of surrounding industrial uses, including the Port to the west and the Anglian Water Recycling Centre, large pylons and Tilbury B to the east. It is noted that the chimneys of Tilbury B were demolished in September 2017 and the remaining structures will have been demolished by January 2019. The listed building is visible in views from across the river in Gravesend. The Tilbury2 Site is largely unappreciable in its present condition in views from the listed building, however, there are some views towards the northern section of the Tilbury2 Site and the area for the proposed infrastructure corridor. It is thus considered to form part of the wider setting to the listed building, in particular the land which includes the proposed infrastructure corridor.

5.5.50 The significance of the World's End Inn is thus principally derived through its aesthetic, historic, evidential and communal values as one of the earliest buildings in Tilbury and a public house to serve users of the river and Tilbury Fort. As such, the River Thames, Tilbury Fort and historic marshland to the north of the listed building form part of its setting and contributes towards its significance. Importantly, the historic marshland setting to the north of the listed building includes the land for the proposed infrastructure corridor and this part of the Site therefore contributes, in part, towards the significance of the listed building.

Removal of Tilbury B

5.5.51 As noted above the visually prominent twin chimneys of Tilbury B were demolished on 28 September 2017. Whilst the substantial mass of the turbine hall currently remains, this will be demolished by January 2019, prior to the construction of the Proposals. The complete removal of Tilbury B will likely have a positive visual impact on the setting of the World's End Inn through the removal of a building of substantial bulk and mass in the background of views of the listed building. However, importantly, the wider industrial context which currently characterises the setting of the listing building will remain appreciable; the Anglian Water building and electricity pylons will be visible to the east in views of the listed building, and the existing Port of Tilbury and associated wind turbines will remain visible to the west.

Assessment of Impact

5.5.52 The Proposals are likely to have a potential impact upon the setting of the World's End Inn through potential increases in noise, light and visual effects. Views of the tallest structures within the Tilbury2 Site, including the CMAT processing facilities and aggregates storage within the northwest area of the Tilbury2 Site, and longer views of the 100m high silo and berthed vessels at the extended jetty, are likely. The upper levels of the RoRo container storage may also be visible in some views. The listed building is, however, already experienced within a distinctly industrial built context with views of existing tall structures, including wind turbines to the west, the substantial sea wall on the north side of the river, vessels on the river and longer views towards the Anglian Water Recycling Centre, large electricity pylons and partially complete Stobart's wood processing facility to the east.

Figure 112: World's End Inn (Grade II). The tall turbine hall and twin chimneys of Tilbury B are prominent in the background. It is noted that the chimneys were subsequently demolished on 28 September 2017. (Source: CgMs)

Figure 113: View towards the World's End Inn (Grade II) from the elevated footpath that follows Fort Road. The listed building is experienced within a distinct industrial context. (Source: CgMs)

5.5.53 The Proposals will likely result in potential decreased traffic, noise and vehicle emissions along Fort Road, particularly HGVs, as these will be re-directed along the new infrastructure corridor. This is likely to have a beneficial impact upon the setting of the listed building through in part reducing its existing immediate industrial setting. However, the construction of the infrastructure corridor to the north of the listed building will, to an extent, further reduce the historic marshland landscape setting to the north which partially contributes towards the significance of the listed building through in part helping to understand the building's historic isolation within the landscape. Whilst the construction of the infrastructure corridor will reduce this setting to the north, it will not be lost entirely and an appreciation of the listed building's historic setting will remain appreciable. Furthermore, the embedded landscape mitigation along the infrastructure corridor will filter views and noise of vehicles using the new road. This will help to further reinstate, to an extent, an appreciation of the former isolation of the listed building within its surroundings. Nonetheless, the proposed infrastructure corridor is likely to result in minor harm to the setting of the listed building.

5.5.54 Overall the Proposals are likely to alter the wider setting of the listed building and are likely to have an adverse impact upon this, as outlined above. However, those elements of the listed building's setting which contribute towards its significance will remain appreciable and the Proposals further represent opportunities to enhance the listed building's immediate setting, such as the reduction in traffic on Fort Road. As such it is considered that **the Proposals are likely to result in an overall minor adverse impact on the setting of the listed building, resulting in a negligible to low level of less than substantial harm to its significance.**

5.5 ASSESSMENT OF HERITAGE ASSETS: STATUTORY LISTED BUILDINGS

The Royal Terrace Pier (Grade II; NHLE no.: 1341489)

Significance and Setting

5.5.55 Now the headquarters of the Pilotage Service, the Royal Terrace Pier was built in 1844 by the Gravesend Freehold Investment Company and was designed by John Baldry Redman. It is a T-shaped construction of cast iron. It is built on 3 rows of 3 columns at the shore end and 3 rows of 5 columns under the T-portion, with a triglyph frieze above. The shore end is flanked by small pavilions of coursed stone with quoins, cornice and base of dressed ashlar. Above each is a little turret of which the west one has been enlarged. The remainder of the pier has been roofed over at a later date. Beyond the platform is a floating pontoon for embarkation approached by steps.

5.5.56 The entrance to the listed Royal Terrace Pier on Royal Pier Road is flanked by two considerably large late twentieth century buildings of low architectural quality, set-back from the building line of the listed building (see Figure 115). It is thus experienced within an immediate modern townscape setting. There are panoramic views from the Royal Terrace Pier over the River Thames and towards Tilbury on the northern bank; the Tilbury2 Site forms a part of these views. The pier was designed to allow such extensive views over the river, but unlike the defensive coastal forts, it does not have any significant functional or visual relationships with the north bank, and its significance is more closely associated with its fabric and construction. Panoramic views from the pier are part of its design, but its significance is more related to the fact that the pier facilitates such views, than specific sight lines or the exact contents of the views.

5.5.57 Furthermore, there are views towards Tilbury from further south along Royal Pier Road and the road slopes upwards. These long distance views are channelled by the buildings which flank the entrance to the pier and the large Anglian Water industrial building is visible in the background, thus indicating the existing industrial character of the northern river bank. Part of the Tilbury2 Site is also visible in this long distance view and it can therefore be considered to fall within the listed building's wider setting but is not considered to contribute towards its significance.

<u>Removal of Tilbury B</u>

5.5.38 As previously noted, the twin chimneys of Tilbury B were demolished on 28 September 2017, resulting in the loss of a substantial landmark which identified Tilbury's location on the River Thames. The complete removal of the remaining Tilbury B structures by January 2019 will result in the removal of a building of substantial mass and bulk in views from The Royal Terrace Pier. Importantly, however, the existing industrial character of the listed building's wider setting and views across the river will remain wholly appreciable and prominent through the existing Port of Tilbury to the northwest, and views towards the Anglian Water Recycling Centre and large electricity pylons to the northeast.

Figure 114: Royal Terrace Pier (Grade II) in Gravesend.

Figure 115: The entrance to the Royal Terrace Pier (Grade II) in Gravesend from Royal Pier Road. The listed building is flanked by two substantial and low quality late twentieth century buildings. (Source: CgMs)

Assessment of Impact

5.5.59 The Proposals are likely to be visible in views from the Royal Terrace Pier across the river. These views are likely to be of the structures, buildings and uses on the river front, including the 100m high silo, berthed vessels at the extended jetty and lighting. In addition, channelled long distance views of the CMAT facilities are likely to be visible above the roofline of the pier in elevated views from Royal Pier Road. This part of the Proposals will be visible in conjunction with the existing substantial Anglian Water Recycling Centre building. Given the existing industrial character of the northern river bank, in particular the existing Port of Tilbury and the Anglian Water Recycling Centre, views across the river from the Royal Terrace Pier at night are already characterised by considerable lighting and, as such, the Proposals will form an extension to this and will therefore not fundamentally change the setting of the listed building after dark. The infrastructure corridor and lower level uses are less likely to be visible from the Royal Terrace Pier.

5.5.60 The Proposals will be visible within the existing industrial built context which largely characterises the northern bank of the river and thus forms the wider setting of the listed building. Whilst the Proposals will alter this wider setting through introducing increased industrial activity in views from the Royal Terrace Pier, they will not fundamentally change the character in which these views and the listed building are already experienced.

5.5.61 **As such, the Proposals are like to have a minor visual impact upon the setting of the listed building, however, given the assessment above, this is likely to result in an overall neutral impact upon the significance of the listed building which principally relates to the building itself and the contribution of the river, rather than any specific sightlines towards the northern bank.**

5.5 ASSESSMENT OF HERITAGE ASSETS: STATUTORY LISTED BUILDINGS

The Mission House (Grade II; NHLE no.: 1089038) and St Andrew's Art Centre (Grade II; NHLE no.: 1039109)

Significance and Setting

5.5.62 Built in 1870-71 originally as a mission chapel for seamen and known as St Andrew's Waterside Chapel; the St Andrew's Art Centre (Grade II) lies adjacent to Mission House (Grade II) and the two listed buildings form a historic group. The Mission House is a 3-storey stock brick eighteenth century building which adjoins the former St Andrew's Waterside Chapel. General Charles Gordon, whose famous deeds in China and Africa epitomise the image of the heroic Victorian military commander, once taught here. The listed buildings both have a historic and functional relationship with the river over which there are views towards Tilbury. The buildings are evidence of the town's long connection to seafaring and ferrying and they represent remnants of the historic fishing community.

5.5.63 Together, the Mission House and St Andrew's Art Centre have strong group value. Both buildings are also included within the Gravesend Riverside Conservation Area. Their significance is principally derived from their aesthetic, historic and evidential value of buildings associated directly with the river and the historic fishing community in Gravesend.

5.5.64 The setting of the buildings is defined principally by the river to which it has a historic connection and the open green space that surrounds them, ensuring that they are experienced within a relatively isolated built context. Whilst there are considerable views across the river towards Tilbury, including the Tilbury2 Site (see Figure 116), and thus the uses on the northern river bank form part of the wider setting to the listed buildings, these views and uses do not contribute towards understanding their significance. It is the buildings' location upon the river and historic connection with the waterway which provides a contribution, rather than views of the northern bank. These existing views across the river are largely characterised by an existing industrial built context formed by the Anglian Water Recycling Centre, large electricity pylons and the substantial Tilbury B which is visually dominant.

Removal of Tilbury B

5.5.65 As noted, Tilbury B is due to be completely demolished by January 2019. On 28 September 2017 the 170m high (approx.) chimneys were demolished. The chimneys were slender, tall and therefore the most widely visible industrial features in the landscape within this area; their removal has therefore resulted in the loss of a substantial landmark feature on the river front. The complete removal of the Tilbury B station will result in the removal of a prominent industrial building which forms part of the setting of the Grade II listed Mission House and St Andrew's Art Centre, and which is dominant in views across the river (as shown in Figure 116). Whilst the complete removal of Tilbury B will likely have a beneficial impact on views the listed buildings, the established industrial character of the northern river bank, formed by the River, the existing Port to the west, the Anglian Water Recycling Centre and the large electricity pylons directly opposite the listed buildings, will remain visible and thus continue to provide an industrial character to the heritage assets' wider settings. As such, whilst the removal of Tilbury B will likely result in a positive visual impact on the settings of the listed buildings, it will not impact upon on an appreciation of their significance.

Assessment of Impact

5.5.66 The Proposals will be visible in views from the both the Mission House and St Andrew's Art Centre across the river. These views are likely to be of the structures, buildings and uses on the river front, including the 100m high silo, the berthed vessels at the extended jetty and the lighting. The upper levels of the RoRo container storage and warehouse, and the CMAT facilities may also be visible. Whilst the Proposals are likely to represent a noticeable alteration to these long views across the river through increasing the industrial character visible in the background of the listed buildings, the Proposals will not fundamentally change the character of the wider setting in which the listed buildings are experienced today as this is already defined by industrial uses, albeit of a lesser scale once Tilbury B is removed. Importantly, however, despite visibility of the Proposals, the listed buildings will remain visually prominent within the streetscape due to their relatively isolated nature.

5.5.67 **It is thus considered that the Proposals are likely to have a minor to moderate visual impact upon the setting of the Grade II listed Mission House and St Andrew's Art Centre through representing an increase in the industrial character of the northern river bank in views directly behind the listed buildings. However, given that the significance of the listed buildings is principally derived from their aesthetic, historic and evidential value, and it is the river which contributes towards their significance, rather than any views or relationship with the northern bank, it is considered that the Proposals are likely to result in an overall negligible to low level of less than substantial harm to the significance of the listed buildings.**

Figure 116: The Mission House and St Andrew's Art Centre (Grade II). The river forms part of the setting to these heritage assets and contribute towards its significance, however, views across the river to the north are of lesser importance and do not contribute towards understanding their significance. (Source: CgMs)

5.5 ASSESSMENT OF HERITAGE ASSETS: STATUTORY LISTED BUILDINGS

The Royal Clarendon Hotel (Grade II; NHLE no.: 1374522)

Significance and Setting

5.5.68 The Royal Clarendon Hotel (Grade II) is situated on Royal Pier Road and set-back from the river behind gardens and a car park. By 1665 the site was occupied by quarters for the Duke of York as Lord High Admiral. This subsequently became the Ordnance Storekeepers Quarters and, much later, the Clarendon Royal Hotel when it was converted in the mid-nineteenth century. The present building for the Clarendon Royal Hotel dates from around 1860.

5.5.69 The listed building is of 4-storeys and stuccoed with a rusticated ground floor. The principal façade which is of a grand appearance overlooks the river and has two asymmetrical projections. To the west of the building is a long low wing of 2-storeys and to the east a 2-storey addition of which the ground floor room is a ballroom. Princess (later Queen) Alexandra spent her first night in England here (the 7th March 1863) on her arrival to marry the Prince of Wales.

5.5.70 The listed building is of principal significance due to its aesthetic, historic and communal values as a prominent building on the river front and a nineteenth century hotel. The Royal Clarendon Hotel also has group value with Gravesend Blockhouse given their historic connection.

5.5.71 The setting of The Royal Clarendon Hotel is formed by the gardens and river to which the building overlooks. There are views across the river to Tilbury and the Tilbury2 Site lies directly opposite the listed building on the northern river bank, however, the building does not have any key historic functional or visual connections with the northern river bank which contribute towards its significance. However, given the inter-visibility, the northern river bank is considered to form part of the listed building's wider setting.

5.5.72 Views across the river are experienced within a modern industrial context formed by the existing Port of Tilbury to the west of Tilbury Fort and the Anglian Water Recycling Centre, remaining structures of Tilbury B and large electricity pylons to the east. Views of the Site itself are largely limited to the southern-most section of the Tilbury2 Site and the jetty and it is visible within an established industrial built context.

<u>Removal of Tilbury B</u>

5.5.73 As previously noted, Tilbury B is due to be completely demolished by January 2019. On 28 September 2017 the 170m high (approx.) chimneys were demolished. The chimneys were slender, tall and therefore the most widely visible industrial features in the landscape within this area; their removal has therefore resulted in the loss of a substantial landmark feature on the river front. The removal of the remaining substantial mass and bulk of the turbine hall will result in the complete removal of a prominent industrial building from the wider setting of the Royal Clarendon Hotel. Importantly, however, the established industrial character of the northern river bank, formed by the River, the existing Port to the west, the Anglian Water Recycling Centre and visible large electricity pylons directly opposite, will remain visible and thus continue to provide an industrial character to the heritage asset's wider setting. In addition, it is noted that numerous other industrial uses and character define the river bank along this part of the Thames, including oil refinery tanks and large, hill-like landfill sites, aggregates storage and facilities, and other industry.

Figure 117: The Royal Clarendon Hotel (Grade II). (Source: CgMs)

Figure 118: Thames House (Grade II). (Source: CgMs)

Assessment of Impact

5.5.74 The Proposals are likely to have an impact on the wider setting of The Royal Clarendon Hotel principally through potential visual effects of new buildings and structures, vessels, port-related activity and lighting. Other environmental effects that could impact upon setting, such as noise, vibration, dust and traffic, are less likely to impact the setting of the listed building, given its considerable distance from the Site.

5.5.75 Visual impacts are likely to be limited to the riverside related uses and activities and, in particular, of the 100m high silo which is likely to form a landmark on the river front, the extended jetty and stationary vessels, the upper levels of the RoRo terminal warehouse, container storage and possibly the CMAT facilities to the north, and lighting masts. The Proposals will extend the existing industrial character of the north shore which is already visible in views from The Royal Clarendon Hotel. Whilst this will alter the wider setting of The Royal Clarendon Hotel it will not fundamentally change its character.

5.5.76 **Overall, it is thus considered that the Proposals are likely to have a minor impact upon the setting of The Royal Clarendon Hotel, and an overall neutral impact upon its significance which is principally derived through its aesthetic, historic and communal values.**

Thames House (Grade II; NHLE no.: 1038337)

Significance and Setting

5.5.77 Thames House (Grade II) is situated on elevated ground set-back from Royal Pier Road and overlooking the River Thames. The listed building is 4-storeys and was built around 1820; it forms a prominent building within the streetscape and its currently in use as a B&B. The listed building is stuccoed with a rusticated first floor and a parapet with moulded eaves cornice. The fenestration on the principal frontage is almost symmetrical. The first floor has a cast iron balcony which is supported on four columns. The principal significance of the building is derived from is aesthetic and historic values. It also has group value with the Royal Clarendon Hotel, the Mission House and St Andrew's Art Centre; together these buildings are evidence of the historic townscape which has largely been redeveloped in this area.

5.5.78 The setting of the listed building is formed by the adjacent listed buildings mentioned above and the river to the which the building overlooks. There are views across the river to Tilbury and the Tilbury2 Site lies directly opposite the listed building on the northern river bank, however, the building does not have any key historic functional or visual connections with the northern river bank which contribute towards its significance. However, given the inter-visibility, the river northern river bank is considered to form part of the listed building's wider setting.

5.5.79 Views across the river are experienced within an existing modern industrial context formed by the existing Port of Tilbury to the west of Tilbury Fort and the Anglian Water Recycling Centre, remaining structures of Tilbury B and large electricity pylons to the east. Views of the Site itself are largely limited to the southern-most section of the Tilbury2 Site and the jetty and it is visible within an established industrial built context.

Removal of Tilbury B

5.5.80 As previously noted, Tilbury B is due to be completely demolished by January 2019. On 28 September 2017 the 170m high (approx.) chimneys were demolished. The chimneys were slender, tall and therefore the most widely visible industrial features in the landscape within this area; their removal has therefore resulted in the loss of a substantial landmark feature on the river front. The removal of the remaining substantial mass and bulk of the turbine hall will result in the complete removal of a prominent industrial building from the wider setting of Thames House. Importantly, however, the established industrial character of the northern river bank, formed by the River, the existing Port to the west, the Anglian Water Recycling Centre and visible large electricity pylons directly opposite, will remain visible and thus continue to provide an industrial character to the heritage asset's wider setting. In addition, it is noted that numerous other industrial uses and character define the river bank along this part of the Thames, including oil refinery tanks and large, hill-like landfill sites, aggregates storage and facilities, and other industry.

Assessment of Impact

5.5.81 The Proposals are likely to have an impact on the wider setting of Thames House principally through potential visual effects of new buildings and structures, vessels, port-related activity and lighting. Other environmental effects that could impact upon setting, such as noise, vibration, dust and traffic, are less likely to impact the setting of the listed building, given its considerable distance from the Site.

5.5.82 Visual impacts are likely to principally be of the riverside related uses and activities and, in particular, of the 100m high silo which is likely to form a landmark on the river front, the extended jetty and stationary vessels, the upper levels of the RoRo terminal warehouse, container storage and possibly the CMAT facilities to the north, and lighting masts. Views of the Proposals are likely to be particularly prominent from the upper floors of the listed building, given it position on elevated land. The Proposals will extend the existing industrial character of the north shore which is already visible in views from Thames House. Whilst this will alter the wider setting of Thames House it will not fundamentally change its character.

5.5.83 **Overall, it is thus considered that the Proposals are likely to have a minor impact upon the setting of Thames House, and an overall neutral impact upon its significance which is principally derived through its aesthetic, historic and communal values.**

HM Customs and Immigration Office (Grade II; NHLE no.: 1088999) and Gazebo in the grounds of HM Customs and Immigration Office (Grade II; NHLE no.: 1341511)

Significance and Setting

5.5.84 Prior to the Port of London Authority being established by Act of Parliament in 1908, it was the job of the 'Searcher' to instigate controls over shipping at Gravesend. All ships had to stop to be searched and to assess the duties payable on their cargoes. An Act of Parliament in 1559 prohibited the landing of cargoes at any wharf on the Thames except at 'legal quays' on the north bank of the Thames between the Tower of London and London Bridge. Ships were also required to stop at Gravesend for a health check. A customs official known as a Tide Waiter then boarded the ship to make sure that it only stopped at the legal quays. This practice continued until the opening of London's enclosed dock system in the early 1800s (West India Dock in 1802 and London Dock in 1806).

5.5.85 In 1649, a Customs House was proposed to house the Tide Waiters who were then using several of Gravesend's inns as offices. However, it was not until 1782 that the first customs house, Whitehall Place, was built opposite the present Customs House. In 1812, changes in the law meant that ships no longer had to stop at Gravesend to pick up a customs official. Consequently, the number of customs officers was reduced and they moved from Whitehall Place to share a building with the Excise Service. This building is the present Grade II listed HM Customs and Immigration Office, known as 'Customs House' situated on a prominent corner site on The Terrace, opposite the New Tavern Fort. The building dates from 1815-16 and is 3-storeys and of brown stock brick with a stone stringcourse above ground floor. On the north front facing the river there is a large 5-light bow window on the roof forming a lookout over the River Thames.

5.5.86 On the river front to the north of Customs Houses is a Grade II listed early nineteenth century 2-storey octagonal weatherboarded gazebo with wooden pilasters and a brick chimney. The building is situated on the river front and its significance is principally derived from its aesthetic and historic interest, as well as its group value with Customs House.

5.5.87 The setting of the listed buildings is principally defined by the River Thames over which the building looks and relates to. There are long views across the river to Tilbury, in particular from the lookout room on the roof of Customs House. These views include Tilbury Fort and the existing industrial uses such as the Anglian Water Recycling Centre and Tilbury B. Whilst views across the river are considerable and therefore the land and uses of the northern river bank form part of the wider setting of the listed building, they are not considered to contribute towards the significance of the listed building, including the Tilbury2 Site.

Removal of Tilbury B

5.5.88 As previously noted, Tilbury B is due to be completely demolished by January 2019. On 28 September 2017 the 170m high (approx.) chimneys were demolished. The chimneys were slender, tall and therefore the most widely visible industrial features in the landscape within this area; their removal has therefore resulted in the loss of a substantial landmark feature on the river front. The removal of the remaining substantial mass and bulk of the turbine hall will result in the complete removal of a

prominent industrial building from the wider settings of the Grade II listed Customs House and Gazebo. Importantly, however, the established industrial character of the northern river bank, formed by the River, the existing Port to the west, the Anglian Water Recycling Centre and visible large electricity pylons directly opposite, will remain visible and thus continue to provide an industrial character to the heritage assets' wider settings. In addition, it is noted that numerous other industrial uses and character define the river bank along this part of the Thames, including oil refinery tanks and large, hill-like landfill sites, aggregates storage and facilities, and other industry.

Assessment of Impact

5.5.89 The Proposals will be visible in views from the Grade II listed Gazebo and upper floors of the Customs House across the river. These views are likely to be of the structures, buildings and uses on the river front, including the 100m high silo, berthed vessels at the extended jetty, lighting and the upper levels of the RoRo container storage, warehouse and CMAT facilities. Whilst they are likely to represent a noticeable alteration to these long views across the river, the Proposals will not fundamentally change the character of the wider setting in which the listed building is experienced today.

5.5.90 Whilst the Proposals will alter the listed building's wider setting through introducing increased industrial activity in views from Customs House and the Gazebo, they will not fundamentally alter the character in which these views are already experienced. Importantly, these heritage assets were built to monitor the river and therefore have a historic association with commercial river uses.

5.5.91 **As such, the Proposals are likely to have a minor visual impact upon the setting of the listed buildings. However, given the assessment above, this is likely to result in an overall neutral impact upon their significance which principally relates their aesthetic and historic interest and the contribution of the river, rather than any specific sightlines towards the northern bank.**

The Three Daws Public House (Grade II; NHLE: 1089052)

Significance and Setting

5.5.92 The Three Daws Public House is situated on the east side of The Town Pier Square and is mainly of eighteenth and nineteenth century construction. It is probably the oldest licensed house in Gravesend and is thought to have been established in 1565 under the name the Three Cornish Choughs.

5.5.93 The listed building has group value with the Town Pier (Grade II) and the Pier Hotel (Grade II, listed as 'The Pier Public House' (NHLE no.: 1341514). Both the Three Daws pub and the Pier Hotel historically capitalised off the trade from passengers arriving off the Town Pier from the Tilbury-Gravesend ferry and beyond and as such the three historic buildings form a coherent group arranged around the 'Town Pier Square'. The River Thames forms part of the setting of the listed building and in part contributes towards its significance. There are views across to the industrial uses on the northern river bank at Tilbury, including towards the Tilbury2 Site, from the listed building and its garden to the rear which overlooks the river. However, whilst forming part of the listed building's wider setting, the uses on the northern river bank are not considered to form an important contribution towards its significance.

Removal of Tilbury B

5.5.94 As previously noted, Tilbury B is due to be completely demolished by January 2019. On 28 September 2017 the 170m high (approx.) chimneys were demolished. The chimneys were slender, tall and therefore the most widely visible industrial features in the landscape within this area; their removal has therefore resulted in the loss of a substantial landmark feature on the river front. The removal of the remaining substantial mass and bulk of the turbine hall will result in the complete removal of a prominent industrial building from the wider setting of the Three Daws Public House. Importantly, however, the established industrial character of the northern river bank, formed by the River, the existing Port to the west, the Anglian Water Recycling Centre and visible large electricity pylons directly opposite, will remain visible and thus continue to provide an industrial character to the heritage asset's wider setting. In addition, it is noted that

Figure 119: HM Customs and Immigration Office (Grade II), known as Customs House. (Source: CgMs)

Figure 120: Gazebo in the grounds of HM Customs and Immigration Office (Grade II). (Source: CgMs)

Figure 121: The Three Daws Public House (Grade II) in Gravesend. (Source: CgMs)

numerous other industrial uses and character define the river bank along this part of the Thames, including oil refinery tanks and large, hill-like landfill sites, aggregates storage and facilities, and other industry.

Assessment of Impact

5.5.95 The Proposals will be visible in views from The Three Daws and across the river. These views are likely to be of the structures, buildings and uses on the river front, including the 100m high silo, berthed vessels at the extended jetty, lighting and the upper levels of the RoRo container storage, warehouse and CMAT facilities. Whilst they are likely to represent a noticeable alteration to these long views across the river, the Proposals will not fundamentally change the character of the wider industrial setting in which the listed building is experienced today, formed by the uses on the northern river bank including, the existing Port of Tilbury, the Anglian Water Recycling Centre, large pylons and the character of the River Thames itself.

5.5.96 As such, whilst the Proposals will alter the listed building's wider setting through introducing increased industrial activity in views from The Three Daws, they will not fundamentally alter the character in which these views are already experienced.

5.5.97 **Subsequently, the Proposals are likely to have a minor visual impact upon the wider setting of the listed building. However, given the assessment above, this is likely to result in an overall neutral impact upon the significance of the listed building which principally relates to its aesthetic, historic and communal value of the listed building itself and its group value with The Town Pier and Pier Hotel, rather than any specific sightlines towards the northern bank.**

5.6 ASSESSMENT OF NON-DESIGNATED HERITAGE ASSETS

Shornemead Fort

Significance

5.6.1 Shornemead Fort is situated on the southern side of the River Thames, to the southeast of the Site and at a considerable distance. It was built in the 1860s as part of a scheme to remodel the forward defences of the Thames to protect the river route to London. It crossed the fire of its guns with those of Coalhouse Fort on the north bank and with Cliffe Fort further downstream on the south bank.

5.6.2 As built in the 1860s Shornemead Fort consisted of an arc of granite-faced gun casemates with iron shields and an open battery at the up-river end. It was fronted by a deep ditch and caponiers. A defensible barracks built of Kentish Rag closed the rear. Magazines were in the basement below the casemates and the open battery, with which they connected via ammunition lifts.

5.6.3 Much of Shornemead Fort, including the barrack block, was demolished in the 1960s, and only the fronts of the casemates and underground passages and magazines remain today.

5.6.4 Shornemead Fort is a non-designated heritage asset which is considered to be of national importance given its historic relationship and group value with the surrounding forts which form Scheduled Monuments, in particular its contemporaries of Coalhouse Fort and Cliffe Fort to which it was built for crossfire. Tilbury Fort and New Tavern Fort formed a secondary line of defence when Shornemead Fort, Coalhouse Fort and Cliffe Fort were established in the nineteenth century and, as a result, also have a historic connection with Shornemead Fort, albeit to a lesser extent than Coalhouse Fort and Cliffe Fort to which Shornemead Fort was built for crossfire.

Setting

5.6.5 The principal setting of Shornemead Fort is formed by the River Thames and the open marshland surrounding the remains of the Fort. There are expansive views across the river towards Coalhouse Fort opposite and in the direction of Tilbury upstream. There are also views towards Cliffe Fort to the northeast on the southern side of the river and which was constructed around the same time of Shornemead Fort and also as a result of the Royal Commission for crossfire with Coalhouse Fort and Shornemead Fort.

5.6.6 There are views upstream in the direction of the Tilbury2 Site and towards Tilbury Fort, however, Tilbury Fort itself is unappreciable given the distance between the two assets and their low lying nature, together with the substantial late-twentieth century sea wall on the north side of the river at Tilbury which further limits any potential views. Given their historic connection, however, Tilbury Fort is considered to form part of Shornemead Fort's wider setting and therefore, by virtue of its proximity to Tilbury Fort, the Site is also considered to form part of the wider setting of the non-designated Shornemead Fort.

5.6.7 Whilst situated at a considerable distance, Tilbury B is currently visible in views west from Shornemead Fort, by virtue of its dominant massing and bulk. It is, however, noted that the chimneys were demolished in September 2017 and the remaining structures will be demolished by January 2019. The complete removal of Tilbury B will result in the removal of a building of substantial mass and bulk from the wider setting of Shornemead Fort. Large electricity pylons and other industrial structures are also visible in these views, thus grounding Shornemead Fort within a wider industrial setting to the west, particularly on the northern side of the river, even when Tilbury B has been removed. In addition, frequent shipping movements also form part of Shornemead Fort's setting.

Assessment of Impact

5.6.8 The Proposals are likely to have an impact on the wider setting of Shornemead Fort principally through potential visual effects of new buildings and structures, large berthed vessels, port-related activity and lighting. Other environmental effects that could impact upon setting, such as noise, vibration, dust and traffic, are less likely to impact the setting of Shornemead Fort, given its considerable distance from the Tilbury2 Site.

5.6.9 Visual impacts are likely to form a distant element in views from Shornemead Fort and visibility is likely to be limited to the largest structures and buildings on the Tilbury2 Site, given the considerable distance that the Fort lies from the Site. This is likely to include the 100m high silo which is likely to form a landmark on the river front, large berthed vessels at the extended jetty and lighting. The upper levels of the RoRo terminal warehouse and container storage may also be visible, however, at such a considerable distance they are unlikely to be greatly appreciable. The Proposals will thus extend the existing industrial character of the north shore which is already appreciable in views from Shornemead Fort. Whilst this will alter the wider setting of Shornemead Fort in appearance, it will not fundamentally change its character. Whilst the Proposals are likely to have some 'landmark' quality, this will principally be limited to the 100m silo which will be visible as a slender structure against the skyline and not overly bulky or dominant.

5.6.10 By virtue of the intervening proposed built form within the main Tilbury2 Site and the considerable distance of the Site from the heritage asset, the proposed new infrastructure corridor will not be appreciable in views from Shornemead Fort and thus this element of the Proposals will have no impact upon its wider setting.

5.6.11 **Overall, it is thus considered that the Proposals are likely to have a potential negligible visual impact upon the wider setting of Shornemead Fort and thus likely to have a neutral impact upon its significance, as the key historic sightlines to Coalhouse Fort and Cliffe Fort will be preserved.**

Figure 122: Existing view looking northeast from Shornemead Fort. Whilst situated a considerable distance away, Tilbury B power station is visually dominant, however, it will be completely demolished by January 2019. the large pylons situated to the north of Tilbury B are also visible, further grounding Shornemead Fort within a wider industrial context. (Source: DJA)

5.7 POTENTIAL CUMULATIVE IMPACTS

Cumulative Impacts

5.7.1 Cumulative impacts are those which comprise multiple effects from different sources within the proposals (synergistic or interrelationships), or cumulatively with other developments (additive), on the same receptors.

5.7.2 Full details of the projects included within the cumulative assessment for Tilbury2 are outlined within Chapter 2 of the ES. These identified schemes include:

- Thames Enterprise Park—11km east of the Tilbury2 Site.
- Oikos Storage Proposals—14km east of the Tilbury2 Site.
- Goshems Farm Jetty—1.14km east of eastern boundary of Tilbury2 Site.
- Land Adjacent Tilbury Power Station—Ash Fields to the east of Tilbury B Power Station.
- West Thurrock Biomass CHP plant—Land at Fiddlers Reach, Wouldham Road, Grays.

5.7.3 These locations and nature of these schemes have been reviewed and it has been concluded that the schemes that could result in cumulative effects with the Proposals are the:

- Goshems Farm Jetty scheme; and
- Ash Fields to the east of Tilbury B Power Station.

5.7.4 The Goshems Farm Jetty scheme includes: “Proposed jetty comprising pontoon and access bridge to improve facilities for barges to bring spoil from Thames Tideway Tunnel to adjoining landfill site and Ash Fields”.

5.7.5 The Ash Fields to the east of Tilbury B Power Station scheme includes: “Continued re-profiling of the site to 9 metres AOD using inert reclamation material imported by river, in place of Pulverised Fuel Ash from the adjacent now redundant Power Station.”

5.7.6 Together these developments are likely to result in increased activity on the land between Tilbury Fort and Coalhouse Fort, resulting in potential further industrial characterisation of the former marshland. However, given the particular nature of these proposals, it is not considered to result in any significant cumulative impacts upon the settings of surrounding built heritage assets in conjunction with the Proposals.

Redevelopment of Tilbury B Power Station site

5.7.7 At the time of publishing the PEIR, the future of the existing Tilbury B Power Station, located adjoining the Tilbury2 Site to the east, was unknown. As highlighted above, the demolition of the Power Station is on-going and its removal is taken into account as part of the future baseline. RWE have confirmed that their demolition contract is such that the demolition will be complete by January 2019, when construction of Tilbury2 will commence from the DCO is made.

5.7.8 On 20 July 2017 RWE Generation, the owners of the Tilbury B Power Station site, wrote to PoTLL to advise that they are proposing the development of a project to be known as “Tilbury Energy Centre.” They advised that the project includes the potential for a Combined Cycle Gas Turbine (CCGT) power station with capacity of up to 2,500 Megawatts, 100 MW of energy storage development and 300MW of Open Cycle Gas Turbines (OCGT). Their web site indicates that “the exact size and range of these technologies will be defined as the project progresses based on an assessment of environmental impacts and market and commercial factors9.” No details of the proposal are yet available. RWE anticipate that an application will be submitted to the Planning Inspectorate under the Planning Act 2008 at the end of 2018 or early in 2019.

5.7.9 Having regard to PINS guidance on cumulative impacts in its Advice Notes 9 and 17, PoTLL have concluded that it is not possible to properly define a ‘scheme’ for the putative RWE Power Station in order to assess the cumulative impacts with the proposals. Accordingly, the proposal is not included as a cumulative development. Clearly, the assessment and modelling for the redevelopment of the Tilbury B Power Station Site itself will need to deal with cumulative impacts, including, as appropriate, from Tilbury2.

Lower Thames Crossing

5.7.10 The Government consulted on proposals for a further crossing of the river Thames (the “Lower Thames Crossing” or “LTC”) in 2016. The Tilbury2 proposals do not rely on the delivery of the LTC.

5.7.11 The Secretary of State for Transport announced the preferred route for the Lower Thames Crossing on 12 April 2017, following Highways England's consultation on the various options for that scheme. The preferred route crosses the River Thames east of the proposals site.

5.7.12 Despite this announcement, there is still a large amount of uncertainty in relation to the impact of LTC on the local highway network in the vicinity of the Port.

5.7.13 This is because the currently published drawings for LTC are illustrative and are at a very preliminary stage, subject to another period of design work before statutory consultation for that scheme. The published traffic appraisal gives some initial assessment of predicted traffic on the chosen route but the analysis is at a ‘headline’ level and is used for comparative purposes in order to consider the relative merits of the chosen route as against the other options, rather than to fully examine and fully appraise the preferred route. There is no available detailed appraisal of the chosen route which could be used as the basis of any in-combination assessment.

5.7.14 Furthermore, there is a lack of detail as to the scale and nature of the development in terms of how it directly interacts with the proposals. This is because there is no certainty as to whether a junction might be proposed as part of the LTC scheme that would create an eastern access into Tilbury2 and what any such junction would mean for access from the main Port area and Tilbury2 to the strategic motorway network. There is an indication in the LTC's announcements that further work will be undertaken to determine whether a new junction will be provided at Tilbury - this decision would fundamentally alter the operation and flows on the network. However, it is impossible to determine the effects of this at this stage; or until a decision on this is made by Highways England and consulted upon as part of its statutory consultation. In any event, it is important to be clear that Tilbury2 does not rely in any way on LTC and has been designed to be able to operate without LTC.

5.7.15 It is also noted that, as set out in the general advice given to the LTC on the PINS website, a DCO application for the LTC is not currently scheduled for submission until mid-2019. LTC has also indicated that construction would not commence on the LTC until 2021, if the DCO was granted in this currently anticipated timescale. This means that the detail of the LTC proposals will not be known until after the DCO process for Tilbury2 is due to be completed, and construction would not take place until after Tilbury2 is already in operation. In the absence of any detail on the construction methodology until early 2019, it will therefore be incumbent on the LTC to assess the impacts of that methodology against Tilbury2 in operation.

5.7.16 Having considered all of the above, and having regard to PINS guidance on these matters in its Advice Notes 9 and 17, PoTLL have concluded that it is not possible to properly define an LTC

5.7 POTENTIAL CUMULATIVE IMPACTS

'scheme' in order to assess the cumulative impacts with the proposals. Given this context it is not the intention to assess the cumulative impact of Tilbury2 with the LTC; nor is it considered reasonable to prepare an alternative Traffic Impact Assessment that considers the new highway network and traffic distribution that could result if the LTC were implemented. Clearly, the modelling for the LTC itself will need to deal with cumulative impacts, including, as appropriate, from Tilbury2.

6.0 SUMMARY

6.1 In line with Paragraph 5.12.6 of the National Policy Statement for Ports (NPS) and Paragraph 128 of the National Planning Policy Framework (NPPF), this Built Heritage Assessment has identified and provided an assessment of the built heritage assets within a 2km radius of the Site boundary. This has included an assessment of their significance, including any contribution of their settings, and the Site's existing contribution to this. It has further provided an assessment of the likely impacts of the Proposals based on the General Arrangement drawings and information provided as part of the Environmental Statement (ES). In line with Paragraph 5.12.7 of the NPS, the assessment of the potential impacts of the Proposals upon the settings of the surrounding heritage assets has been informed by representative visualisations (included in full within Appendix 9.F of the LVIA.

6.2 This Built Heritage Assessment forms Technical Appendix 12.B to Chapter 12 of the Draft ES and should be read alongside it.

6.3 The assessment has found that the Proposals, by virtue of their nature and proximity to surrounding built heritage assets, are likely to have an impact upon the settings of surrounding heritage assets and may affect their significance. These impacts are likely to principally be visual and caused by the buildings, structures and uses associated with the Proposals, including the increase in lighting and large berthed vessels at the extended jetty. However, there is also likely to be an increase in noise to the settings of the heritage assets that are situated closest to the Tilbury2 Site, including Tilbury Fort and the World's End Inn.

6.4 It is considered that the most significant impacts of the Proposals are likely to be to the setting of Tilbury Fort, a Scheduled Monument situated in close proximity to the west of the main Tilbury2 Site and to the south of the proposed infrastructure corridor. The Proposals will result in an overall reassertion with some increase in the industrial character of the land surrounding Tilbury Fort, however, this will be appreciable as an extension of the existing industrial character which already principally defines the wider setting of the heritage asset. The key visual impacts are likely to be from the higher elements of the Proposals, including the 100m high silo, upper levels of the RoRo container storage and warehouse, CMAT processing facilities and aggregates stockpiles, large vessels berthed at the extended jetty and lighting throughout the Tilbury2 Site. Vessels have the potential to disrupt the crossfire sightlines from the southeast corner of Tilbury Fort, however, this impact will only occur when a vessel is berthed at the western end of the RoRo berth. It is acknowledged that this impact will be limited to the short periods of time that vessels are berthed here and therefore an appreciation of these sightlines will not be entirely lost.

6.5 The proposed infrastructure corridor will result in a reduction of the historic landscape setting to the north of Tilbury Fort, however, this setting will remain appreciable in views from and around the Fort, ensuring that an understanding of the historic landscape remains. Furthermore, the embedded noise and landscape mitigation surrounding the infrastructure corridor will ensure that traffic movements are screened/filtered in views from Tilbury Fort; this landscaping will be in the form of scrubland which already forms part of the character of the landscape surrounding Tilbury Fort. The proposed infrastructure corridor will also enable a reduction in traffic along Fort Road in close proximity to Tilbury Fort, thus providing an opportunity to enhance the immediate landscape setting surrounding the Fort and reducing visibility of vehicles, traffic emissions and noise. Furthermore, the Active Travel Study which forms part of the DCO, includes opportunities for improvements to the footpaths and network surrounding Tilbury Fort; this includes resurfacing of footpaths and car parking to improve their appearance. This measure will help to improve connectivity to Tilbury Fort and thus open up new pedestrian links and encourage visitors towards both the Scheduled Monument and its landscape setting.

6.6 Overall, it is considered that the Proposals will likely result in an overall moderate adverse impact on the setting of Tilbury Fort, due to an increase in the industrial character of the land surrounding the Scheduled Monument and partial reduction of the landscape setting to the north of Tilbury Fort. However, given that the Scheduled Monument will remain physically unaffected by the Proposals and the key elements of its setting will be largely retained—i.e. the river, key views across to Gravesend and New Tavern Fort, the historic functional association with the other riverside defences, and the vast majority of the surviving historic landscaped setting to the north around Fort Road, including the areas closest to the designation—it is considered that the Proposals will be appreciable as an extension of the existing wider industrial setting which surrounds Tilbury Fort, and its principal significance formed by its historic, evidential and aesthetic values, will remain understood.

6.7 It is thus considered that the Proposals are, overall, likely to result in a medium level of less than substantial harm to the significance of Tilbury Fort through altering and further industrialising its setting.

6.8 Given its location within Tilbury Fort, the Proposals are likely to have an impact upon the setting of the Grade II* Officers Barracks. Overall, the Proposals will increase the proximity of industrial uses, including lighting effects, and are thus likely to have a potential moderate adverse impact upon the setting of the listed building. This is likely to result in a low to medium level of less than substantial harm to the listed building's significance. It's key significance, as assessed within Section 5.5 of this report, will remain appreciable, as will the contribution of its immediate setting which is formed by Tilbury Fort itself.

6.9 The Proposals are also likely to have a harmful impact on the setting and subsequently significance of the Grade II listed World's End Inn, situated to the west of the Tilbury2 Site and Tilbury Fort. The Proposals will likely result in decreased traffic, noise and vehicle emissions along Fort Road, particularly HGVs, as these will be re-directed along the new infrastructure corridor. This is likely to have a beneficial impact upon the setting of the World's End Inn through in part reducing its existing industrial setting. However, the construction of the infrastructure corridor to the north of the listed building will, to an extent, further reduce the historic marshland landscape setting to the north which partially contributes towards the significance of the listed building through in part helping to understand the building's historic isolation within the landscape.

6.10 Whilst the construction of the infrastructure corridor will reduce this setting to the north, it will not be lost entirely and an appreciation of the listed building's historic setting will remain appreciable. Furthermore, the embedded landscape mitigation in proximity to the infrastructure corridor will filter views and noise of vehicles using the new road. This will help to further reinstate, to an extent, an appreciation of the former isolation of the listed building within its surroundings. Nonetheless, the proposed infrastructure corridor is likely to result in minor harm to the setting of the listed building resulting in a negligible to low level of less than substantial harm to its significance.

6.11 Given the nature of the Proposals and their location of the riverfront, the wirelines illustrate that they will be visible in views across the river from Gravesend and are thus likely to have an impact upon the wider settings of heritage assets on the southern river bank. Given the considerable distance between the Tilbury2 Site and these heritage assets, impacts are likely to be limited to visual impacts of the buildings and structures, stationary vessels and lighting; other environmental factors, such as noise and air quality, are unlikely to have any significant affect on the settings of heritage assets located here.

6.12 In particular, the Proposals are likely to have a minor adverse impact upon the setting of New Tavern Fort through further industrialising the northern river bank and partially disrupting the wider historic crossfire sightlines to Tilbury Fort when vessels are berthed at the western end of the RoRo berth. However, importantly the key sightlines between the two forts will not be directly impacted or disrupted. The impacts are thus likely to result in a low level of less than substantial harm to the overall significance of New Tavern Fort.

6.0 SUMMARY

6.13 The Proposals are also likely to have an impact upon views from a number of the conservation areas within Gravesend. As shown within the accompanying wirelines, effects are likely to be most significant in views from the Gravesend Riverside Conservation Area, the High Street and Queens Street Conservation Area and the Windmill Hill Conservation Area, all of which have long views across the river to Tilbury. The Proposals will further industrialise the northern riverbank and there will be increases in lighting. Importantly, however, these views of the Proposals will be within the context of the existing and established industrial character which defines the northern river bank and, as such, the Proposals will not fundamentally change the wider settings of these conservation areas and the listed buildings contained within their boundaries. The Proposals will therefore be visible as an extension of the established industrial character of the river and are unlikely to have any significantly harmful impacts upon the majority of the heritage assets within Gravesend.

6.14 Overall, the Proposals are likely to result in a degree of harm to the significance of some of the surrounding built heritage assets, as outlined and assessed above and therefore, in line with the NPS and NPPF, this harm should be balanced against the public benefits of the scheme.

Potential Further Mitigation

6.14 As noted, the Proposals as have the potential to impact upon the settings of numerous surrounding built heritage assets. Possible further mitigation measures to potentially reduce the effects on the settings of the surrounding built heritage assets could include the following. It is, however, important to note that these are subject to both operational viability and consultation and agreement with key stakeholders, including Historic England, Thurrock Council, Gravesham Borough Council and English Heritage.

- Retention of mature Monterrey Pine trees located at the western boundary to reduce and potentially screen low level views of the RoRo container operations from Tilbury Fort, thus potentially reducing the impact of an increased industrial character without altering the existing landscape. This is secured through the Landscape and Ecological Management Plan, compliance with which is secured by a DCO requirement.

- Colour the proposed 100m high silo and other taller buildings and built structures light grey to potential reduce the visual impacts of these elements on the setting of Tilbury Fort and in views from heritage assets to south of the river in Gravesend. Taller structures are likely to be seen against the sky and lighter colouration would reduce their presence. To secure this, surface treatment of the silo will be required by the DCO to be approved by Thurrock Council, in consultation with Historic England and Gravesham Borough Council.

- Provide low key lighting, where appropriate and health and safety allows, to illuminate waterside elements of the Proposals to help reduce impacts on the setting of Tilbury Fort and heritage assets within Gravesend. This will be secured through the DCO requirement for a detailed lighting strategy to be approved by Thurrock Council, in consultation with Historic England and Gravesham Borough Council, to be in general accordance with the Preliminary Lighting Strategy and Impact Assessment (Document Reference 6.2 9.J).

6.15 The potential further mitigation measures will continue to evolve through engagement with the relevant key stakeholders for the historic environment. Where possible, additional mitigation will be incorporated as appropriate and could result in reducing the residual effects upon the settings of heritage assets.

Potential Heritage Enhancements

6.16 Further direct engagement will be undertaken with Historic England, English Heritage, Thurrock Council and Gravesham Borough Council in regard to potential heritage enhancements that could be offered by the Applicant.

6.17 Enhancement measures could possibly include improvements to access, wayfinding, car parking and visitor experience to Tilbury Fort. Initial meetings with HE and EH were held on 29 November 2016 and 23 August 2017 (the latter also with Thurrock Council) on this topic. Whilst further engagement is required, opportunities to improve the footpaths and wayfinding in proximity to the Fort were discussed and have the potential to enhance both visitor experience and the setting of the heritage asset. Enhanced car parking and improvements to the surface treatment and approach to Tilbury Fort could also be explored.

6.18 Further heritage enhancements may also be appropriate on the southern river bank. The assessment of impact indicates that the main impacts of the Proposals upon heritage assets in Gravesend will be visual and could potentially disrupt the outer historic crossfire sightlines between New Tavern Fort and Tilbury Fort which could result in a low level of less than substantial harm to the significance of New Tavern Fort. Likely appropriate enhancements could therefore be in the form of new heritage interpretation boards at New Tavern Fort and Tilbury Fort to visually map and explain the historic crossfire and relationship between the two defences in further detail, thus introducing a new element of interpretation to enhance public appreciation of the crossfire that the two forts were built for. This has been raised with Gravesham Borough Council and further engagement is required to agree appropriate enhancements. The Applicant will seek to secure any heritage enhancements through a Section 106 agreement and this is subject to further discussions with GBC.

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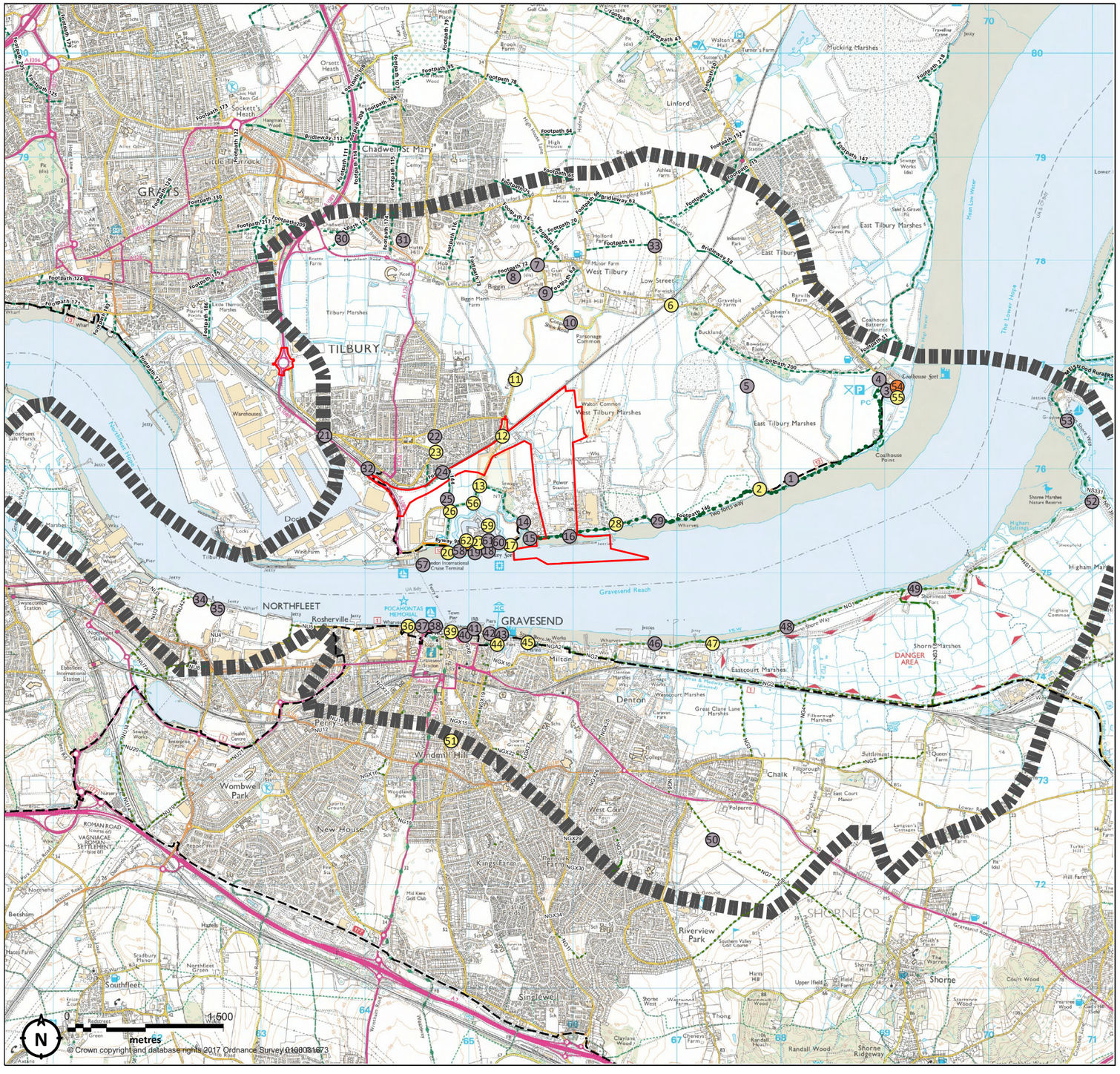
APPENDIX B: VIEWPOINT LOCATIONS

Map showing the locations of the Sensitive Receptor Viewpoints and Zone of Significant Visibility for the Landscape and Visual Impact Assessment (LVIA), Chapter 9 of the ES. The numbers in yellow indicated that key representative viewpoints that have been used for the assessment and for which wirelines of the Proposals have been provided.

A number of these images have informed the assessment of impact upon the settings of built heritage assets surrounding the Site and are included within this report. High quality copies and further information on each of these views, including the recommended viewing distances, is included within Appendix 9.F of the LVIA and should be read in conjunction with this Built Heritage Assessment.

Source: DJA, Figure 9.8 of the LVIA.



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