

13 Cultural Heritage

13.1 Introduction

- 13.1.1 This Chapter assesses the likely significant archaeological and cultural heritage effects resulting from the K3 and WKN Proposed Developments. It considers construction, operation and decommissioning effects in respect of the physical fabric and setting of heritage assets as appropriate.
- 13.1.2 The Chapter reports on studies, including a combination of field surveys and desktop research, to describe, classify and evaluate the existing resource. The likely impacts are assessed during the construction, operational and decommissioning phases of the K3 and WKN Proposed Developments and Works No. 1 - 7. Full details of these associated works are presented in Chapter 2 and accompanying figures, which set the basis against which this assessment has been conducted.
- 13.1.3 An appended baseline desk assessment (Appendix 13.1) contains a detailed baseline with accompanying figures. Due to the interrelated nature of the assessments there is some cross over between this Chapter and Chapter 12, Landscape. On this basis some of the landscape figures remain relevant for this assessment and the location plan for Figure 13.1 is contained within Chapter 12- Landscape, as are further relevant visualisations referred to in this chapter. Figure 13.2 shows the designated assets in the area surrounding the DCO boundary.

13.2 Regulatory and Policy Framework

Legislation and Planning Policies

- 13.2.1 Listed buildings are protected under the designation regime set out in the Planning (Listed Buildings and Conservation Areas) Act (1990) which empowers the Secretary of State for the Department of Digital, Culture, Media and Sport (DCMS) to maintain a list of built structures of historic or architectural significance.
- 13.2.2 Scheduled monuments are protected through the Ancient Monuments and Archaeological Areas Act (1979), which had been updated in the National Heritage Act (1983). Scheduled monuments are maintained on a list held by the Secretary of State for DCMS. Any alterations or works to a Scheduled Monument (including archaeological investigation) requires Scheduled Monument consent (SMC).

National Policy Statements for Energy

- 13.2.3 In July 2011 the Secretary of State for Energy and Climate Change designated the six National Policy Statements for Energy (NPSs) under the Planning Act 2008. These NPSs set out national policy against which proposals for major energy schemes will be assessed and determined.

- 13.2.4 The NPSs which are relevant to the application for the proposed development is the Overarching Energy National Policy Statement (NPS EN-1); Department of Energy and Climate Change (DECC 2011a).
- 13.2.5 NPS EN-1 responds to the guidance provided in the NPPF in that it requires applicants to describe the significance of heritage assets affected by a development and the contribution of their setting to that significance (NPS EN-1: 5.8.8). The applicant also has to ensure that the extent of the impact of the development on the significance of any heritage assets affected can be adequately understood from the application documents
- 13.2.6 NPS EN-1 advises that harmful impacts on the significance of heritage assets should be weighed against the public benefit of the proposed development, also that where a development may affect the setting of a heritage asset the IPC and its successor bodies should treat more favourably applications that preserve those elements of the setting that make a positive contribution to the significance of the asset.
- 13.2.7 NPS EN-1 at paragraph 5.5.8 notes that applicants 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
- 13.2.8 NPS EN-1 at paragraph 5.5.8 goes on to note that as a minimum the applicant should have consulted the relevant Historic Environment Record (or, where the development is in English or Welsh waters, EH or Cadw) and assessed the heritage assets themselves using expertise where necessary according to the proposed development's impact
- 13.2.9 NPS EN-1 at paragraph 5.8.9 notes that where a development site includes, or the available evidence suggests it has the potential to include, heritage assets with an archaeological interest, the applicant should carry out an appropriate DBA and, where such desk-based research is insufficient to properly assess the interest, a field evaluation
- 13.2.10 NPS EN-1 at paragraph 5.8.9 goes on to note that where proposed development will affect the setting of a heritage asset, representative visualisations may be necessary to explain the impact

National Planning Policy Framework (NPPF)

- 13.2.11 The revised National Planning Policy Framework (NPPF) (Department of Housing Communities and Local Government, February 2019) provides guidance to planning authorities regarding the protection of heritage assets within the planning process. The NPPF deals with all types of heritage in a single document. It takes an integrated approach to the historic environment and 'heritage assets', moving beyond a distinction between buildings, landscapes and archaeological remains.
- 13.2.12 A heritage asset is defined in the NPPF at page 67 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. Heritage

assets include designated heritage assets and assets identified by the local planning authority (including local listing).

- 13.2.13 'Setting of a heritage asset' is defined in the NPPF at page 71 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'.

Kent County Council

- 13.2.14 The Kent Minerals and Waste Local Plan 2013 – 2030 was adopted in July 2016. Policy DM5 is concerned with Heritage assets:

"Proposals for minerals and waste developments will be required to ensure that Kent's heritage assets and their settings, including locally listed heritage assets, registered historic parks and gardens, Listed Buildings, conservation areas, World Heritage Sites, Scheduled Ancient Monuments, archaeological sites and features and defined heritage coastline, are conserved in a manner appropriate to their significance. Proposals should result in no unacceptable adverse impact on Kent's historic environment and, wherever possible, opportunities must be sought to maintain or enhance historic assets affected by the proposals. Minerals and/or waste proposals that would have an impact on a heritage asset will not be granted planning permission unless it can be demonstrated that there is an overriding need for development and any impacts can be mitigated or compensated for, such that there is a net planning benefit."

- 13.2.15 Policy DM6 specifically covers Historic Environment Assessment:

"Proposals for minerals and waste development that are likely to affect important heritage assets will only be granted planning permission following:

- 1. preliminary historic environment assessment, including field archaeological investigation where appropriate, to determine the nature and significance of the heritage assets*
- 2. appropriate provision has been secured for preservation in situ, and/or archaeological excavation and recording and/or other historic environment recording as appropriate, including post-excavation analysis and reporting, archive deposition and access, and interpretation of the results for the local community, in accordance with the significance of the finds*
- 3. agreement of mitigation of the impacts on the significance of the heritage assets, including their fabric, their setting, their amenity value and arrangements for reinstatement"*

Swale Borough Council's Development Plan

13.2.16 The Swale Borough council development plan comprises the Swale Borough local Plan. The Swale Borough Local Plan was published in July 2017. Policy CP8, Conserving and enhancing the historic environment, states the following:

"To support the Borough's heritage assets, the Council will prepare a Heritage Strategy. Development will sustain and enhance the significance of designated and non-designated heritage assets to sustain the historic environment whilst creating for all areas a sense of place and special identity. Development proposals will, as appropriate:

- *Accord with national planning policy in respect of heritage matters, together with any heritage strategy adopted by the Council;*
- *Sustain and enhance the significance of Swale's designated and non-designated heritage assets and their settings in a manner appropriate to their significance and, where appropriate, in accordance with Policies DM30-DM34;*
- *Respond to the integrity, form and character of settlements and historic landscapes;*
- *Bring heritage assets into sensitive and sustainable use within allocations, neighbourhood plans, regeneration areas and town centres, especially for assets identified as being at risk on national or local registers;*
- *Respond positively to the conservation area appraisals and management strategies prepared by the Council;*
- *Respect the integrity of heritage assets, whilst meeting the challenges of a low carbon future; and*
- *Promote the enjoyment of heritage assets through education, accessibility, interpretation and improved access."*

13.3 Methodology

Scoping and Consultation

13.3.1 The formal scoping exercise is set out in Chapter 3 In addition, consultation with the Kent County Archaeology Advisory Service and their Historic Environment Record (HER) was undertaken.

13.3.2 KCC noted the inclusion of the Scheduled Monument Rough Castle in the baseline and suggested that the applicant consulted with KCC and Historic England on the effects of the scheme in relation to built heritage matters. An assessment of the potential impacts on Rough Castle can be found in sections 13.6.6 – 13.36.12 below

- 13.3.3 With regards to the assessment methodology, KCC noted that they mostly agreed with the proposed methodology for the assessment of the effect of the proposed WKN Proposed Development on archaeology and cultural heritage. However, they recommended that the desk based archaeological assessment should include detailed modelling of the below ground deposits beneath the site, based on the results of geotechnical work both within the site and on adjacent site. They stipulated that the model should also be used to compare the known below ground impacts and the proposed construction ground impacts to determine the potential impact of the development on archaeology. The results of a number of previous ground investigations and geo-archaeological investigations covering much of the area within the DCO boundary and adjacent sites informed the assessment of below ground potential, some of which were incorporated within Appendix 13.1.
- 13.3.4 In the request for a Scoping Opinion submitted to PINS, it was stated that no changes to the built form or site layout of K3 as consented were required and therefore no likely significant effects on archaeology and built heritage would result. It therefore proposed that the assessment of effects on archaeology and cultural heritage from the K3 Proposed Development were scoped of the ES. The response from PINS agreed with this approach.
- 13.3.5 Following ongoing discussion with the Planning Inspectorate (PINS) following the 2018 Consultation and Publicity the applicant has been advised that the application for the K3 development should (in order to properly categorise and consent the development under the Planning Act 2008) seek consent for the construction and operation of K3 up to a generating capacity of 75MW, as well as then seeking consent for an annual throughput of 657,000 tonnes of waste.
- 13.3.6 The 2010 assessment of effects resulting from the K3 has therefore been submitted in support of the application (Document 3.3) and is summarised in this chapter.

Establishing Baseline Conditions

Study Area

- 13.3.7 The study area is based upon recent experience of similar developments, the DCO site visit and consideration of the landscape study, including the zone of theoretical visibility (ZTV) that has been defined for the LVIA (see Chapter 12). This assessment, for the purpose of buried archaeology, focuses on a study area of 1km around the DCO boundary. For the purpose of the settings of heritage assets, the assessment focuses on a study area of 3km around the DCO boundary while taking into consideration evidence from a wider area if appropriate, for example, assets outside the study area characterise the baseline or if it appeared likely that there would be a significant effect on a heritage asset outside the study area.
- 13.3.8 With respect to the settings of heritage assets, only those assets which lie within the ZTV are assessed, using the guidance prepared by Historic England in their document "The Setting of Heritage Assets" (Historic England 2017) along with "Conservation Principles". (Historic England 2008).

Baseline Methodology

- 13.3.9 A baseline desk assessment and walkover survey of the DCO boundary has been undertaken.
- 13.3.10 The desk assessment comprised, in the first instance, consultation with the Kent County Archaeology Advisory Service and their Historic Environment Record (HER). Data on Scheduled Monuments, registered parks and gardens and registered battlefields was obtained from Historic England. A review of relevant documentary and archival material held in libraries and archives was undertaken. An iterative approach was adopted during this process to determine the scope of the above consultations/searches.
- 13.3.11 A site visit was undertaken in October 2017 to establish the presence of above ground archaeology, whether or not previously recorded and to verify the settings of the heritage assets surrounding the DCO boundary. The assessment has conformed to the relevant legislation and guidance, including:
- National Planning Policy Framework (NPPF) Department of Communities and Local Government (DCLG) (February 2019);
 - Overarching Energy National Policy Statement (NPS EN-1); Department of Energy and Climate Change (DECC) (2011a);
 - Renewable Energy Infrastructure National Policy Statement (NPS EN-3); Department of Energy and Climate Change (DECC) (2011b);
 - Code of Conduct Chartered Institute for Archaeologists (2014);
 - Standard and Guidance for Historic Environment Desk Based Assessment Chartered Institute for Archaeologists (2017); and
 - Historic Environment Good Practice in Planning Note 3: The Setting of Heritage Assets Historic England (2017)

Significance Criteria

Assessment Criteria and Impact Assessment Methodology

- 13.3.12 The significance of predicted impacts likely to occur during construction, operation and future decommissioning of the WKN Proposed Development has been determined by consideration of the importance of assets that may be affected and the magnitude of the predicted impact.

Asset Significance and Importance

- 13.3.13 In order to reach an understanding of the likely effect that a project may have on a heritage asset, it is necessary to understand the significance and importance of that asset.

13.3.14 Establishing the importance of a heritage asset is principally a means of identifying the extent to which the asset should be valued. For example, is it important at a national level or at a local level.

13.3.15 Significance can primarily be understood through examination of why a structure, site or area should be considered as a heritage asset. In the NPPF the significance of an asset is defined as:

'The value of a heritage asset to this and future generations because of its heritage interest. That interest may be archaeological, architectural, artistic or historic. Significance derives not only from a heritage asset's physical presence, but also from its setting.' (DCLG 2019, Annex 2 and cross-referenced in National Policy Statement EN-1).'

13.3.16 These levels of interest broadly tie in with previous guidance from EH expressed in the document Conservation Principles, Policies and Guidance for the Sustainable Management of the Historic Environment (Historic England, 2008). This provides guidance on understanding heritage values and also included a section (Section 6) advising on how to assess heritage significance.

13.3.17 According to the guidance published by HE (2008), heritage values fall into four inter-related groups:

- Evidential value – the potential of a place to yield evidence about past human activity;
- Historical value – this derives from the ways in which past people, events and aspects of life can be connected through a place to the present. This value tends to be illustrative (providing insights into past communities and their activities) or associative (association with a notable family, person, event or movement);
- Aesthetic value – this derives from the ways in which people draw sensory and intellectual stimulation from a place; and
- Communal value – this derives from the meanings of a place for the people who relate to it, or for whom it figures in their collective experience or memory.

Assessment of Asset Importance - Archaeological Assets

13.3.18 There are no national government guidelines for evaluating the importance of heritage assets. For archaeological assets, the DCMS has adopted a series of recommended (i.e. non-statutory) criteria for use in the determination of national importance when scheduling ancient monuments. These are expressed in the document Scheduled Monuments - Identifying, Protecting, Conserving and Investigating Nationally Important Archaeological Sites under the Ancient Monuments and Archaeological Areas Act 1979 (DCMS 2010). The criteria include period, rarity, documentation, group value, survival/condition, fragility/vulnerability, diversity and potential, and can be used as a basis for the assessment of the importance of historic remains and archaeological sites. However, the document also states that these criteria *'should not be regarded as*

definitive; but as indicators which contribute to a wider judgement based on the individual circumstances of a case.'

- 13.3.19 The criteria described above may also be used as a basis for the assessment of the importance of archaeological assets of less than national importance. However, the categories of regional and district/local importance are less clearly established than that of national and implicitly relate to local, district and regional priorities, which themselves vary within and between regions. Where available, local, district and regional research agenda, and local or structure plans may assist in this process.
- 13.3.20 It is noted that a high degree of professional judgement is required in the identification of importance for archaeological assets and this approach has been applied to this assessment, guided by acknowledged standards, designations and priorities. It is also important to recognise that buried archaeological remains may not always be well-understood at the time of assessment and can therefore be of uncertain importance.
- 13.3.21 The most recent guidance from any national agency regarding cultural heritage and EIA is from the Highways Agency and is expressed in Guidance Note 208/07 (August 2007) that now forms part of the Design Manual for Roads and Bridges, Volume 11, Section 3, Part 2 (HA 208/7) (Highways Agency et al., 2007).
- 13.3.22 The following table (Table 13.1:) is primarily based on HA 208/07 and has been used to inform the assessment.

Sensitivity	Typical Descriptors
Assets of the highest significance	World Heritage Sites. Assets of acknowledged international importance. Assets that can contribute significantly to acknowledged international research objectives. Scheduled Monuments. Undesignated assets of schedulable quality and importance.
High	Assets that can contribute significantly to acknowledged national research objectives.
Medium	Designated or undesignated heritage assets that contribute to regional research objectives
Low	Undesignated heritage assets of local importance. Assets compromised by poor preservation and/or poor survival of contextual associations. Assets of limited value, but with potential to contribute to local research objectives.
Negligible	Assets with very little or no surviving archaeological interest.
Unknown	The importance of the resource cannot be ascertained

Table 13.1: Example Definitions of Sensitivity or Value (Archaeological Assets)

Assessment of Asset Importance - Historic Buildings

- 13.3.23 For historic buildings, assessment of importance is usually based on the designations used in the Listed Building process. Where historic buildings are not listed, or where the listing grade may be in need of updating, professional judgement has been used.

13.3.24 The criteria used in establishing the importance of historic buildings within the Listed Building process include architectural interest, historic interest, close historic association (with nationally important people or events) and group value. Age and rarity are also taken into account. In general (where surviving in original or near-original condition), all buildings of pre-1700 date are listed, most of 1700 to 1840 date are listed, those of 1840 to 1914 date are more selectively listed, and thereafter even more selectively. Specific criteria have been developed for buildings of 20th century date. At a local level, buildings may be valued for their association with local events and people or for their role in the community.

13.3.25 HA 208/07 provides a basis for the following table (Table 13.2: Example Definitions of Sensitivity or Value (Archaeological Assets)), as a guide for establishing the importance of historic buildings. This has been used to inform the current assessment.

Sensitivity	Typical Descriptors
Assets of the highest significance	Standing buildings inscribed as of universal importance as World Heritage Sites. Other buildings of recognised international importance. Scheduled Monuments with standing remains. Grade I and II* listed buildings. Other listed buildings that can be shown to have exceptional qualities in their fabric or historical association not adequately reflected in the listing grade. Conservation Areas containing very important buildings. Undesignated structures of clear national importance.
High	Grade II listed buildings. Historic (unlisted) buildings that can be shown to have exceptional qualities in their fabric or historical association. Conservation Areas containing important buildings.
Medium	Historic Townscape or built-up areas with historic integrity in their buildings or built settings (e.g. including street furniture and other structures).
Low	Undesignated heritage assets of local importance. Assets compromised by poor preservation and/or poor survival of contextual associations. Assets of limited value, but with potential to contribute to local research objectives.
Negligible	'Locally listed' buildings. Historic (unlisted) buildings of modest quality in their fabric or historical association. Historic Townscape or built-up areas of limited historic integrity in their buildings or built settings (e.g. including street furniture and other structures).
Unknown	Buildings of no architectural or historic note; buildings of an intrusive character.

Table 13.2: Example Definitions of Sensitivity or Value (Archaeological Assets)

Assessment of Asset Importance - Historic Landscapes

13.3.26 The sub-topic of Historic Landscape is recognised as having significant overlaps with other topics, such as landscape and townscape and therefore a multi-disciplinary approach to assessment has been adopted. This is to avoid double counting and duplication of effort. There are also significant overlaps with the other cultural heritage sub-topics of archaeological remains and historic buildings.

The elements that are considered within those two sub-topics can make significant contributions to the historic landscape. This latter sub-topic has therefore concentrated on the overall Historic Landscape Character (HLC) and its value, rather than the individual elements within it.

13.3.27 All landscapes have some level of historic significance, as all of the present appearance of the urban and rural parts of England is the result of human or human-influenced activities overlain on the physical parameters of climate, geography and geology

13.3.28 A number of designations can apply to historic landscapes, including World Heritage Sites (inscribed for their historic landscape value), Registered Parks and Gardens, Registered Battlefields and Conservation Areas. Some local plans include locally designated Historic Landscape Areas and Historic Parks and Gardens (or similar).

13.3.29 A model has been produced by the Council for British Archaeology (Rippon, 2004), whereby the historic landscape can be divided up into units that are scaled from smallest to largest, as follows:

- Elements - individual features such as earthworks, structures, hedges, woods etc.;
- Parcels - elements combined to produce, for example farmsteads or fields;
- Components - larger agglomerations of parcels, such as dispersed settlements or straight-sided field systems;
- Types - distinctive and repeated combinations of components defining generic historic landscapes such as ancient woodlands or parliamentary enclosure;
- Zones - characteristic combinations of types, such as Anciently Enclosed Land or Moorland and Rough Grazing;
- Sub-regions - distinguished on the basis of their unique combination of interrelated components, types and zones; and
- Regions - areas sharing an overall consistency over large geographical tracts.

13.3.30 The model described above can be used as the principal part of the overall assessment usually known as Historic Landscape Characterisation (HLC). However, although HLC has been undertaken for much of England, there is no specific guidance or advice regarding the attribution of importance or significance to identified HLC types.

13.3.31 The following Table (Table 13.3: Example Definitions of Sensitivity or Value (Historic Landscape Character)) is based on the guidance provided in HA 208/07 with regard to evaluating the importance of historic landscape character units and has been used to inform the current assessment.

Sensitivity	Typical Descriptors
Assets of the highest significance	World Heritage Sites inscribed for their historic landscape qualities. Historic landscape of international sensitivity, whether designated or not. Extremely well-preserved historic landscapes with exceptional coherence, time-depth, or other critical factor(s).
High	Designated historic landscapes of outstanding interest. Undesignated landscapes of outstanding interest. Undesignated landscapes of high quality and importance, and of demonstrable national sensitivity. Well-preserved historic landscapes exhibiting exceptional coherence, time-depth, or other critical factor(s).
Medium	Designated special historic landscapes. Undesignated historic landscapes that would justify special historic landscape designation, landscapes of regional sensitivity. Averagely well-preserved historic landscapes with reasonable coherence, time-depth, or other critical factor(s).
Low	Robust undesignated historic landscapes. Historic landscapes with specific and substantial importance to local interest groups, but with limited sensitivity. Historic landscapes whose sensitivity is limited by poor preservation and/or poor survival of contextual associations.
Negligible	'Locally listed' buildings. Historic (unlisted) buildings of modest quality in their fabric or historical association. Historic Townscape or built-up areas of limited historic integrity in their buildings or built settings (e.g. including street furniture and other structures).
Unknown	Landscapes with little or no significant historical interest.

Table 13.3: Example Definitions of Sensitivity or Value (Historic Landscape Character)

Assessment of Impact Magnitude – Archaeological Assets

- 13.3.32 The magnitude of an impact is assessed without regard to the value of the heritage asset. In considering the magnitude of impact, the principle established in section 12 of the NPPF that preservation of the asset is preferred, and that total physical loss of the asset is least preferred, has been taken into account.
- 13.3.33 It is not always possible to assess the physical impact in terms of percentage loss and therefore it can be important in such cases to try to assess the capacity of the heritage asset to retain its character and significance following any impact. Similarly, impacts resulting from changes within the settings of buried archaeological assets may also be more difficult to assess as they do not involve physical loss of the resource and may be reversible.
- 13.3.34 The magnitude of the predicted impact is assessed using the criteria expressed in Table 13.4: below. These are primarily based on the guidance provided in HA 208/07.

Sensitivity	Typical Descriptors
High	Change to most or all key archaeological elements, such that the asset is totally altered and much of its significance is lost. Substantial change within the setting leading to considerable loss of significance of the asset.
Medium	Changes to many key archaeological elements, such that the asset is clearly modified and there is some loss of significance. Change within the setting leading to some loss of significance of the asset.
Low	Changes to key archaeological elements, such that the asset is slightly altered and there is a slight loss of significance. Slight change within the setting leading to a slight loss of significance of the asset.
Negligible	Very minor changes to key archaeological elements or within the setting that hardly affect the significance of the asset.
None	No substantive change to key archaeological elements or within the setting.

Table 13.4: Example Definitions of Impact Magnitude (Archaeological Assets)

Assessment of Impact Magnitude – Historic Buildings

13.3.35 As for archaeological assets, the magnitude of impact in relation to historic buildings is assessed without regard to the importance of the asset, so the total destruction of an insignificant historic building has the same degree of magnitude of impact as the total loss of a high value historic building. Determination of the magnitude of impact is based on the principle that preservation of the asset and its setting is preferred and that total physical loss of the asset and/or its setting is the least preferred.

13.3.36 Changes within the settings of historic buildings may result from vibration, noise and lighting issues as well as visual impacts, and may be reversible. Additional methodology regarding the assessment of effects resulting from changes within settings is provided below.

13.3.37 The magnitude of the predicted impact is assessed using the criteria expressed in Table 13.5: below. These are primarily based on the guidance provided in HA 208/07.

Sensitivity	Typical Descriptors
High	Change to key historic building elements, such that the asset is totally altered and much of its significance is lost. Substantial change within the setting of an historic building leading to considerable loss of significance of the asset.
Medium	Change to many key historic building elements, such that the asset is clearly modified and there is some loss of significance. Change within the setting of an historic building leading to some loss of significance of the asset.
Low	Changes to key historic building elements, such that the asset is slightly altered and there is some loss of significance. Change within the setting of an historic building leading to a slight loss of significance of the asset.
Negligible	Slight changes to historic building elements or within its setting that hardly affect the significance of the asset.
None	No substantive change to fabric or within the setting.

Table 13.5: Example Definitions of Impact Magnitude (Historic Buildings)

Assessment of Impact Magnitude – Historic Landscapes

13.3.38 Historic landscapes cannot be destroyed or damaged but impacts on them can change their character. Impacts are assessed using evaluated HLC units, not the elements/parcels/components that contribute towards the character. There may be impacts resulting from changes within the settings of identified units, especially with regard to designated historic landscapes. Additional methodology regarding the assessment of effects resulting from changes within settings is provided at paragraphs 13.3.43 - 13.3.51 below.

13.3.39 The magnitude of the predicted impact is assessed using the criteria expressed in Table 13.6: Example Definitions of Impact Magnitude (Historic Landscape Character) below. These are primarily based on the guidance provided in HA 208/07.

Sensitivity	Typical Descriptors
High	Change to most or all key historic landscape elements, parcels or components; extreme visual effects; gross change of noise or change to sound quality; fundamental changes to use or access; resulting in total change to HLC unit and complete loss of significance.
Medium	Changes to many key historic landscape elements, parcels or components; visual change to many key aspects of the historic landscape; noticeable differences in noise or sound quality; considerable changes to use or access; resulting in moderate changes to HLC and some loss of significance.
Low	Changes to few key historic landscape elements, parcels or components; slight visual changes to few key aspects of historic landscape; limited changes to noise levels or sound quality; slight changes to use or access; resulting in limited changes to HLC and slight loss of significance.
Negligible	Very minor changes to key historic landscape elements, parcels or components; virtually unchanged visual effects; very slight changes in noise levels or sound quality; very slight changes to use or access; resulting in a very small change to HLC and very little loss of significance.
None	No change to elements, parcels or components; no visual or audible changes; no changes arising from in amenity or community factors.

Table 13.6: Example Definitions of Impact Magnitude (Historic Landscape Character)

Significance of Effects

13.3.40 The significance of an effect is a combination of the importance of the heritage asset and the magnitude of impact on that asset.

13.3.41 Effects can be adverse or beneficial. Beneficial effects are those that mitigate existing impacts and help to restore or enhance heritage assets, therefore allowing for greater understanding and appreciation. Based on the approach in HA 208/07, the following matrix in Table 13.7: Assessment Matrix below has been used for the assessment of archaeological remains, historic buildings and historic landscapes.

Sensitivity	Magnitude of impact				
	No Change	Negligible	Low	Medium	High
Negligible	No change	Negligible	Negligible or Minor	Negligible or Minor	Minor
Low	No change	Negligible or Minor	Negligible or Minor	Minor	Minor or Moderate
Medium	No change	Negligible or Minor	Minor	Moderate	Moderate or Major
High	No change	Minor	Minor or Moderate	Moderate or Major	Major or Substantial
Very high	No change	Minor	Moderate or Major	Major or Substantial	Substantial

Table 13.7: Assessment Matrix

13.3.42 Impacts can be either favourable or adverse; however, to avoid confusion; the default position of any effect recorded in this chapter is understood to be adverse unless stated otherwise.

13.3.43 Where the matrix provides a split in the level of effects, e.g. moderate/minor, the assessor has exercised professional judgement in determining which of the levels is more appropriate.

13.3.44 For the purposes of this assessment, any effect that is moderate, major or substantial is considered to be significant. Any effect that is minor or below is not significant.

13.3.45 The duration of the effect is indicated where known using the following terminology.

- Short term: a period of months, up to one year to cover the anticipated initial infrastructure delivery period and initial working;
- Medium term: a period of between one and 20 years to cover the whole of the anticipated construction period and anticipated restoration of a site; and
- Long term: a period of 20 years or more which accounts for the post-completion effects.

13.3.46 The significance of any effect on a heritage asset is clearly different from the significance of the asset itself.

Settings

13.3.47 In 2017, HE published a document entitled 'Historic Environment Good Practice Advice' in 'Planning Note 3: The Settings of Heritage Assets' (Historic England, 2017). This guidance provides further advice on the definition of setting and the general principles of setting in the context of strategic planning and development control.

13.3.48 Paragraph 2 of the HE advice document in particular deals with the issue of setting and development control. It advises applicants that the information required in support of applications for planning permission and listed building consent should be no more than is necessary to reach an informed decision, and those activities to conserve or invest need to be proportionate to the significance of the heritage assets affected and the impact on the significance of those heritage assets.

13.3.49 Paragraph 19 of the HE advice document provides the following broad approach to assessment, undertaken as a series of steps that apply proportionately to complex or more straightforward cases.

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

13.3.50 Although assessments of changes within the settings of heritage assets can involve non-visual issues such as noise (see for example HE 2017: paragraph 26)., the advice notes that consideration of the contribution of setting to the significance of heritage assets, and how it can enable that significance to be appreciated, will almost always include the consideration of views (HE 2017: paragraph 5). To this end the ZTV is a useful tool in assessing in general terms the assets which are likely to be impacted by the proposed development likely level (HE 2017: paragraph 21).

13.3.51 An assessment of visual impacts on the heritage assets and their settings needs to take into account a wide variety of factors. These include the asset's physical surroundings, the experience of the asset, the location, siting, form and appearance of the proposed development, its wider effects and its permanence. The assessment then needs to balance the impact of these various considerations on the basis of qualitative and expert judgment.

13.3.52 Assessment of the visual effects of the project has been undertaken in accordance with the procedures expressed in the Guidelines for Landscape and Visual Impact Assessment (The Landscape Institute and the Institute of Environmental Management and Assessment 2013). The findings of the landscape and visual assessment are presented in Chapter 12: Landscape and Visual Impact. These findings have been taken into account in considering the impact on settings in this chapter. Where there is the potential for changes within the setting of heritage assets due to noise or other impacts, these have been considered within this chapter using appropriate procedures.

13.3.53 Once the impact on the heritage asset has been examined, this has been related to the impact scales defined above for each type of heritage asset. The level of

impact has been considered against the importance of the heritage asset in the matrix provided in Table 13.7: Assessment Matrix above to reach a conclusion regarding the overall significance of effect. The effects on heritage assets resulting from change within their settings may be adverse or beneficial.

Limitations and Assumptions

13.3.54 A comprehensive desk assessment has been undertaken using all available relevant sources. In addition, a number of fieldwork interventions have taken place within and adjacent to the DCO boundary, including geotechnical work. On this basis there are no major data limitations that would compromise the robustness of the assessment.

13.4 Baseline Conditions

13.4.1 The desk-based assessment (Appendix 13.1) describes the known cultural heritage resource within a Study Area of 1km, and also sets out the cultural heritage resource in a wider study area in order to identify both designated and non-designated assets which may be impacted on by the WKN Proposed Development and Works No. 3 - 7. The results of this desk-based assessment are summarised below. The desk-based assessment pursuant to the construction of K3 as part of its existing planning consent is available in Document 3.3 submitted in support of the application.

Prehistoric and Roman

13.4.2 The DCO site is located at the junction of the higher ground of the Kemsley Ridge, which lies on London Clay, underlying part of the WKN Site and the alluvial floodplain to the north and east, which in general has the potential to contain deposits of palaeo-environmental significance.

13.4.3 The wider area saw extensive activity from early times, with remains of ritual, settlement and agricultural origin being recorded on the mainland and on Sheppey. At least part of the higher ground of the Kemsley Ridge is known to have been used for occupation activity during the prehistoric and Roman periods, while the alluvial floodplain would have been marshland and would have been exploited for a number of purposes, including salt making and pottery manufacture as well as hunting and fishing. Part of the area now covered by the Swale may have been drier in prehistory than it is today and may therefore have potential for prehistoric terrestrial as well as maritime remains (Wessex Archaeology 2000, 47).

13.4.4 A small collection of Mesolithic or Neolithic flints was recovered during fieldwork in connection with the construction of Swale Way (HER number TQ96NW122), with Mesolithic flints also being recovered at Castle Rough, to the south of the DCO boundary (HER number TQ96NW10).

13.4.5 A Middle Bronze Age barrow was found at Kemsley Down, during fieldwork in connection with the construction of Swale Way, some 600m southwest of the DCO boundary (HER number TQ96NW125). There is further extensive evidence of Prehistoric activity in the search area, most notably in the vicinity of Ridham Avenue, Kemsley where excavation recorded a multi-period Prehistoric site

(TQ96NW96-100), with evidence of activity extending into the Roman period. It may be noted that this site and most sites of similar period lie on higher ground above the alluvial deposits that mark the extents of the former intertidal zone.

- 13.4.6 Prehistoric activity within the intertidal zone is likely to have been less intensive in character in general; hunting fishing and perhaps seasonal grazing. More intensive use of the intertidal area is likely to have commenced in the late prehistoric period in the form of salt-production. No such prehistoric sites are recorded in the search area but the remains of two possibly Roman period salterns are located on the west side of Sheppey, approximately 4-500m to the east of the DCO boundary, and finds including briquetage, pottery, burnt flint and animal bone have been made (TQ96NW1108 & TQ961110).
- 13.4.7 The wider area was heavily Romanised with the line of Roman Watling Street leading from London to the coast running rather less than 3km to the south of the DCO boundary. Also, a late Iron Age to early Roman enclosure was discovered during fieldwork in connection with the construction of Swale Way, some 600m southwest of the DCO boundary (HER number TQ96NW127).

Medieval

- 13.4.8 A possible Anglo-Saxon site of unknown type is recorded as being located some 150m southeast of the DCO boundary. The source is antiquarian and the site type and location uncertain, although it may be based on place name evidence (HER number TQ96NW13).
- 13.4.9 A moated site, Castle Rough, is located some 470m southwest of the DCO boundary. The moated site is located below the 5m contour, overlooks Milton Creek and comprises a rectangular earthwork island surrounded on four sides by a moat. Excavations during the early 1970s indicated that the site was constructed during the 13th or 14th century. Numerous earlier artefacts were recovered dating from the Mesolithic and Roman periods. These were interpreted by the excavators as having been brought in with material from elsewhere. It is not entirely clear from the available material whether material was imported from some distance away or whether the dumped material represents upcast from the moat. The site is a Scheduled Monument (HER number TQ96NW10, List 1013368).
- 13.4.10 The parish church of the Holy Trinity at Milton located some 1.3km southwest of the DCO boundary, is flint-faced with stone quoins. The roof is of the 14th century, while the south porch is of the 15th century. The church was subject to restoration during the 1880s. The building is listed at Grade I (List 1061036).

Post-medieval and modern

- 13.4.11 There are numerous remains of timber structures and vessels recorded along the foreshore. The vast majority of these are probably post-medieval in origin and when recognisable this seems to be the case, although some remains may be earlier.
- 13.4.12 The remains of a number of barges or other hulked vessels are recorded in Milton Creek, to the south of the DCO boundary and the Swale, to its north and east (HER numbers TQ96NW33, TQ96NW35, TQ96NW37, TQ96NW39, TQ96NW42,

TQ96NW43, TQ96NW55, TQ96NW59, TQ96NW60, TQ96NW61 and TQ96NW1119).

- 13.4.13 To the north of the DCO boundary the remains of a wooden vessel (HER number TQ96NW38, NRHE number 900626) survive to the west of the Knauf jetty. This vessel seems to have arrived between 1960 and 1990 to judge from aerial photographs and was seen in 2004, according to the RCZAS (Wessex Archaeology 2005: 43).
- 13.4.14 There are a number of recorded assets connected with wharfs and slipways to the southeast of the DCO boundary. The slipway (HER number TQ96NW1147) is of concrete and timber, while the remainder are of timber, surviving as a series of posts. The visible remains are likely to be relatively late in origin, although this does not rule out an early origin for such use of these areas (HER numbers TQ96NW1147, TQ96NW1148, TQ96NW1149 and TQ96NW1150).
- 13.4.15 Little Murston Farmhouse located some 1.4 km southeast of the DCO boundary is a farmhouse of the 18th century or earlier. It is of two storeys in brown brick, now partly pebble-dashed. The building has a hipped tiled roof with one chimney stack. The building is listed at Grade II (List 1061035).
- 13.4.16 Cartographic evidence indicates that the DCO boundary largely lay in the marsh and intertidal zone into the mid-18th century but was progressively reclaimed in the late 18th/early 19th century.
- 13.4.17 The DCO boundary cannot be accurately located on Andrew and Dury's map (1769). The mouth of Milton Creek is depicted as wider on this map than on subsequent maps and it appears likely that the DCO boundary largely lay within the intertidal zone, with parts extending into the adjacent marshes.
- 13.4.18 The DCO boundary can be located with greater certainty on the 1797 Ordnance Survey surveyor's drawing. This shows a sea wall in the northern part of the DCO boundary which appears on subsequent Ordnance Survey maps. The eastern part of the DCO boundary is depicted as forming part of the intertidal zone with a small creek flowing into Milton Creek, whilst the western part is shown as fields. It is not clear whether these were reclaimed. The situation as depicted by Mudge and Faden (1801) is broadly the same.
- 13.4.19 The Milton Next Sittingbourne Tithe Map of 1838 shows the DCO boundary and much of the surrounding area as being owned by William Marshall. The area was being used for pasture, with parcels occasionally being recorded as 'pasture and water'.
- 13.4.20 The First Edition six inch to the mile Ordnance Survey map of 1869 shows that by this time the DCO boundary had been fully reclaimed. The main body of the DCO boundary is depicted as a field, crossed by a track, drainage ditch and small watercourse. The surrounding area is predominantly rural, although a brick field (TQ96NW78) is marked immediately south of New Milton, approximately 250m to the south of the DCO boundary. In the wider area a large duck decoy (TQ96NW62) is marked some 550m to the northwest of the DCO boundary.
- 13.4.21 By the time of the OS six-inch edition of 1898 the surrounding area had become much more industrialised with a number of brick works having been established

in the area, including buildings constructed on the brick field marked on the OS edition of 1869. Along the shore line a disused oyster pond is marked. To the north of the DCO boundary, in the vicinity of the access road, a tramway had been constructed from a wharf on Milton Creek in the east, west past Decoy House to the west of the DCO boundary to a brickworks. By the time of the OS edition of 1909, the brickworks immediately south of New Milton were disused and the Grovehurst Dock had been excavated (HER number TQ96NW1003). A narrow-gauge mineral railway, the Sittingbourne and Kemsley Light Railway was laid by the Bowater Paper Company in 1908 to connect their mills at Sittingbourne and Kemsley with their dock at Grovehurst on the Swale (HER number TQ 96NW22).

- 13.4.22 The post First World War shortage of wood pulp and an increased demand for paper led Frank Lloyd, the owner of the Sittingbourne paper mill to expand the operation and build a new paper mill at Kemsley. Construction began in 1923 and the mill was in operation in 1924.
- 13.4.23 The mill was supplied from Ridham Dock by an extension of the earlier light railway. The railway expanded after the opening of Lloyd's Kemsley Paper Mill in 1924 and from Sittingbourne to the south acted as a passenger railway, bringing workers to and from the mill.
- 13.4.24 The railway line was taken over by Bowater's in 1948 and operated until 1968. The maintenance depot is situated at the original end of the line, Kemsley Down.
- 13.4.25 In 1969 the railway was handed over to the Locomotive Club of Great Britain's Light Railway Section which became the Sittingbourne & Kemsley Light Railway. The southern half of the railway, south of the Site, continues in use as a preserved railway, while the section of the northern part which lies within the boundary of the Site has been replaced by the perimeter road around the Kemsley Paper Mill and the northern access road to the DCO boundary.
- 13.4.26 The DCO boundary lies within the Industrial Complexes and Factories historic landscape character (HLC) area (HLC number 2702), with a small part falling within Small Irregular Enclosures (HLC number 2759).
- 13.4.27 A series of visits to the DCO boundary have been undertaken, beginning in June 2009 for the consented K3 with further visits in December 2016 and October 2017. Within the assessment boundary, the northern access road and associated development have been constructed and are in operation. The laydown area has been subject to ground disturbance including stripping in the recent past. Construction work on the consented K3 is advanced. The DCO boundary has been prepared and is in use as a contractor's compound. No archaeological features were observed or finds made during the DCO boundary visit.

Geotechnical and Archaeological Fieldwork

- 13.4.28 A Phase Two geotechnical site investigation was undertaken in 2009 (RPS 2009), which comprised three cable percussion boreholes, 15 trial pits and 8 window sample boreholes. The bulk of these works were within the K3 Site, but this saw limited work in the WKN site. Intrusive works Interventions were undertaken from the base of any arisings.

- 13.4.29 The survey revealed made ground across the whole of the K3 Site, comprising brown grey gravelly sands and clays with frequent infill materials including bricks, plastics, and wood, with peat and gravels of coal dust, ash and clinker noted as being present in places. These infill materials were more commonly found in locations within the northern and western K3 Site areas such as Trial Pits TP10, TP11 and TP13. The made ground extended to depths of between 0.9m and 4.6m below current ground level
- 13.4.30 Peat was occasionally present within Made Ground in the north and east of the K3 Site and was encountered as a peaty silt / clay layer within the made ground at 1.6 to 1.8 m below current ground level in boreholes WS3 and WS5 or as occasional pockets in the made ground in Trial Pits TP1 and TP14.
- 13.4.31 Superficial Deposits were encountered directly beneath the Made Ground in the majority of the borehole and trial pit locations. The superficial deposits typically comprised grey brown orange mottled firm to stiff clays and appear to be Alluvium, as mapped in the area by the BGS. These were sandy, gravelly and friable in places. Below the made ground the borehole logs from WS1 and WS3 indicate the possible presence of organic matter.
- 13.4.32 Further geotechnical investigation, including a series of trial pits, was undertaken by RPS in the western part of the WKN Site, to the north of K3 (RPS 2013). This revealed that there was made ground of a minimum thickness of 0.9 m and up to in excess of 4.2 m over the whole area, underlain by alluvium.
- 13.4.33 An archaeological watching brief was undertaken during geotechnical works which were carried during groundworks for the construction of K3 (Wessex Archaeology 2011). The watching brief comprised constant archaeological supervision during the excavation of nine trial pits and eight window samples. The fieldwork took place between May and June 2011. Evidence for buried topsoil was encountered within WS10 in the WKN site at a depth of 4.6 m below ground level but no features, deposits or artefacts of archaeological or palaeo-environmental significance were encountered within the trial pits or window samples (Wessex Archaeology 2011).
- 13.4.34 An archaeological trial trenching evaluation was undertaken northwest of the WKN Site ahead of the formation of an access road and other infrastructure (Archaeology South East 2015). The evaluation comprised the excavation of a single trial trench measuring 30 m in length by approximately 2 m wide.
- 13.4.35 The full length of the trench was excavated to c.1 m depth, however, due to water egress, it was necessary to excavate the lower levels, to a depth of 2 m, within a series of four smaller test pits along its length. The stratigraphic sequence encountered comprised topsoil of up to 0.5 m overlying a layer of made ground which was up to 0.8 m thick, this overlying the natural alluvial subsoil. No finds or features of archaeological interest were encountered during the evaluation.

Designated Assets

- 13.4.36 There are no World Heritage Sites, Protected Wrecks, registered battlefields or registered parks and gardens located within 3km of the DCO boundary.

- 13.4.37 There are no listed buildings or conservation areas located within 1km of the DCO boundary.
- 13.4.38 There is one SM located within 1km of the DCO boundary. This is 'Castle Rough' Medieval moated site (List 1013368).
- 13.4.39 There is one SM (Murston Old Church, Sittingbourne, List 1011768) and 15 listed buildings located between 1km and 2km of the DCO boundary. Of these, 13 are listed at Grade II and two, the Church of the Holy Trinity (List 1061036) and the Church of all Saints (List 1069380), are listed at Grade I. The listed buildings are shown in Table 1 of the desk assessment (Appendix 13.1).
- 13.4.40 There is one SM (World War II Heavy Anti-aircraft gunsite (TS2), 300m east of Chetney Cottages, List 1020389) and 57 listed buildings located between 2km and 3km of the DCO boundary. Of these, 55 are listed at Grade II, one, The Court House (List 1344240) and 49 and 51 High Street (List 1352683), is listed at Grade II* and one, the Church of St Giles (List 1322821) is listed at Grade I. Of the total, one Grade II* and 37 Grade II listed buildings are located within or adjacent to the Milton Regis High Street conservation area. The listed buildings are shown in Table 2 of the desk assessment (Appendix 13.1).

Sensitive Receptors

- 13.4.41 The sensitive receptors listed in Table 13.8: Potentially affected sensitive receptors below have the potential to be affected by effects arising from the WKN Proposed Development. The assessment in this Chapter has considered the effects listed in the table upon the identified sensitive receptors.

Receptor	Importance/sensitivity/vulnerability to change
Scheduled Monument	High
Listed Building	High
Conservation Area	High
Undesignated assets (below ground archaeology)	Low

Table 13.8: Potentially affected sensitive receptors

13.5 Future baseline

- 13.5.1 The future baseline conditions that would potentially exist in 2024, when the WKN Proposed Development becomes operational, would potentially include cumulative schemes which have been granted a planning consent and are currently under construction. For the purposes of this assessment K3 as consented is taken as the basis against which the WKN Proposed Development is assessed.

13.6 K3 Proposed Development

- 13.6.1 Whilst consent is sought for the construction and operation of the K3 Proposed Development the practical effect of the DCO being sought would allow K3 as consented and currently being built to operate to an upgraded power generation

level of 75MW (an additional 25.1MW) and to process 657,000 tonnes of waste per annum (an additional 107,000 tonnes) above and beyond that permitted under its existing planning permission. The practical effect of the consent sought would not result in any additional external physical changes to K3 as permitted and the layout and appearance of the facility will remain as per its consented design.

- 13.6.2 In this regard the assessment undertaken as part of existing 2010 ES pursuant to K3 as consent is considered to remain relevant. The full assessment is available in Document 3.3 submitted in support of the application and summarised below.

Construction Effects

- 13.6.3 The 2010 ES concluded that the potential impact of K3 upon palaeoenvironmental remains and deeply stratified archaeological deposits should be addressed through a programme of archaeological works, the first phase of which would be monitoring of geotechnical test pits to further establish potential. This work established that potential was limited (Appendix 13.3: Wessex Archaeology 2011) and no further work was required.
- 13.6.4 The construction phase is now almost complete and has no potential to result in effects beyond those identified and assessed by the 2010 ES and addressed by subsequent archaeological works.

Completed Development Effects

- 13.6.5 The 2010 ES did not identify any significant effects upon cultural heritage assets resulting from the operation of K3. The NMAs since 2010 have resulted in changes to the external appearance of the facility. However, the assessment was based on the appearance of the facility as a large modern industrial structure rather than the detail of its design. Consequently, the 2010 assessment therefore remains relevant.

13.7 The practical effect of the K3 Proposed Development

- 13.7.1 The practical effect of the consent sought would not result in any additional external physical changes to K3 as permitted and the layout and appearance of the facility will remain as per its consented design. No construction related effects will therefore result from the practical effect of the K3 Proposed Development beyond those pursuant to K3 as consented.

Completed Development Effects

- 13.7.2 The practical effect of the K3 Proposed Development will increase the number of HGVs visiting the facility (an additional 68 two HGV movements). However, as the trunk roads used and the associated noise and movement already form a part of the setting of nearby heritage assets this increase would not represent a material change in their setting.
- 13.7.3 The practical effect of the consent sought would not result in any additional external physical changes to K3 as permitted and the layout and appearance of

the facility will remain as per its consented design. The 2010 ES therefore remains a valid assessment of the K3 Proposed Development.

13.8 WKN Predicted Effects

Construction Effects

Buried Archaeological Remains

- 13.8.1 The DCO boundary lies within a wider landscape which generally has high potential to contain remains of all dates from the prehistoric onwards. However, the DCO boundary itself lies in an area that has historically fallen within the intertidal area or marsh and hence is unlikely to have seen intensive activity.
- 13.8.2 Recent archaeological work on the Sittingbourne Northern Relief Road has indicated that the higher ground of the Kemsley Ridge has the potential to contain remains from the prehistoric through to the medieval periods, with outlying activity taking place in the lower lying marshlands now represented by areas of alluvium.
- 13.8.3 Site visits have indicated that the WKN Site is occupied by a construction compound and has historically been used for the storage of material resulting in ground disturbance. Both the nature of the 20th century land-use at the DCO boundary and the associated ground disturbance suggests that the potential for the survival of previously unidentified sub-surface archaeological remains of national importance, or of sufficient importance to warrant preservation in situ, is unlikely. In addition, it is likely that any archaeological deposits have been damaged or removed and that the potential for the survival of significant, coherent archaeological remains is low.
- 13.8.4 The heritage values of any buried assets within the DCO boundary are as follows:
- Evidential and Historical – The value derives from any buried remains. The historical value is illustrative;
 - Aesthetic - The value is unlikely to apply to these remains; and
 - Communal – The value of any remains would derive from their symbolic value as part of the local community.
- 13.8.5 Any buried remains are likely to be of low significance. There may be a physical impact on these remains. The impact magnitude on any surviving remains is assessed as being high. Based on current evidence it is considered that the significance of effect of the WKN Proposed Development on buried remains would be minor adverse.

Designated Assets located within 1 km of the DCO boundary

- 13.8.6 The nearest designated asset is Castle Rough, a Scheduled Monument (List 1013368). The Scheduled Monument is located some 550m southwest of the DCO boundary.

13.8.7 The heritage values of the Scheduled Monument are as follows:

- Evidential and Historical – The value derives primarily from the earthworks and buried remains of the Scheduled Monument. The historical value is largely illustrative;
- Aesthetic – The value derives from the earthwork remains of the Scheduled Monument; and
- Communal – The value of the Scheduled Monument derives from its symbolic value as part of the local community.

13.8.8 The Scheduled Monument is of highest significance. There would be no physical impact upon the Scheduled Monument from the WKN Proposed Development and any impact would be on the setting of the designated asset.

13.8.9 Setting makes a contribution to the significance of the Scheduled Monument mainly in the sense that it has not entirely lost its rural location, although the setting of the Scheduled Monument is now against the background of an industrial landscape.

13.8.10 The Scheduled Monument itself is low lying and not visible from any distance away. Its position in the landscape is indicated by trees. Perhaps the clearest view of the Scheduled Monument towards the WKN Proposed Development and Works No. 3 - 7 is obtained from the southwest (See Landscape viewpoint 4, Figure 12.8). From here, the Scheduled Monument itself is not visible but the trees growing on it are visible against a background of the existing paper mill buildings. The buildings of the WKN Site would not be visible, as the Scheduled Monument would be screened by the mass of the existing K3 buildings. The Scheduled Monument itself lies obscured by trees in the centre of the photograph, in front of the four tall stacks.

13.8.11 Consultation with the client's acoustics specialists has indicated that perception of the operational noise from the WKN Proposed Development is unlikely to significantly change the existing ambient noise levels from Kemsley Paper Mill when standing at the Scheduled Monument.

13.8.12 Lighting will be minimal and implemented using BS EN 12464-2:2007 Lighting of work places. Outdoor work places. Part 1 & 2. The existing buildings will also act to screen it from the SM and it will be seen in the context of an existing industrial site with external lighting.

13.8.13 Given the location and scale of the existing paper mill buildings, the impact magnitude on the Scheduled Monument is assessed as being negligible. The significance of effect of the WKN Proposed Development on the Scheduled Monument would be minor adverse. The effect would be long term.

Designated Assets located between 1 km and 2 km of the DCO boundary

Scheduled Monuments

13.8.14 High Street Old Church, Sittingbourne is a Scheduled Monument (List 1011768). The scheduled area includes both the above ground and buried remains of the church building and encompasses the churchyard.

13.8.15 The Scheduled Monument is located some 1.6 km south of the DCO boundary. The heritage values of the Scheduled Monument are as follows:

- Evidential and Historical – The value derives primarily from the fabric of the church and the buried remains of the Scheduled Monument. The historical value is largely illustrative, although there are associations with known individuals.
- Aesthetic - The value derives from the ruins of the church building and the churchyard.
- Communal – The value of the Scheduled Monument derives from its symbolic value as part of the local community.

13.8.16 The Scheduled Monument is of highest significance. Setting makes a relatively minor contribution to the significance of the Scheduled Monument because it is bounded on all sides by roads and/ or modern development. On its north side the Scheduled Monument is bounded by modern business/ industrial units which provide an effective northern boundary to the setting of the Scheduled Monument.

13.8.17 There would be no physical impact upon the Scheduled Monument from the WKN Proposed Development and Works No. 3 - 7 and any impact would be on the setting of the Scheduled Monument. The WKN Proposed Development and Works No. 3 - 7 is at a scale with the existing structures located at Kemsley Paper Mill. The impact magnitude on the Scheduled Monument is assessed as being no change. The significance of effect of the WKN Proposed Development and Works No. 3 - 7 on the Scheduled Monument would be no change.

Listed Buildings

13.8.18 Little Murston Farmhouse listed at Grade II is located some 1.4km southeast of the DCO boundary.

13.8.19 The heritage values of the listed building are as follows:

- Evidential and Historical – The evidential value derives primarily from the fabric of the listed building and the potential for associated buried archaeological remains. The historical value is largely illustrative.
- Aesthetic - The value derives from the design value of the listed building in terms of its expression of the local vernacular.
- Communal – The value of the listed building derives from its symbolic value as part of the local community.

- 13.8.20 The listed building is of high significance. There would be no physical impact upon the listed building from the WKN Proposed Development and any impact would be on its setting.
- 13.8.21 The setting of the listed building comprises the surrounding fields, those to the west having been subject to gravel extraction. The setting of the listed building is now rather degraded, and setting makes a relatively minor contribution to the setting of the listed building.
- 13.8.22 There is currently little intervisibility with the WKN Site and Works No. 3 - 7. The WKN Proposed Development would lie adjacent to the existing Kemsley Paper Mill in distant views to the north west.
- 13.8.23 The WKN Proposed Development is similar in scale to the adjacent structures and would be seen as part of the industrial development of Kemsley Paper Mill when viewed from the listed building or its surroundings.
- 13.8.24 The impact magnitude of the WKN Proposed Development and Works No. 3 - 7 is assessed as being negligible adverse. The significance of effect of the WKN Proposed Development and Works No. 3 - 7 on Little Murston Farmhouse would be minor adverse and the lower end of this scale.
- 13.8.25 The medieval parish church of the Holy Trinity, Milton, located some 1.5 km southwest of the DCO boundary. The church is listed at grade I (List 1061036).
- 13.8.26 The heritage values of the listed building are as follows:
- Evidential and Historical – The value derives primarily from the fabric of the church and the associated buried remains. The historical value is largely illustrative, although there are associations with known individuals.
 - Aesthetic - The value derives from the design value of the listed building in terms of its expression of medieval and later religious architecture.
 - Communal – The value of the listed building derives from its symbolic value as part of the local community.
- 13.8.27 The listed building is of highest significance. Development, including the existing Kemsley Paper Mill buildings and stacks, is located between the listed building and the WKN Proposed Development and Works No. 3 - 7 and the housing development on the west, north and east side of the listed building effectively limits its setting. Setting, other than its location within its churchyard, makes a relatively minor contribution to the significance of the listed building.
- 13.8.28 There would be little intervisibility between the WKN Proposed Development and Works No. 3 - 7 and the listed building. There would be no physical impact upon the listed building from the WKN Proposed Development and Works No. 3 - 7. Any effect would be on its setting. The WKN Proposed Development is similar in scale to the adjacent structures and would be seen as part of the industrial development of Kemsley Paper Mill when viewed from the listed building or its surroundings. The magnitude of impact is assessed as being negligible. The

significance of effect of the WKN Proposed Development and Works No. 3 – 7 on the listed building would be minor adverse.

13.8.29 The church of All Saints, Iwade is located approximately 1.8 km north west of the nearest part of the DCO boundary and some 2.3 km from its built development. The building is listed at Grade I (List 1069380)

13.8.30 The heritage values of the listed building are as follows:

- Evidential and Historical – The value derives primarily from the fabric of the church and the associated buried remains. The historical value is largely illustrative, although there are associations with known individuals.
- Aesthetic – The value derives from the design value of the listed building in terms of its expression of medieval and later religious architecture.
- Communal – The value of the listed building derives from its symbolic value as part of the local community.

13.8.31 The listed building is of highest significance. The church is located within a surrounding churchyard which forms its primary setting. The eastern side of the churchyard is bordered by agricultural fields which form a secondary setting. Setting, other than its location within its churchyard, makes a relatively minor contribution to the significance of the listed building.

13.8.32 There has been considerable large-scale development on the Kemsley Ridge to the northwest of the DCO boundary. This development provides a substantial visual barrier. The WKN Proposed Development and Works No. 3 – 7 would fit into this area and would add little, if any visible mass to the view in this direction from the listed building.

13.8.33 There would be no physical impact upon the listed building from the WKN Proposed Development and Works No. 3 – 7 and any impact would be on the setting of the church.

13.8.34 The impact magnitude on the church of All Saints, Iwade is assessed as being no change. The significance of effect of the WKN Proposed Development and Works No. 3 – 7 on the site would be no change.

13.8.35 Two further listed buildings Ivy Cottage and Traditional Agricultural Barn (each listed at Grade II, List 1057685 and 1390604 respectively) are located adjacent to the church of all Saints and would be similarly unaffected by the WKN Proposed Development and Works No. 3 – 7.

13.8.36 Kingshill Farmhouse and the barn adjoining the cattle shed immediately north of Kingshill Farmhouse are located some 1.9 km northeast of the DCO boundary on the Island of Sheppey and are listed at Grade II (Lists 1258073 and 1243080).

13.8.37 The heritage values of the listed buildings are as follows:

- Evidential and Historical – The evidential value derives primarily from the fabric of the listed buildings and the potential for associated buried archaeological remains. The historical value is largely illustrative.
- Aesthetic – The value derives from the design value of the listed buildings in terms of their expression of the local vernacular.
- Communal – The value of the listed buildings derives from their symbolic value as part of the local farming community.

13.8.38 The listed buildings are of high significance. There would be no physical impact upon the listed buildings from the WKN Proposed Development and Works No. 3 – 7 and any impact would be on their setting.

13.8.39 Each listed building and the space between them form the primary setting of the other. The setting of the listed buildings also comprises the surrounding fields and setting makes a contribution to the significance of the listed buildings in that they retain their rural location. The WKN Proposed Development will not, however be visible as views will be obstructed by K3, which will be constructed and operational and forms part of the baseline of this assessment.

13.8.40 The impact magnitude on the listed buildings is assessed as being 'no change'. The significance of effect of the WKN Proposed Development and Works No. 3 – 7 on the listed buildings would be 'no change'.

13.8.41 There are further Grade II listed buildings at 66 North Street, Kemsley, located some 1.6 km southwest of the DCO boundary and to the west of Kemsley, with Great Grovehurst Farmhouse and Bramblefield Farmhouse, located some 1.4 km and 1.8 km west of the DCO boundary. These buildings are of high value. In each case their settings have been rather degraded. Any view of the WKN Proposed Development and Works No. 3 – 7 from the listed buildings would be through Kemsley and the existing Kemsley Paper Mill buildings. The magnitude of impact would be 'no change' and the significance of effect of the WKN Proposed Development and Works No. 3 – 7 on these listed buildings would be 'no change'.

13.8.42 Meres Court listed at Grade II is located some 1.9 km south of the DCO boundary. Development, including recent industrial development, as well as the existing paper mill buildings and stacks, is located between the listed building and the WKN Site. There would be little intervisibility between the WKN Proposed Development and the listed building. There would be no physical impact upon the listed building from the WKN Proposed Development and Works No. 3 – 7. Any effect would be on its setting. The magnitude of impact on setting would be negligible and the significance of effect of the WKN Proposed Development and Works No. 3 – 7 on the listed building would be minor adverse.

Designated Assets located between 2 km and 3 km of the DCO boundary

13.8.43 A World War II Heavy anti-aircraft gunsite (known as Thames South 2), is located 300 m west of Chetney Cottages, some 3 km northwest of the DCO boundary and is a Scheduled Monument (List 1020389). The heritage values of the SM are as follows:

- Evidential and Historical – The value derives primarily from the buried and upstanding remains of the Scheduled Monument. The historical value is largely illustrative, although there are associations with known organisations and individuals.
- Aesthetic - The value derives from the earthwork remains of the Scheduled Monument.
- Communal – The value of the Scheduled Monument derives from its symbolic value as part of the local community.

13.8.44 The Scheduled Monument is of highest significance. The scheduling description indicates that the site was chosen to defend the industrial and military targets in the Lower Thames and Medway areas from high flying strategic bombers approaching from the south and east. The site overlooks the River Medway and the Chetney Marshes. On this basis, setting makes a contribution to the significance of the Scheduled Monument.

13.8.45 The setting of the Scheduled Monument is dependent on its defensive purpose and is wide ranging. The Kemsley Paper Mill would have been in existence during the period of use of the Scheduled Monument and would presumably have been an area for the guns to avoid, assuming they could be depressed that far. There has been considerable large-scale development on the Kemsley Ridge to the northwest of the DCO boundary. This new development provides a partial visual barrier and means that the original Kemsley Paper Mill is not the landscape feature that it would have been during the period of use of the Scheduled Monument. In addition, there has been significant new development at the Kemsley Paper Mill. The WKN Proposed Development and Works No. 3 – 7 would fit into this area and would add little, if any visible mass.

13.8.46 There would be no physical impact upon the Scheduled Monument from the WKN Proposed Development and Works No. 3 - 7 and any impact would be on the setting of the Scheduled Monument. The impact magnitude on the site is assessed as being no change. The significance of effect of the WKN Proposed Development and Works No. 3 - 7 on the SM would be no change.

13.8.47 The church of St Giles is located some 2.9 km southeast of the DCO boundary and is listed at Grade I (List 1322821).

13.8.48 The heritage values of the listed building are as follows:

- Evidential and Historical – The value derives primarily from the fabric of the church and the associated buried remains. The historical value is largely illustrative, although there are associations with known individuals.
- Aesthetic - The value derives from the design value of the listed building in terms of its expression of medieval and later religious architecture.
- Communal – The value of the listed building derives from its symbolic value as part of the local community.

- 13.8.49 The listed building is of highest significance. There would be no physical impact upon the listed building from the WKN Proposed Development and Works No. 3 - 7.
- 13.8.50 The setting of the listed building comprises its churchyard, the road to its west and the surrounding fields. Although nominally within the ZTV, the WKN Proposed Development and Works No. 3 - 7 would not be visible from the listed building. The magnitude of impact on setting would be 'no change' and the significance of effect of the WKN Proposed Development and Works No. 3 - 7 on the listed building would be 'no change'.
- 13.8.51 Tonge Corner Farmhouse is located some 2.1 km south east of the CO boundary and is listed at Grade II (List 1069270).
- 13.8.52 The heritage values of the listed building are as follows:
- Evidential and Historical – The evidential value derives primarily from the fabric of the listed building and the potential for associated buried archaeological remains. The historical value is largely illustrative.
 - Aesthetic – The value derives from the design value of the listed building in terms of its expression of the local vernacular.
 - Communal – The value of the listed building derives from its symbolic value as part of the local community.
- 13.8.53 The listed building is of high significance. There would be no physical impact upon the listed building from the WKN Proposed Development and Works No. 3 - 7 and any impact would be on its setting.
- 13.8.54 The setting of the listed building comprises the surrounding fields and setting makes a contribution to the significance of the listed buildings in that they retain their rural location. There is currently no intervisibility with the WKN Proposed Development and Works No. 3 - 7, although the stacks of the existing Kemsley Paper Mill and that of the consented K3 are likely to be visible from the listed building. The WKN Proposed Development and Works No. 3 - 7 is likely to be only partly visible from the listed building, being screened by the high ground of the adjacent land fill site and existing farm buildings. The magnitude of impact on setting would be negligible and the significance of effect of the WKN Proposed Development and Works No. 3 - 7 on the listed building would be minor adverse.
- 13.8.55 To the south of the DCO boundary there are further Grade II listed buildings at Murston House, the Church of All Saints, Bayford Court and East Hall, located within built development. These buildings are of high value. In each case their settings have been rather degraded. Any view of the WKN Proposed Development and Works No. 3 - 7 from the listed buildings would be through Kemsley and the existing Kemsley Paper Mill buildings. The magnitude of impact would be 'no change' and the significance of effect of the WKN Proposed Development and Works No. 3 - 7 on these listed buildings would be 'no change'.
- 13.8.56 To the southwest of the DCO boundary there are further Grade II listed buildings at Quinton Farm house, The White House, Upper Toes, Nether Toes and Quinton Cottage, located within built development. These buildings are of high value. In

each case their settings have been rather degraded. Any view of the WKN Proposed Development and Works No. 3 - 7 from the listed buildings would be through Kemsley and the existing Kemsley Paper Mill buildings. The magnitude of impact would be 'no change' and the significance of effect of the WKN Proposed Development and Works No. 3 - 7 on these listed buildings would be 'no change'.

13.8.57 There would be no physical impact upon the listed building from the WKN Proposed Development and Works No. 3 - 7. Any effect would be on its setting. The WKN Proposed Development is similar in scale to the adjacent structures and would be seen as part of the industrial development of Kemsley Paper Mill when viewed from the listed building or its surroundings.

13.8.58 The magnitude of impact on setting would be negligible adverse and the significance of effect of the WKN Proposed Development and Works No. 3 - 7 on the listed building would be minor adverse.

13.8.59 Milton Regis High Street conservation area is located some 2.3 km south west of the DCO boundary. The Conservation Area contains a number of listed buildings within it and one adjacent which are assessed as part of the Conservation Area. The heritage values of the conservation area are as follows:

- Evidential and Historical – The evidential value derives primarily from the fabric of the buildings, listed and otherwise, structures and streetscape within the conservation area and the potential for below ground remains. The historical value is largely illustrative.
- Aesthetic - The value derives from the design value of the conservation area in terms of its expression of settlement architecture.
- Communal – The value of the conservation area derives from its symbolic value as part of the local community.

13.8.60 The Conservation Area is of high significance. There would be no physical impact upon the Conservation Area from the WKN Proposed Development and Works No. 3 - 7 and any impact would be on its setting.

13.8.61 The Conservation Area is inward looking and on its eastern side, much of it is bounded by trees in back gardens of houses and its setting to the east is thus limited. To the north east, extensive areas of built development further restrict the setting of the Conservation Area. Views of the WKN Site were not obtained from any part of the Conservation Area within the public realm and it is unlikely that the WKN Proposed Development and Works No. 3 - 7 would be visible from the Conservation Area. Setting makes a minor contribution to the significance of the conservation area.

13.8.62 At most, only the stack of the WKN Proposed Development would be visible from the Conservation Area. Any impact would be on the setting of the Conservation Area. The impact magnitude on the Conservation Area is assessed as being negligible. The significance of effect of the WKN Proposed Development and Works No. 3 - 7 on the Conservation Area would be minor adverse.

Historic Parks and Gardens and Historic Battlefields

13.8.63 The nearest Registered Park and Garden is Doddington Place, some 9 km to the south of the DCO boundary. There would be no physical impact upon the Registered Park and Garden from the WKN Proposed Development and Works No. 3 - 7 and no effect on its setting.

13.8.64 There are no registered battlefields within 15km of the DCO boundary and there would be no effect on any registered battlefield or its setting arising from the WKN Proposed Development.

Historic Landscapes

13.8.65 The HER indicates that the DCO boundary is located within the Industrial complexes and factories HLC type, with a small area of WKN and the laydown access within the small irregular enclosures HLC type. These HLC types have a high ability to withstand change. The WKN Proposed Development and Works No. 3 - 7 would introduce further large built development of an industrial nature and would be consistent with the existing historic landscape character of the wider area.

13.8.66 The heritage values of the HLC Areas are as follows:

- Evidential and Historical – The evidential value derives primarily from the fabric of the road, buildings and land divisions within the HLC area and the potential for below ground remains. The historical value is largely illustrative.
- Aesthetic - The value derives from the design value of the HLC area in terms of its expression of industrial architecture.
- Communal – The value of the HLC area derives from its symbolic value as part of the local community.

13.8.67 The HLC areas are of low significance. Given the existing development in the area, the impact magnitude on the HLC areas is assessed as being no change. Overall, the significance of effect on the historic landscape is considered to be 'no change'.

13.8.68 The nature of the WKN Proposed Development and Works No. 3 - 7 and its location within an area already containing an industrial complex means that there would be no impact on any other HLC.

Completed Development Effects

13.8.69 All effects will be at their maximum at the end of the construction phase. The nature of the operation is likely to be similar to that of construction, i.e. lorry movements, noise, etc. and on this basis, no further operational effects on heritage assets are likely.

13.8.70 Demolition/dismantling of K3 and WKN would have no further effect on below ground archaeology and any effect on the settings of heritage assets through the

construction of K3, WKN and Works No. 3 – 7 would be reversed. No further effects are likely or assessed.

13.8.71 It is highly likely that any below ground archaeological remains would have been destroyed in their entirety at the time of construction, and their loss offset by an appropriate programme of archaeological work and dissemination, the demolition/dismantling of the K3 and WKN plants would therefore not have any impact on below ground archaeology. The overall degree of effect on buried archaeological remains would remain unchanged.

13.8.72 Demolition/dismantling of K3 and WKN would reduce or remove entirely the impact that its construction and operational use had on the settings of heritage assets. Removal of these impacts would be beneficial to the settings of these assets. This significance of effect of this change would be minor beneficial.

Effect Identified	Receptor Sensitivity	Impact Magnitude	Nature	Duration	Degree of Effect
Construction Effects					
Effects on below ground archaeology	low	Up to high	Physical impact	Long term	Minor adverse
Effects on the settings of heritage assets	low	Up to negligible	Setting impact	Long term	Minor adverse
Completed Development Effects					
Effects on the settings of heritage assets	low	Up to negligible	Setting impact	Long term	Minor adverse

Table 13.9: Summary of Effects Prior to Mitigation

13.9 Mitigation

13.9.1 The location (largely on previously developed land), nature and design (i.e. an industrial development of appropriate scale and massing) of the WKN Proposed Development and Works No. 2 – 7, and the distance from many of the designated assets assessed is intended to help mitigate any effects on the setting of designated assets. The remaining boundary alignments around the DCO boundary would be preserved in situ and the landscape pattern in terms of the industrial character of the area would remain unchanged.

Mitigation for Construction Effects

13.9.2 A programme of archaeological fieldwork in the form of trial trenching in the first instance, further to investigate and to record any surviving archaeological remains which may be affected by the WKN Proposed Development and Works No. 2 – 7, to be undertaken at a suitable time following consent, is proposed.

13.9.3 Should archaeological remains be identified during this trial trenching an appropriate programme of archaeological works will be required to ensure that their physical loss would be offset through their preservation by record. As there would be no perceptible loss to the historic environment and the recording and

analysis would fully realise their potential as sources of archaeological data, it is considered that the latter would fully offset the physical loss of such remains.

Mitigation for Completed Development Effects

13.9.4 The location (largely on previously developed land), nature and design (i.e. an industrial development of appropriate scale and massing) of the WKN Proposed Development and Works No. 2 – 7 is intended to help mitigate any effects on the setting of designated assets following the completion of the development.

13.9.5 No further mitigation is proposed for the completed development effects.

13.10 Residual Effects

Residual effects are those that are predicted to remain after implementation of the secondary mitigation measures described above. The significant residual effects are summarised in Table 13.10: Summary of Residual Effects, below.

Significant residual effect	Receptor sensitivity	Impact magnitude	Nature	Duration	Degree of effect	Level of certainty
Effects on the settings of heritage assets	Low	Up to negligible	Setting impact	Long term	Minor adverse	High

Table 13.10: Summary of Residual Effects

13.11 Cumulative Effects

13.11.1 In the Scoping Report it was proposed that the K3 Proposed Development be scoped out of the Cultural Heritage assessment because there were no intended changes to the built form and that therefore no likely significant effects on heritage assets would result. PINS agreed with this approach. Cumulative effects potentially resulting from the construction of K3 have accordingly been scoped out. However, following the response from PINS (see Chapters 2 and 3) the following cumulative effects have been assessed:

- K3 Proposed Development + other cumulative developments
- WKN Proposed Development + other relevant cumulative developments.
- WKN Proposed Development + K3 Proposed Development + other cumulative developments

13.11.2 The other relevant cumulative developments comprise 46 schemes that are operational / constructed, consented, for which planning permissions are currently being sought or the Swale Local Plan 2031 allocation sites has been undertaken. These schemes are set out in detail in Chapter 3, with section 3.8 in particular describing the schemes considered.

K3 Proposed Development+ other cumulative developments

- 13.11.3 The K3 Proposed would not result in any external changes to the facility as permitted but will result in an increase in traffic on the surrounding trunk road network. As trunk roads and the associated noise and movement currently form a part of the setting of heritage assets in the area this is not considered to represent a material change in their setting. The findings of the 2010 ES, which concluded that there no significant effects would result from the completed K3 development, remains valid.
- 13.11.4 The majority of the cumulative schemes are industrial or commercial in nature and would be located within the industrial and commercial part of Sittingbourne, within which the DCO boundary is also located. The immediate context of K3, on the industrialised fringes of Sittingbourne would be more intensively developed if the cumulative schemes are constructed. Less natural landscape, vacant land or previously used land would be present in the wider area as a result of the cumulative developments. Given that the setting of all the designated heritage assets considered is already industrialised and that no significant or borderline significant effects have been identified as a result of K3 Proposed Development in isolation, it is considered that there is no potential for significant cumulative effects to arise as a result of the interaction of the K3 Proposed Development with the cumulative developments.

WKN Proposed Development + other relevant cumulative developments

- 13.11.5 As noted above, the majority of the cumulative schemes are industrial or commercial in nature and would be located within the industrial and commercial part of Sittingbourne, within which the DCO boundary is also located. The immediate context of the WKN Proposed Development on the industrial fringe of Sittingbourne would be more intensively developed if the cumulative schemes are constructed. Given that the setting of all the designated heritage assets considered is already industrialised and that no significant or borderline significant effects have been identified as a result of WKN in isolation, it is considered that there is no potential for significant cumulative effects to arise as a result of the interaction of completed WKN with the cumulative developments.
- 13.11.6 There may be some cumulative impacts on below ground archaeological receptors in general terms as a result of the interaction of the WKN Proposed Development and Works No. 2 - 7 with other schemes. Indeed, it is acknowledged that any archaeological remains within the site form part of a wider archaeological landscape. However, given the isolated, small scale and localised nature of archaeological sites no significant cumulative effects are identified in relation to below ground archaeological remains arising from the construction and operational phases of the WKN Proposed Development and Works No. 2 - 7.
- 13.11.7 No cumulative effects are identified in relation to the built heritage receptors arising from the completed development phase of the WKN Proposed Development and Works No. 2 - 7 along with the completed development phases of the aforementioned developments. This is because these built heritage receptors lie away from the WKN Proposed Development and Works No. 3 - 7 and no significant effects are identified as a result of the construction of the WKN

Proposed Development and Works No. 2 - 7. Therefore, the approved developments will not have a significant cumulative effect on the setting of the identified built heritage receptors.

WKN Proposed Development + K3 Proposed Development+ other cumulative developments

13.11.8 No cumulative effects are identified in relation to built heritage receptors arising from the completed development phase of the WKN Proposed Development and K3 along with the completed development phases of the cumulative developments. This is because these built heritage receptors lie away from the DCO Boundary in an industrialised setting, and no significant effects have been identified as a result of the operation of either WKN or K3.

13.12 Summary

13.12.1 This Chapter assesses the likely significant archaeological and cultural heritage effects resulting from the K3 Proposed Development, the WKN Proposed Development and Works No. 3 – 7 on the historic environment of the area, including buried archaeological sites, historic buildings and historic landscapes, are considered. It aims to identify all effects on these heritage assets - in terms of the potential for direct physical disturbance and indirect visual effects on setting - and to assess the overall effect and significance of these predicted effects. The likely impacts are assessed during the construction, operational and decommissioning phases of the WKN Proposed Development and Works No. 2 - 7.

13.12.2 The DCO boundary lies within a wider landscape which generally has high potential to contain remains of all dates from the prehistoric onwards. Site visits, however, have indicated that the Site contains buildings and hardstanding over much of its area, with the access roads to both the K3 development and the laydown area already in place and the K3 facility almost complete. Both the nature of the 20th century land-use within the DCO boundary and the associated ground disturbance suggests that the potential for the survival of previously unidentified sub-surface archaeological remains of national importance, or of sufficient importance to warrant preservation in situ, is unlikely. In addition, it is likely that any archaeological deposits have been damaged or removed over much of the WKN Site and that the potential for the survival of significant, coherent archaeological remains is low and appropriate mitigation is proposed. Any buried remains are likely to be of at most low significance. There may be a physical impact on these remains. The impact magnitude on any surviving remains is assessed as being high. The effect of the WKN Proposed Development and Works No. 2 – 7 on buried remains would be minor adverse. There is no evidence for the DCO boundary to contain below ground remains of the highest significance, or of sufficient significance to warrant preservation in situ, and accordingly the loss of any archaeological remains can be offset through an appropriate programme of archaeological excavation, recording and dissemination appropriate to their potential as sources of archaeological data.

13.12.3 The consent sought in respect of K3 would not result in any external changes to the facility as permitted. The increase in throughput will result in an increase in traffic on the surrounding trunk road network. As trunk roads and the associated

noise and movement currently form a part of the setting of heritage assets in the area this is not considered to represent a material change in their setting. The findings of the 2010 ES, which concluded that there no significant effects would result from the completed K3 development, remains valid.

- 13.12.4 This study has revealed that there are no designated assets (e.g. Scheduled Monuments, listed buildings) within the DCO boundary. The nearest designated asset is Castle Rough, a Scheduled Monument (List 1013368). The Scheduled Monument is located some 470m southwest of the Site. The Scheduled Monument is of highest significance. There would be no physical impact upon the Scheduled Monument from the WKN Proposed Development and Works No. 2 - 7 and any impact would be on the setting of the designated asset. Given the location and scale of the existing Kemsley Paper Mill buildings, the impact magnitude on the setting of the Scheduled Monument is assessed as being negligible. The effect of the WKN Proposed Development and Works No. 2 - 7 on the Scheduled Monument would be minor adverse. The effect would be long term. There would be no significant effects on either this or any other designated assets.
- 13.12.5 The assessment has established that there may be impacts on the settings of a small number of Listed Buildings. The closest of these is the Grade II Little Murston Farmhouse, here the significance of effect on the Listed Building is considered minor adverse. Minor adverse effects are also indicated for the Grade I Listed Church of the Holy Trinity, Milton, for the Grade II Meres Court and for the Grade II Tonge Corner Farmhouse. A minor adverse significance of impact has also been identified for the Milton Regis High Street Conservation Area. None of these effects are considered significant.
- 13.12.6 Whilst there may be some cumulative impacts on heritage assets as a result of the interaction of the proposed developments with other development schemes, these are not considered to be significant.
- 13.12.7 No significant effects have been identified. Construction will have adverse effects on any buried archaeological remains within the WKN Proposed Development and Works No. 2 - 7, whilst minor adverse effects have been identified for one Scheduled Monument, a small number of Listed Buildings and one Conservation Area. Following the completion of the developments, the only lasting effects will be the impacts identified on the settings of heritage assets listed above. There is embedded mitigation within the scheme and programme of archaeological will offset any impact on buried archaeological remains, as a result, the only residual effects of the scheme will be a small number of minor adverse effects on designated historic assets.

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Wheelabrator Technologies Inc

Wheelabrator Kemsley (K3 Generating Station) and Wheelabrator Kemsley North (WKN) Waste to Energy facility Development Consent Order

Archaeology South East (2015) Archaeological Evaluation Report Land at Northern Access Road Kemsley Paper Mill, Ridham Avenue Sittingbourne, Kent Archaeology South East unpublished client report no: 2015448

Environmental Statement

Legend

- ▭ DCO Boundary
- ▭ WKN Boundary
- 3km search radius
- ▲ Listed Buildings
- ▭ Scheduled Monuments
- ▭ Conservation Areas

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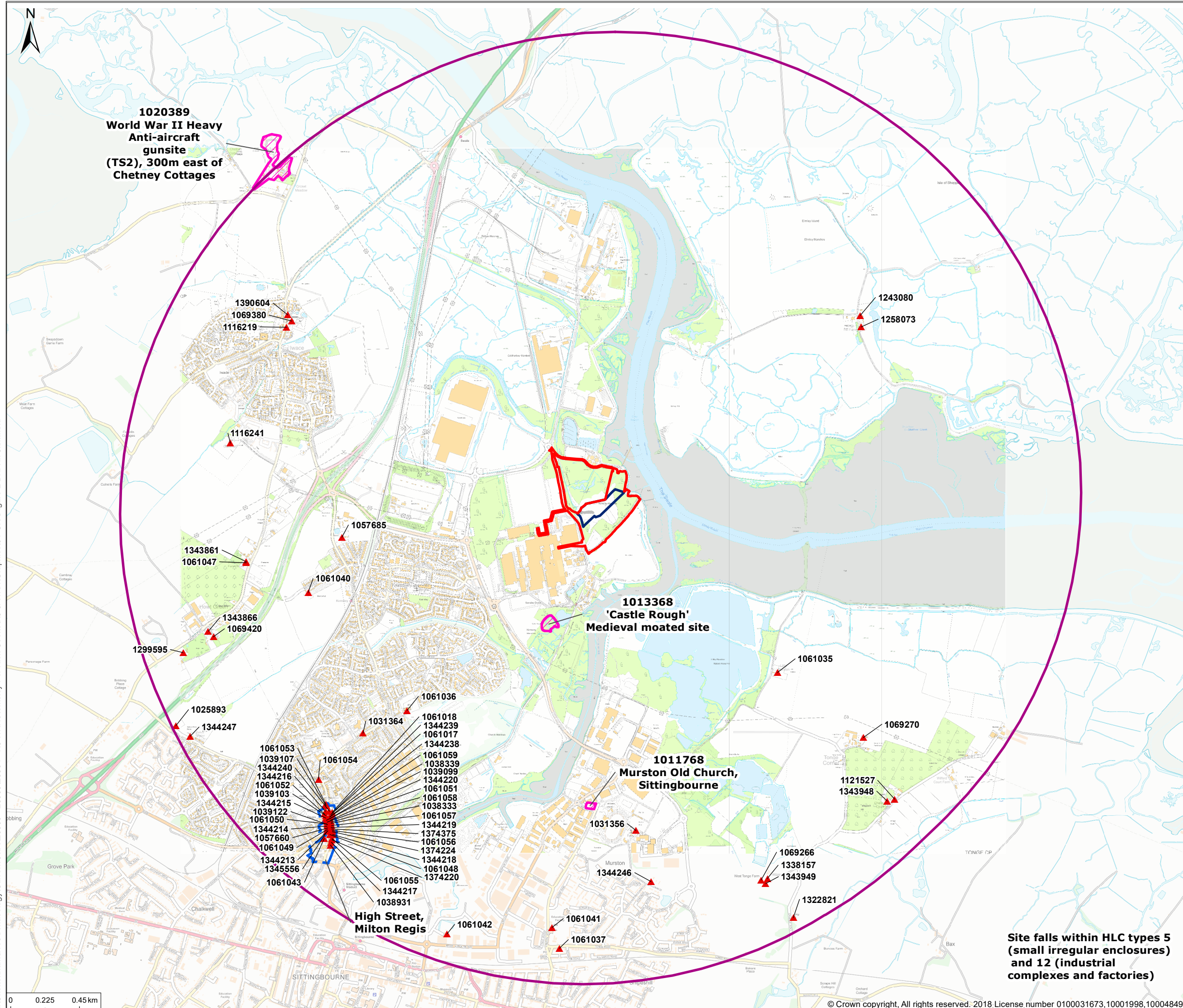
Project **K3 and WKN DCO**

Title **Site Location Plan**

Status **Final** Drawn By: **NB** PM/Checked By: **RC**

Job Ref **JAC23569** Scale @ A3: **1:24,000** Date Created: **AUG 2019**

Figure Number **3.1**



Site falls within HLC types 5 (small irregular enclosures) and 12 (industrial complexes and factories)

Environmental Statement

Legend

- ▭ DCO Boundary
- ▭ WKN Boundary
- 1km search radius

Non-Designated Heritage Assets:

HER Record Point

- Monument
- + Find Spot
- ⊗ Marine
- ✝ Protected Military Remains
- ◆ Farm
- Land
- HER Monuments Line
- ▭ HER Monuments Polygon

Previous Archaeological Work:

- HER Events Point
- HER Events Line
- ▭ HER Events Polygon

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Title **HER Data Plot**

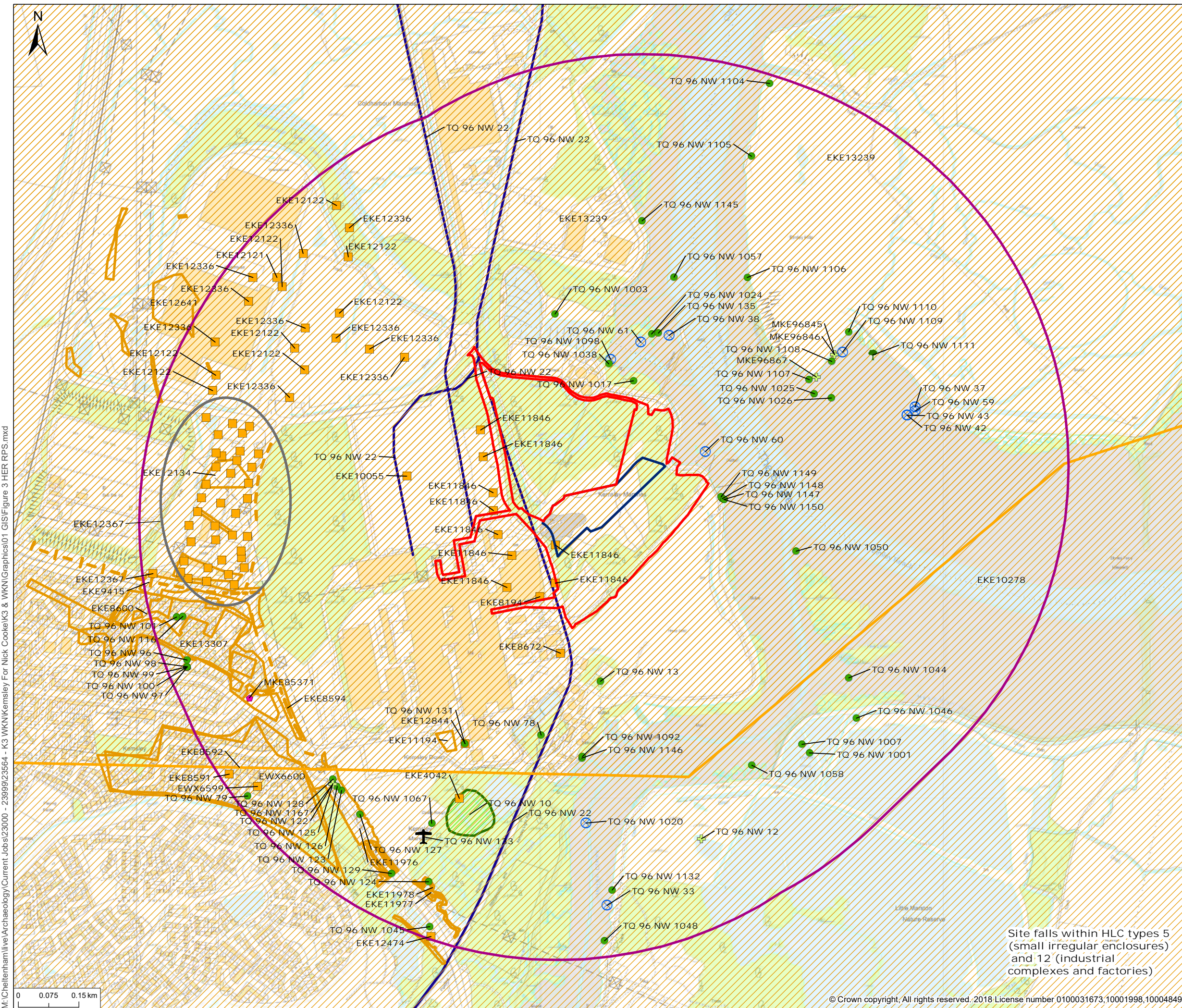
Status **Final** Drawn By: **NB** PM/Checked By: **NC**

Job Ref **JAC23569** Scale @ A3 **1:9,000** Date Created **JUL 2019**

Figure Number

13.2

Site falls within HLC types 5 (small irregular enclosures) and 12 (industrial complexes and factories)



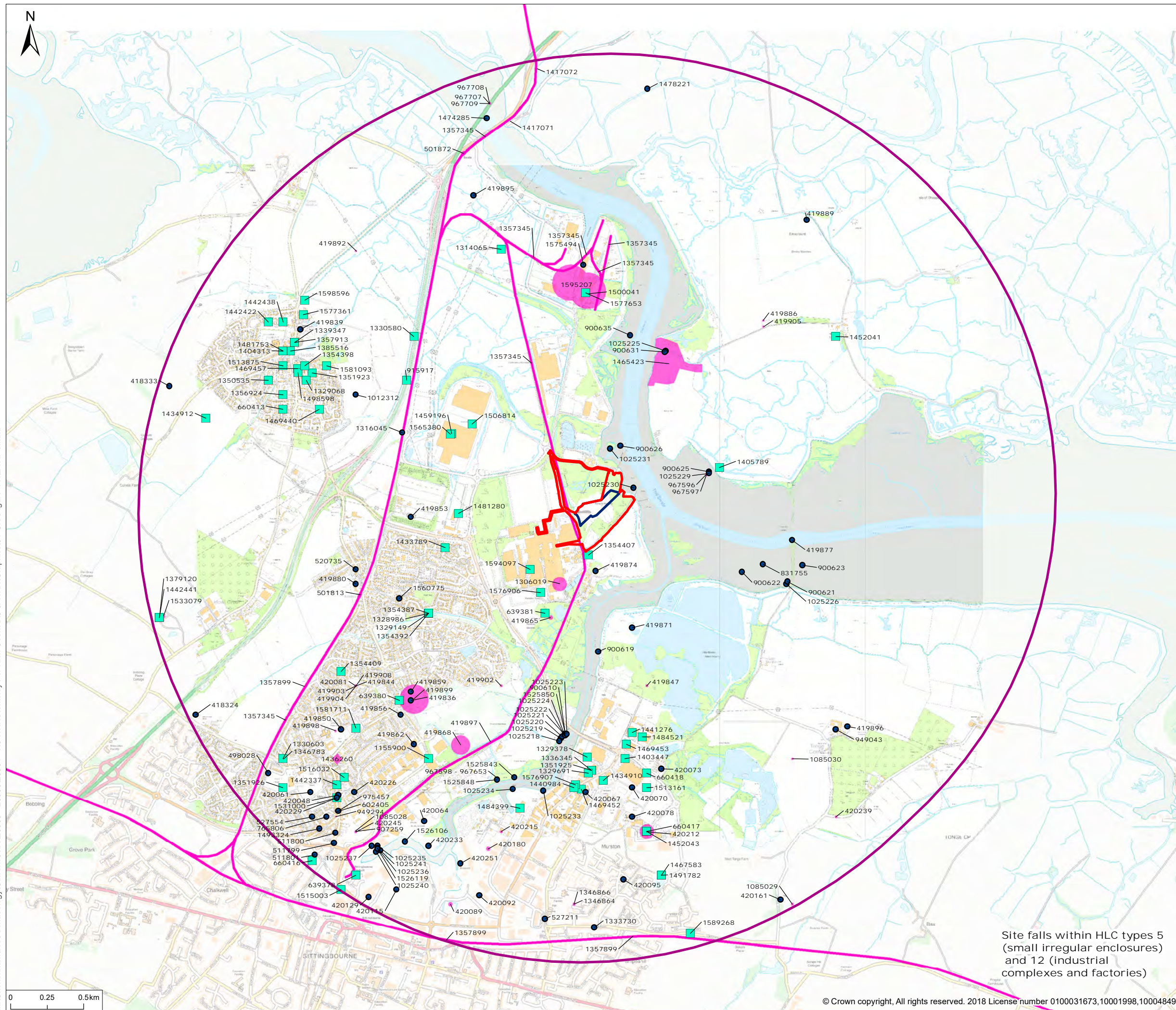


Environmental Statement

Legend

- ▭ DCO Boundary
- ▭ WKN Boundary
- ▭ 3km search radius
- ▭ HEA Monuments
- ▭ Polygons
- HEA Monuments Points
- ▭ HEA Events
- ▭ HEA Monuments Lines

M:\Cheltenham\live\Archaeology\Current Jobs\23000 - 23999\23564 - K3 WKN\Kemsley For Nick Cooke\K3 & WKN\Graphics\01 GIS\Figure 4 HEA RPS.mxd



Site falls within HLC types 5 (small irregular enclosures) and 12 (industrial complexes and factories)

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Project **K3 and WKN DCO**

Title **HEA Data Plot**

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Final	NB	RC

Job Ref	Scale @ A3	Date Created
JAC23569	1:25,000	JUL 2019

Figure Number

13.3