

RPS

**WEALDEN BRICKWORKS
RESOURCE RECOVERY
AND RENEWABLE ENERGY
FACILITY**

EIA SCOPING REPORT



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EIA SCOPING REPORT

**Request for Scoping Opinion under Town and Country Planning
(Environmental Impact Assessment (Regulations) 2011 (as
amended 2015))**

On behalf of Britaniacrest Recycling Ltd

Date: 9th November 2015

Our Ref: JPW0568

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1 INTRODUCTION

- 1.1 This Scoping Report has been prepared by RPS on behalf of Britaniacrest Recycling Ltd. It proposes the scope of environmental assessment for a resource recovery and renewable energy facility at Wealdon Brickworks, West Sussex.
- 1.2 Environmental Impact Assessment (EIA) is the process of identifying and assessing the significant effects likely to arise from a proposed development. EIA is not required for all developments.
- 1.3 This report sets out the proposed scope of the Environmental Statement (the report of the EIA process) which will be prepared in accordance with the Town and Country Planning (Environmental Impact Assessment) Regulations 2011 (S.I. 2011 No. 1824), as amended 2015 (referred to hereafter as the EIA Regulations). The Environmental Statement (ES) will accompany a full planning application to be submitted to the local planning authority, West Sussex County Council.
- 1.4 The aim of this report is to provide information to the West Sussex County Council to enable a Scoping Opinion to be made under the EIA Regulations. A letter to the Council requesting such an opinion accompanies this report.

Purpose of EIA

- 1.5 EIA is the process of identifying and assessing the significant effects likely to arise from a proposed development. This requires consideration of the likely changes to the environment, where these arise as a consequence of the proposed development, through comparison with the existing and likely future baseline conditions in the absence of the proposed development.

Purpose of Scoping

- 1.6 The process of identifying the issues to consider within an ES (establishing the scope of the assessment) is known as scoping. Scoping is not a mandatory requirement under the EIA Regulations. However, it is recognised as a useful part of the assessment process which helps to identify the main effects that a project is likely to have on the environment.
- 1.7 The scoping of an EIA by which these main or significant effects are identified is, therefore, an important preliminary procedure, which sets the context for the study. Through the scoping exercise, the key environmental issues are identified at an early stage, which permits subsequent work to concentrate on those environmental topics for which significant effects may arise as a result of a proposed development.

Purpose of this Scoping Report

- 1.8 This document sets out details of the proposed development at the former Wealdon Brickworks, Horsham, West Sussex, the proposed EIA methodology and the proposed scope of technical assessments, and invites comments from West Sussex County Council and its consultees regarding the scope of works. The intention of this scoping exercise is to gain agreement from all key parties regarding the proposed methodology and scope of assessment.

1.9 This Scoping Report has been informed by the following:

- Desk-top studies, site visits and surveys;
- Review of relevant websites, such as those provided by statutory consultees;
- Planning policy;
- The EIA Regulations and EIA good practice guidance; and
- Experience of other similar developments.

The Applicant

1.10 The applicant is Britaniacrest Recycling Ltd (Britaniacrest). Britaniacrest is a family business, started in 1993 to provide affordable and professional skip hire and waste management in West Sussex and East Surrey for private and commercial customers.

1.11 Britaniacrest recently obtained planning permission (ref WSCC/018/14/NH) for a Waste Transfer Facility at the Wealdon site and construction of the facility has commenced. The proposed resource recovery and renewable energy facility would be built in addition to the Transfer Facility if permission is granted and would take a proportion of its feedstock directly from it.

Public Consultation

1.12 The applicant has not yet carried out any consultation with local residents and businesses, but will do so following a pre-application with the County Council and prior to any planning application being submitted. The consultation programme will be initiated at an early stage in the design of the development so that feedback can be incorporated into the eventual planning application. A further round of consultation will be carried out prior to the application being submitted, once specialist studies have been completed. This way, residents and consultees can be properly informed about the development proposed and its likely effects. The ES will include a summary of the pre-application public consultation carried out.

2 THE SITE AND THE PROPOSED DEVELOPMENT

The Site and its Surroundings

- 2.1 The site address is: Site Hb, The Wealdon Brickworks Site, Langhurstwood Road, Horsham, West Sussex, RH12 4QD
- 2.2 The site is a former brickworks situated to the North of Horsham approximately 11 miles south west of Gatwick and 10 miles west of Crawley in the county of West Sussex (as shown in Figure 1 (a & b) - Site Location). The site is adjacent to the West Sussex mechanical-biological treatment (MBT) facility.
- 2.3 The topography of the site is relatively flat and the site area is approximately 3.12 hectares.
- 2.4 Access to the site is achieved from an existing access road which connects to the public highway at Langhurstwood Road. Langhurstwood Road links directly to the A264 some 750m to the south. The A624 links to the A24 and M23 after a short distance. This access road also serves a Landfill Site, Weinerbergers Brickworks and the more recently developed Mechanical-Biological Treatment plant.
- 2.5 The proposed red line boundary is shown on Figure 2.
- 2.6 There are no recorded World Heritage Sites or Registered Battlefields in the vicinity of the site. There are two scheduled monuments, one registered park and garden, one Conservation Area and 59 Listed Buildings within 2km of the site.
- 2.7 There is one Site of Special Scientific Interest (SSSI) located 690m north east of the site and one Site of Importance for Nature Conservation (SINC) 725m to the north east.
- 2.8 The High Weald AONB lies within 5km of the Application Site to the south-east and the Surrey Hills AONB lies approximately 6.7km to the north-west. The South Downs National Park is located just over 15km to the south-west.
- 2.9 A watercourse, identified as Bolding Brook flows to the west of the site beyond a main railway line (and below the 50 m AOD contour line). The site is not located within the Environment Agency's (EA) identified floodplain.
- 2.10 The site lies within the larger 24.4 ha Warnham and Wealden Brickworks area. To the east of the application site is the new Mechanical Biological Treatment Facility operated by Biffa in partnership with West Sussex County Council. Weinerberger operate the Warnham Brickworks to the south of the site. The London-Horsham railway line lies to the west beyond which there is open countryside. To the north are some ponds located on land believed to be owned by the Council. The land is currently vacant, although there is a long-standing undetermined application for a Materials Recovery Facility (MRF) on the site. Beyond this lies the Brookhurst Wood Landfill site.

Existing Development and Planning History

- 2.11 Britaniacrest recently obtained planning permission (ref WSCC/018/14/NH) for a Waste Transfer Facility at the Wealdon site and construction of the facility has commenced. The proposed resource recovery and renewable energy facility would be built in addition to the Transfer Facility if permission is granted and would take a proportion of its feedstock directly from it.
- 2.12 The Site currently hosts a transfer station/materials recycling facility which processes construction, commercial, industrial & domestic waste, and processes inert materials, wood and green waste, as well as carrying out transfer and eventually baling operations. It has a total capacity of up to 200,000tpa a year. The Site also has parking facilities for between 25 – 30 HGV vehicles and skip storage.
- 2.13 The County Council granted planning permission for a Mechanical and Biological Treatment (MBT) plant on 1 December 2009 (Ref: WSCC/055/09/NH) to the east of the Site. The MBT plant operates under the West Sussex County Council's Materials Resource Management Contract (MRMC). An application for B2 (general industrial)/B8 (storage/distribution) uses on the southern part of the site was also won by others on appeal in 2011, which covers approximately 3.0 hectares (14/03/11 Appeal Ref:APP/Z3825/A/10/2141926/NWF).

Project Description

- 2.14 The proposed facility will utilise sorting, segregating and the latest thermal treatment technology to treat up to 180,000 tonnes per annum of collected waste from commercial, industrial and/or municipal sources to help meet future demand in the growing market for renewable energy. The facility will produce approx. 16 MWe of renewable energy.

Overview of the process

- 2.15 In the first instance, waste will be delivered to the transfer and recycling facility. Upon arrival at the facility, the delivered material will be weighed and recorded in accordance with Environment Agency and trading standards requirements. After passing over the weighbridge the material will be delivered to the Reception Building where it will be put into buffer storage. It will then be subject to initial screening and mechanical recovery operations to capture and remove rubble, plastics and metal components from the resource. The separated recyclable materials will be stored and bulked on the Site prior to export for re-use or recovery at suitable recycling facilities in the local area.
- 2.16 The residual material will be shredded prior to treatment within the main processing building by thermal treatment methods. The energy released from the waste fuel will be used to generate renewable energy for export from the Site through the local electricity distribution network.
- 2.17 The process will produce residues in the form of bottom ash and boiler ash - which can be used as a substitute to low grade aggregates - and air pollution control residue (APCr) which will be collected and removed from the Site for further treatment off-site. Any disposal to landfill will be minimised and the Facility is expected to achieve around 95% of landfill avoidance.

- 2.18 The modern, state-of-the-art thermal treatment will use heat to convert the waste mass to a gaseous phase, the energy from which will be extracted through a boiler to produce steam. The steam will be superheated to drive a turbo-generator to produce electricity. Subject to user availability, heat will also be able to be extracted and exported from the site as distributed energy. The process will use proprietary technology which will be subjected to an Integrated Pollution Control (IPC) permit issued by the Environment Agency and meet the requirements of the Incineration Directive and Industrial Emissions Directive.
- 2.19 In general terms the proposed development adheres to the principles of sustainability in terms of energy management and emissions control.

Proposed Site Layout

- 2.20 Employee and visitor access to the facility will utilise the existing entrance point. Car parking will be located to the front of the proposed process building.
- 2.21 An impermeable surface will provide access for use by HGVs around the facility. HGV traffic will be segregated from private vehicles. The main thermal treatment process will be fully enclosed within a purpose built Process Building which will be constructed such that the Reception Building and Process Building are integrated. The Process Building will include dedicated areas for the reception and storage of imported material, which together with the processing and materials separation are all contained within a controlled environment. Gas clean-up reactors, storage tanks, electrical equipment and air cooling facilities will be sited externally and adjacent to the main Process Building.

Planning Policy Context

- 2.22 The West Sussex Waste Local Plan was developed in partnership with the South Downs National Park Authority, and was formally adopted by both authorities in April 2014. The plan covers the period to 2031 and is the most up to date statement of land use planning policy for waste. The plan provides the basis for making consistent decisions about planning applications for waste management facilities. The County's aspiration is to become a zero waste to landfill county with the aim of ensuring that the communities, environment and economy of West Sussex are protected.
- 2.23 The applicant site is allocated in the West Sussex Waste Local Plan, shown in Policy Map 4, for waste management development and identifies a minimum contribution of 300,000 tpa of waste management capacity to meet the need for new waste management capacity in West Sussex over the Plan period.

3 GENERAL APPROACH TO EIA

Requirement for Environmental Impact Assessment

- 3.1 The legislative framework for EIA is set by European Directive 2011/92/EU, as amended by Directive 2014/52/EU (collectively referred to as the EIA Directive). Directive 2014/52/EU requires Member States to transpose its requirements into national law by 16 May 2017 and sets out arrangements for a transitional period from the regime laid down by Directive 2011/92/EU. These transitional measures require that the provisions of Directive 2011/92/EU should apply to projects for which the EIA process has been initiated or the application submitted within the transition period. Therefore, for the purposes of the resource recovery and renewable energy facility project, Directive 2011/92/EU remains the relevant consideration. However, as a matter of good practice, the measures required by the amended Directive have been considered where appropriate in this Scoping Report.
- 3.2 The EIA Directive requires an EIA to be completed in support of an application for development consent for certain types of project. For projects of this type in England, the European legislative requirements are transposed into law by the Town and Country Planning (Environmental Impact Assessment) Regulations 2011, as amended in 2015.
- 3.3 The process of identifying whether or not EIA is required for a development is known as screening. Projects of the type listed in Schedule 1 of the Regulations require EIA in all cases. Projects of the type listed in Schedule 2 may require EIA in certain circumstances.
- 3.4 The proposed development would fall within the category 10 of Schedule 1 of the EIA Regulations 'Waste disposal installations for the incineration or chemical treatment of non-hazardous waste with a capacity exceeding 100 tonnes per day.
- 3.5 Schedule 1 development requires EIA. The applicant accepts this to be the case and therefore no EIA screening has been requested from WSCC.

Information Required

- 3.6 Although there is no statutory provision as to the form of an ES, it must contain the information specified in Part II of the EIA Regulations, and as much of the relevant information in Part I of Schedule 4 as reasonably required to assess the effects of the project and which the developer can reasonably be required to compile. The specified information within Schedule 4 Parts I and II is set out in full below:

Part I

1. Description of the development, including in particular:
 - a description of the physical characteristics of the whole development and the land-use requirements during the construction and operational phases;
 - a description of the main characteristics of the production processes, for instance, nature and quantity of the materials used;

- an estimate, by type and quantity, of expected residues and emissions (water, air and soil pollution, noise, vibration, light, heat, radiation etc.) resulting from the operation of the proposed development.
2. An outline of the main alternatives studied by the applicant or appellant and an indication of the main reasons for the choice made, taking into account the environmental effects.
 3. A description of the aspects of the environment likely to be significantly affected by the development, including, in particular, population, fauna, flora, soil, air, climatic factors, material assets, including the architectural and archaeological heritage, landscape and inter-relationship between the above factors.
 4. A description of the likely significant effects of the development on the environment, which should cover the direct effects and any indirect, secondary, cumulative, short, medium and long-term, permanent and temporary, positive and negative effects of the development, resulting from:
 - The existence of the development;
 - The use of natural resources;
 - The emission of pollutants, the creation of nuisances and the elimination of waste, and the description by the applicant or appellant of the forecasting methods used to assess the effects on the environment.
 5. A description of the measures envisaged to prevent, reduce and where possible offset any significant adverse effects on the environment.
 6. A non-technical summary of the information provided under paragraphs 1 to 5 of this Part.
 7. An indication of any difficulties (technical deficiencies or lack of know-how) encountered by the applicant or appellant in compiling the required information.

Part II

1. A description of the development comprising information on the site, design and size of the development.
2. A description of the measures envisaged in order to avoid, reduce and, if possible, remedy significant adverse effects.
3. The data required to identify and assess the main effects which the development is likely to have on the environment.
4. An outline of the main alternatives studied by the applicant or appellant and an indication of the main reasons for his choice, taking into account the environmental effects.
5. A non-technical summary of the information provided under paragraphs 1 to 4 of this Part.

- 3.7 The ES for the proposed development will provide all information in Part II of the Schedule and, in addition, provide other relevant information under Part I. Together, the information supplied in the ES will provide a clear understanding of the likely significant effects of the project upon the environment. The following sections outline the overall approach to EIA in order to meet these legal requirements.

Structure of the Environmental Statement (ES)

- 3.8 The ES will be structured logically, enabling all relevant environmental information to be found quickly and easily. The ES will describe the EIA process and its findings, and will include the following sections:

- Non-Technical Summary (as a stand alone document);
- Written Statement;
- Figures; and
- Appendices.

EIA Methodology

Relevant EIA Guidance

- 3.9 The EIA process will take into account relevant government or institute guidance, including:
- Department of the Environment, Transport and the Regions (DETR) (1997) Mitigation Measures in Environmental Statements. HMSO;
 - Institute of Environmental Management and Assessment (2004) Guidelines for Environmental Impact Assessment;
 - Institute of Environmental Management and Assessment (2011) The State of Environmental Impact Assessment Practice in the UK. Special Report; and
 - Department for Communities and Local Government (2014) Planning Practice Guidance at <http://planningguidance.planningportal.gov.uk>.
- 3.10 Other topic specific specialist methodologies and good practice guidelines will be drawn on as necessary.

Key Elements of the General Approach

- 3.11 The assessment of each environmental topic will form a separate chapter of the ES. For each environmental topic, the following will be addressed:
- Methodology and assessment criteria;
 - Description of the environmental baseline (existing conditions);
 - Identification of likely effects;

- Evaluation and assessment of the significance of identified effects, taking into account any measures designed to reduce or avoid environmental effects which form part of the project and to which the developer is committed; and
- Identification of any further mitigation measures envisaged to avoid, reduce and, if possible, remedy adverse effects (in addition to those measures that form part of the project).

Methodology and Assessment Criteria

- 3.12 Each topic chapter will provide details of the methodology for baseline data collection and the approach to the assessment of effects. Details of the proposed approach for each topic are provided in Section 5 of this Scoping Report. Each identified environmental topic will be considered by a specialist in that area. The identification and evaluation of effects will take into account relevant topic-specific guidance where available.

Description of the Environmental Baseline

- 3.13 An ES requires sufficient recent data to form the basis of the assessment. Each topic chapter will include a description of the current (baseline) environmental conditions. This will be based on an identified study area, which will be identified for each topic chapter.
- 3.14 Britaniacrest recently obtained planning permission (ref WSCC/018/14/NH) for a Waste Transfer Facility at the Wealdon site and construction of the facility has commenced. The proposed resource recovery and renewable energy facility would be built in addition to the Transfer Facility if permission is granted and would take a proportion of its feedstock directly from it.
- 3.15 Consideration will also be given to any likely changes in baseline conditions without the proposed development. Such changes could include any other proposed developments in the surrounding area that have been granted planning permission but not yet built or operational and expected to be built by the time the proposed development is completed.

Assessment of Effects

- 3.16 The EIA Regulations require the identification of the likely significant environmental effects of the project. Each topic chapter will take into account both the sensitivity of receptors affected and the magnitude of the likely impact in determining the significance of the effect.

Sensitivity or Importance of Receptors

- 3.17 Receptors are defined as the physical resource or user group that would be affected by a proposed development. The baseline studies will identify potential environmental receptors for each topic and will evaluate their sensitivity to the proposed development. The sensitivity or importance of a receptor may depend, for example, on its frequency or extent of occurrence at an international, national, regional or local level.

Magnitude of Impact

- 3.18 Impacts are defined as the physical changes to the environment attributable to the project. For each topic, the likely environmental impacts will be identified. The magnitude of the impact will be described using defined criteria within each topic chapter.

- 3.19 The categorisation of the impact magnitude may take into account the following four factors:
- Extent;
 - Duration;
 - Frequency; and
 - Reversibility.
- 3.20 Impacts will be defined as either adverse or beneficial. Depending on discipline, they may also be described as:
- Direct: Arise from activities associated with the project. These tend to be either spatially or temporally concurrent;
 - Indirect: Impacts on the environment which are not a direct result of the project, often produced away from the project site or as a result of a complex pathway.
- 3.21 Impacts will be divided into those occurring during the construction phase and those occurring during operation. Where appropriate, some chapters may refer to these as temporary and permanent impacts.

Significance of Effects

- 3.22 Effect is the term used to express the consequence of an impact (expressed as the 'significance of effect'), which is determined by correlating the magnitude of the impact to the sensitivity of the receptor or resource.
- 3.23 The magnitude of an impact does not directly translate into significance of effect. For example, a significant effect may arise as a result of a relatively modest impact on a resource of national value, or a large impact on a resource of local value. In broad terms, therefore, the significance of the effect can depend on both the impact magnitude and the sensitivity or importance of the receptor.
- 3.24 Levels of significance that will be used in the assessment include, in descending order:
- Substantial;
 - Major;
 - Moderate;
 - Minor;
 - Neutral.
- 3.25 Where an effect is described as 'neutral' this means that there is either no effect or that the significance of any effect is considered to be negligible. All other levels of significance will apply to both adverse and beneficial effects. These significance levels will be defined separately for each topic within the methodology sections. In all cases, the judgement made as to significance will be that of the author of the relevant chapter with reference to appropriate standards/guidelines where relevant.

Cumulative Effects

- 3.26 The cumulative effects of the proposed development in conjunction with other proposed schemes will be considered. Cumulative impacts are those effects of development that may interact in an additive or subtractive manner with the impacts of other developments that are not currently in existence but may be by the time the development is implemented. The effects to be considered cumulatively in an Environmental Statement should be agreed with the LPA during the scoping stage. In most cases, detailed consideration of the combined effects of the development proposed together with other developments will be limited to those that are already begun or constructed or those that have not been commenced but have a valid planning permission.
- 3.27 At this early stage in the project we are unaware of any developments that have the potential to act cumulatively with the project. It is envisaged that an understanding of the relevant cumulative developments will be established through the EIA scoping process and via discussions with the LPA. The relevant planning permissions/applications will then be reviewed and a draft matrix will be produced which will set out, for each of the developments identified:
- the anticipated construction and operational timeframes for each of those developments in comparison to those of the project.
 - identification of topics and phases for which the cumulative impacts will need to be addressed (including traffic, emissions and visual impact).
 - identification of topics/phases for which the need to address cumulative impacts can be scoped out.

Mitigation Measures

- 3.28 The EIA Regulations require that where significant effects are identified 'a description of the measures envisaged to prevent, reduce and where possible offset any significant adverse effects on the environment' should be included in the ES.
- 3.29 The development of mitigation measures is part of an iterative EIA process. Therefore, measures will be developed throughout the EIA process in response to the findings of initial assessments. The project that forms the subject of the planning application will include a range of measures designed to reduce or prevent significant adverse environmental effects arising, where practicable. In some cases these measures may result in enhancement of environmental conditions. The assessment of effects will therefore take into account all measures that form part of the project and to which Britaniacrest Recycling Ltd are committed.
- 3.30 In a few cases, where significant effects are predicted, it may be desirable to identify what are described as 'further mitigation' measures. These are measures that could also prevent, reduce and where possible offset any adverse effects on the environment but are not part of the assessed project.

Summary Tables

- 3.31 Summary tables will be used to summarise the effects of the project for each environmental topic.

4 SCOPE OF ASSESSMENT

Work Undertaken to Date

- 4.1 Britaniacrest recently obtained planning permission (ref WSCC/018/14/NH) for a Waste Transfer Facility at the Wealdon site. An Environmental Statement accompanied this application covering the following topics; Air Quality, Traffic, Ecology, Noise, Water, Heritage and Land Quality. This has been taken account of in preparing this Scoping Report.

Topics Scoped Out of Assessment

- 4.2 Taking into account the findings of the above studies, together with knowledge of the site and surrounding area, it is proposed that the following topics are not included in the scope of the ES.

Planning Policy Context

- 4.3 It is not proposed to include a chapter on Planning Policy Context in the ES. The draft guidance on EIA from the Department for Communities and Local Government 'EIA: A Guide to Good Practice and Procedures' (DCLG 2006) (paragraph 155) states out that there is no requirement to provide chapters on planning and sustainability in Environmental Statements. A separate Planning Statement will be submitted with the planning application and the environmental topic chapters within the ES will each set out the policy context relevant to that topic.

Socio-economic Impact

- 4.4 At this stage it is assumed that the requirement for a socio-economic impact assessment can be scoped out. This will, however, need to be agreed with the Local Planning Authority.

Grid Connection

- 4.5 It is understood that there is an available on site grid connection and on this basis it is assumed that a specific ES chapter to address the potential grid connection impacts will not be required.

Aerodrome Safeguarding

- 4.6 The site is located within the designated Aerodrome Safeguarding zone of London Gatwick Airport. The proposed height of the stack is clear of the takeoff/landing zones and the outer horizontal surface zone. The design team will ensure that the operational integrity and safety of the airport is not compromised by the development.
- 4.7 Nevertheless, Aerodrome Safety is not an environmental effect and would be addressed within the Planning Application Supporting Statement, if necessary, rather than requiring a specific Chapter within the Environmental Statement.

Content of the Environmental Statement

- 4.8 Table 4.1 identifies the chapters that are proposed for inclusion in the ES. Further details of the approach to the assessment and its scope are provided in Section 5 of this Scoping Report.

Table 4.1: Structure of ES

Structure of ES	
Non-Technical Summary	Summary of the ES using non-technical terminology
Chapter 1	Introduction
Chapter 2	Project Description
Chapter 3	Need and Alternatives Considered
Chapter 4	Environmental Assessment Methodology
Chapter 5	Landscape and Visual Impact
Chapter 6	Traffic & Transportation
Chapter 7	Air Quality & Odour
Chapter 8	Noise & Vibration
Chapter 9	Archaeology and Cultural Heritage
Chapter 10	Hydrology & Flood Risk
Chapter 11	Hydrogeology & Ground Conditions
Chapter 12	Ecology & Nature Conservation
Chapter 13	Conclusions & Further Information

5 TECHNICAL ASSESSMENTS

Chapter 1: Introduction

- 5.1 This chapter will provide the introduction to the ES, including details of the application, need for EIA and the structure of the ES.

Chapter 2: Project Description

- 5.2 The EIA will include a description of the project, which will form the basis of the assessment of effects. The EIA Regulations require an ES to include:
- 5.3 'A description of the development comprising information on the site, design and size of the development.'
- 5.4 This project description chapter will include details of the site, together with a description of the key components of the proposed development. The description will include the following information, as far as practicable at the time of writing:
- Construction phase – a description of the key works, activities and processes that would be required during the construction phase;
 - Operational phase – a description of the completed development and its use;
 - Decommissioning phase - a description of the key works, activities and processes that would be required during the decommissioning phase.
- 5.5 Where options remain at the time of the assessment (with regard to construction techniques, for example), the ES will provide clear explanation of the assumptions made. Where appropriate, the realistic worst case scenario will be assessed.
- 5.6 Where mitigation measures have been identified and developed through the EIA process and have been incorporated as part of the project, details of these measures will be set out within the project description chapter.

Chapter 3: Need and Alternatives Considered

- 5.7 The EIA Regulations require the alternatives considered by the applicant to be set out in the ES:
- 'An outline of the main alternatives studied by the applicant or appellant and an indication of the main reasons for his choice, taking into account environmental effects.'
- 5.8 This chapter will summarise the reasons for the selection of the site and provide an outline the alternatives considered during the EIA process, including a description of the alternative design and layout options that have been considered.

Chapter 4: Environmental Assessment Methodology

- 5.9 Details of the overall approach to EIA will be set out in this chapter, together with details of the scoping process, consultation undertaken and the overall approach to the assessment of

significance. Topic specific methodologies, such as survey methods, will be provided in each topic chapter.

Chapter 5: Landscape and Visual Impact

Baseline Information

- 5.10 The Application Site is not situated within or adjacent to any designated landscape, although Warnham Court Grade II Registered Park and Garden lies approximately 1.2km to the south-west. The High Weald AONB lies within 5km of the Application Site to the south-east and the Surrey Hills AONB lies approximately 6.7km to the north-west. These AONBs and Warnham Registered Park and Garden are shown on Figure 4. A proposed study area of 15km radius has been chosen for the proposed development due to the height of the proposed facility and taking into account the industrial nature of the Application Site and adjacent land. The Application Site is located within the National Character Area 121: Low Weald, and the County Landscape Character Area of LW8: Northern Vales.

Proposed Approach

- 5.11 The Landscape and Visual Impact Assessment (LVIA) would be undertaken with reference to the Guidelines for Landscape and Visual Impact Assessment: Third Edition, Landscape Institute and Institute for Environmental Management and Assessment, 2013 (GLVIA3). It would consider the potential impacts of the proposed development as a result of changes in the landscape character (landscape impact assessment) and the nature and extent of the visual effects (visual impact assessment). The LVIA would consider the effects that the construction, operational and decommissioning phases of the proposed development would have on to landscape character as well as visual amenity.
- 5.12 RPS would update the review of existing and emerging national and local planning policy section that relates to landscape character and visual amenity, utilising published information. It would also review published landscape character assessments, including the West Sussex County Landscape Character Assessment and the Horsham District Landscape Character Assessment and identify any key characteristics that are present on the Application site and in the surrounding area. The relationship of the site to any designated landscapes would be identified and the purpose for their designation and their special qualities would be reviewed.
- 5.13 A Zone of Theoretical Visibility has been generated for the 15km study area based on a 90 m stack height (Figure 4). Eight viewpoints have been identified within the study area, as representative of sensitive residential receptors and recreational receptors situated within the study area at various distances and directions from the proposal. These are also shown on figure 4. Panoramic photographs from the representative viewpoints would be used to assess the potential visual impacts of the proposal. It should be noted that the South Downs National Park is 17km from the site (see Figure 4) and therefore outside the 15km study area.
- 5.14 Following the guidance in GLVIA3, the assessment would identify the sensitivity of the landscape resource and visual receptors, describe the direct and indirect impacts of the proposed development on those resources and receptors and establish the significance of effect. The landscape assessment would be illustrated by supporting figures to show the relationship between the development and the various landscape character areas and any designated landscapes within the study area.

- 5.15 The impact of the proposed development upon visual receptors would also be assessed in terms of sensitivity, magnitude of change and significance of effect. The visual assessment would be supported by annotated photographs, identifying the location of the proposed facility.

Issues Proposed to be Scoped Out

- 5.16 No photomontages are proposed as part of the assessment. A full assessment of the likely significant effects on landscape and visual resources can be presented using the methodology set out above, without the use of photomontages.

Interlinkages with other EIA topics

- 5.17 Should there be potential for structural landscape mitigation planting, a joint landscape and ecological habitat mitigation strategy should be undertaken. Consultation with archaeologists will help to ensure that, where possible, viewpoint locations are situated to ensure that they can be used to support the assessment of the settings of historic monuments as well as the landscape and visual assessment.

Chapter 6: Traffic and Transportation

Baseline Information

- 5.18 Access to the site is taken from Langhurstwood Road and it is understood that previous planning consents on site have required this to be improved.
- 5.19 The site access road is subject to a 10mph speed limit and is generally 6.7 metres wide. It forms the minor arm of a simple priority junction with the western side of Langhurstwood Road, which is subject to a 40mph restricted speed limit and is a rural single carriageway road. There is no street lighting along Langhurstwood Road and there are no footways. At its southern end, Langhurstwood Road forms a junction with the eastbound carriageway of the A264 via a left-in / left-out arrangement with associated acceleration and deceleration tapers.
- 5.20 There are no facilities provided for right turn movements into and out of Langhurstwood Road on the A264 and so u-turns must be made at junctions to the east and west to accommodate these. The A246 links to the A24 to the west at the Great Daux Roundabout, and with the M23 / A23 junction 11 to the east. The A246 has a derestricted national speed limit enforced within vicinity of the site.
- 5.21 All HGV movements associated with the current and consented operations on site are required to route to and from the south via the A264. All HGV operational traffic to the proposed development will route in accordance with this, via the A264 and to / from the site via Langhurstwood Road south of the site access.

Proposed Approach

- 5.22 Guidance on undertaking the Environmental Impact Assessment of traffic generated by development proposals is set out within the IEMA publication '*Guidance Note No. 1. Guidelines for the Environmental Assessment of Road Traffic*', March 1993.
- 5.23 The Traffic and Transport Chapter of the ES would assess the significance of environmental effects of traffic generated by the proposals. To produce a robust assessment, the Chapter would identify any sensitive receptors along the access routes to the site, determine significance criteria for

assessment, analyse background traffic flows along the access routes for all recognised time periods and obtain and analyse Personal Injury Accident statistics along the access routes.

- 5.24 The guidelines are based upon the forecast increase in traffic on a road link resulting from proposed development and sets out thresholds upon which assessments should be undertaken.
- 5.25 The guidelines suggest that assessments should be undertaken for links where traffic flows are predicted to increase by more than 30% as a result of proposed development. The guidelines suggest that in sensitive locations a 10% threshold should be used as a basis for undertaking assessments.
- 5.26 Table 2.1 of the Guidelines goes on to state that when assessments are required the following should be considered:
- Noise;
 - Vibration;
 - Visual Impact;
 - Severance;
 - Driver Delay;
 - Pedestrian Delay;
 - Pedestrian Amenity;
 - Accidents and Safety;
 - Hazardous Loads;
 - Air Pollution; and
 - Dust and Dirt.
- 5.27 The environmental effect of road traffic resulting from the proposals will be assessed upon the access route in accordance with the above IEMA guidelines, in particular Langhurstwood Road and the A264.
- 5.28 Assessments will be undertaken across a typical working day with 12 hour (0700-1900) traffic flows. On any road link where increases in traffic flow are in excess of the threshold a detailed environmental impact assessment will be undertaken in accordance with Table 2.1 of the guidelines and set out above.
- 5.29 The assessments will also consider the cumulative effect resulting from all traffic flows generated by other developments as agreed with the LPA.
- 5.30 Local transport related information is available from the ES that was prepared for the Waste Transfer Station (WTS) and from the Transport Assessment (TA) that was prepared for the B2/B8 building. The traffic survey data and the traffic flows contained within these documents will be used and it is not proposed to undertake any new traffic surveys along the adjacent road network. Although these

documents also contain details on Personal Injury Accidents along the adjacent road network, it is proposed that new data is obtained to ensure that the most recently available data is used for the road safety analysis.

- 5.31 Although EIA does not concentrate on highway capacity as such, it is proposed to undertake weekday peak hour operational (junction) assessments at the site access / Langhurstwood Road junction and an assessment of traffic flow increases through the Langhurstwood Road / A264 junction from which a qualification can be made on the likely impact in conjunction with the operational (junction) assessments undertaken within the TA for the B2/B8 building.
- 5.32 The proposed development would take a large proportion of the feedstock from the WTS on site. Therefore, although the proposed development would have a total input of 180,000 tonnes per annum, most of this will not create additional vehicle movements. Full details of the traffic flows generated by the proposal will be set out within the chapter.

Issues Proposed to be Scoped Out

- 5.33 Given that the proposals will generate traffic movements throughout the day, rather than being concentrated into the weekday AM and PM peak hours, a Transport Assessment report will not be prepared. Rather, this Traffic and Transport Chapter of the ES will provide full details of traffic generation and the likely environmental effects resulting from the proposals.

Interlinkages with other EIA topics

- 5.34 The Air Quality and Noise chapters will utilise the traffic flows to inform their assessments.

Chapter 7: Air Quality and Odour

Baseline Information

- 5.35 The site is not within an Air Quality Management Area (AQMA); the nearest AQMA is more than 12 km from the Application Site and is unlikely to be affected by the proposed development. Air quality in the area is generally very good.

Proposed Approach

- 5.36 During the construction phase, the main concerns relating to air quality for this development would be fugitive dust emissions. During the operational phase, the main concerns relating to air quality for this development would be stack emissions from the thermal treatment of the waste and fugitive dust, odour and bio-aerosol emissions. The following tasks will be undertaken for the air quality and odour assessment :
- Establish the current air quality in the area with specific regard to the findings of Horsham District Council's Review and Assessment process, the results of available local monitoring and data available in the Defra maps. The Air Quality chapter in the ES accompanying the approved Waste Transfer Facility application evaluated the magnitude of increases in traffic-related pollutants during the operational phase. A future baseline scenario will be derived for the proposed development by increasing the current concentrations for the relevant pollutants by the contribution predicted in the ES Air Quality chapter.

- Undertake a risk assessment of dust and emissions during demolition / construction of the proposed development, having regard to the 2014 Institute of Air Quality Management (IAQM) 'Guidance on the assessment of dust from demolition and construction'. The assessment will consider sensitive receptors within 350 m of the site boundary.
- Undertake a stack height determination to predict the height beyond which local buildings no longer significantly affect dispersion. The modelling study would include the location and dimensions for the Waste Transfer Facility. Informed by the results of this study, the project team will be consulted to agree an appropriate height at which the air quality effects will then be assessed in detail, taking into account other aspects of the project (such as Landscape and Visual impacts).
- Evaluate the effects of emissions from the combustion plant stack using the current version of the ADMS dispersion model, ADMS 5. Emissions will be assessed assuming the releases are at the maximum allowed by the Industrial Emissions Directive (IED). The dispersion modelling will take account of terrain, local building and meteorology effects. Hourly sequential meteorological data collated at a suitable representative site for five consecutive years will be used within the model. Ground level pollutant concentrations will be predicted across a grid of receptors centred on the combustion plant, plus at discrete, selected sensitive human-health receptors.
- Describe the significance of the illustrated effects of the combustion of the biogas using professional judgement and relevant criteria, including those set out in: 2015 Environmental Protection UK (EPUK)/IAQM 'Land-use Planning and Development Control: Planning for Air Quality' document and the Environment Agency (EA) Horizontal Guidance documents H1 (Environmental Risks Assessment).
- The number of vehicle movements generated by the proposed development will be compared with the indicative criteria thresholds in the 2015 EPUK/IAQM 'Land-use Planning and Development Control: Planning for Air Quality' document. At this stage, it is not anticipated that the vehicle movements generated by the proposed development will substantially exceed the number generated by the approved development (being 264 HGVs and 28 LGVs accessing the site on a daily basis between Monday and Saturday). If this is confirmed then the ES will demonstrate that the indicative thresholds for determining when an air quality assessment is needed are not exceeded.
- Qualitatively assess the risk of dust impacts from the proposed development using a source-pathway-receptor conceptual model based on the 2014 IAQM 'Guidance on the Assessment of dust from Demolition and Construction' with appropriate modifications. The assessment will only consider changes in dust sources and additional dust sources when compared with the approved Waste Transfer Facility.
- Qualitatively assess the risk of odour impacts from the proposed development using a source-pathway-receptor conceptual model according to Appendix 1 of the 2014 IAQM 'Guidance for the Assessment of Odour for Planning'. The assessment will only consider changes in odour sources and additional odour sources when compared with the approved Waste Transfer Facility.

- Qualitatively assess the risk of bio-aerosol impacts from the proposed development using a source-pathway-receptor conceptual model. With reference to the EA's interim guidance for assessing potential health effects from bio-aerosol releases by composting facilities (June 2011), we would identify all sensitive receptors within 250 m of the site boundary.
- Recommend mitigation measures to improve air quality during the construction and operational phase, should initial results of the assessment show any adverse air quality and odour effects arising from the proposed development.
- For cumulative impacts, traffic-related emissions from the approved development will be taken into account through their inclusion in the future baseline scenario. For dust, odour and bio-aerosols, risk assessments will be undertaken. While risks are not 'additive', the mitigation measures proposed will be reviewed holistically to determine the appropriate controls for the development as a whole.

Issues Proposed to be Scoped Out

- 5.37 *'Annex F – Air Emissions'* to the EA H1 Guidance document states that the air quality impacts at conservation sites need only be considered where they fall within the following set distances of the activity:
- "Special Protection Areas (SPAs), Special Areas of Conservation (SACs) or Ramsar sites within 10km of the installation (or 15km coal- or oil-fired power station)
 - Sites of Special Scientific Interest (SSSIs), National Nature Reserves (NNRs), Local Nature Reserves (LNRs), local wildlife sites and ancient woodland within 2km of the location of the installation"
- 5.38 There are no SPAs, SACs or Ramsar sites within 10 km of the Wealdon site.
- 5.39 The Warnham SSSI is located 690 m to the north east of the site. The citation for the SSSI designation suggests that this is primarily a geological feature and there are no habitats on the site sensitive to air pollution.
- 5.40 The Warnham LNR is located more than 1 km to the south of the site. Due to the large separation distance and the fact that the LNR is upwind of the proposed development, an assessment of the air quality impacts at the site will be scoped out.
- 5.41 As set out in the tasks above, it is anticipated that the proposed development will not generate a substantial number of traffic movements when compared with the approved development. On that basis, a detailed assessment of vehicle-related emissions will be scoped out.

Interlinkages with other EIA topics

- 5.42 The results of the stack height determination will be a key input for the Landscape and Visual Assessment. There are also inter-dependencies with 'Traffic and Transportation' and 'Ecology and Nature Conservation'; however in both cases, it is anticipated that an assessment of air quality impacts will not be required.

Chapter 8: Noise and Vibration

Baseline Information

- 5.43 The neighbouring land uses are industrial to the north, east and south of the site and agricultural to the west. The site lies approximately 700 m to the east of the A24, 900 m to the north of the A264, and there is a railway line immediately to the west. A number of noise sensitive receptors (NSRs) near to the site have been identified which lie: approximately 350 m to the south of the site on Station Road; 400 m to the north-west off Dorking Road; and 450 m to the south-east on Langhurstwood Road.

Proposed Approach

- 5.44 The Environmental Statement accompanying the planning application for a Waste Transfer Facility on the site included a Noise Chapter. The chapter included details of a baseline noise survey that was carried out in October 2013 at the nearest noise-sensitive locations to the site. Measurements were taken of the ambient and background noise levels for a typical weekday. We propose to use the existing baseline information from the application supplemented with additional noise monitoring to establish the noise levels across the full operating hours of the facility.

- 5.45 The key aspects with regards to noise and vibration for this project are considered to be:

Construction Effects: any adverse noise and vibration effects arising from the construction of the proposed development on existing NSRs; and

Operational Effects: any adverse noise effects arising from the operation of the proposed development, including changes in traffic flow characteristics on the local road network, mechanical plant and deliveries, on existing and/or proposed NSRs.

- 5.46 A qualitative assessment of the significance of noise and vibration effects during the construction phase of the proposed development will be carried out at existing NSRs, based upon the guidance contained within BS 5228-1:2009+A1:2014 'Noise and vibration control on construction and open sites. Part 1: Noise', BS 5228-2:2009+A1:2014 'Noise and vibration control on construction and open sites. Part 2: Vibration'.
- 5.47 A quantitative assessment of the noise effects of the proposed development will be carried out based upon a SoundPLAN sound propagation model that includes the significant sound generating items of plant and activities. Subject to consultation, the assessment will be based upon the assessment methodology contained within BS 4142:2014 and the prediction methodology contained within International Standard (ISO) 9613-2:1996 'Acoustics: Attenuation of sound during propagation outdoors. Part 2: General method of calculation'.
- 5.48 The significance of noise and vibration effects during the construction and operation of the proposed development will be considered in the context of National Planning Policy Framework (NPPF), Noise Policy Statement for England (NPSE), and Planning Practice Guidance (PPG) for noise and any relevant local policy. Where necessary, appropriate levels of mitigation will be recommended in accordance with best practice, and/or the Environment Agency's (EA's) guidelines for Best Available Technology (BAT).

Issues Proposed to be Scoped Out

- 5.49 We expect that the increase in traffic on the local road network will be minimal and therefore a quantitative assessment of the changes in noise levels on the local road network from activities associated with the proposed development on existing NSRs, based upon the guidance contained within the 'Calculation of Road Traffic Noise' (CRTN) and Design Manual for Roads and Bridges (DMRB) will not be required.
- 5.50 Significant operational vibration effects are considered unlikely. On this basis we propose to scope out a quantitative operational vibration assessment.

Interlinkages with other EIA topics

- 5.51 There are interdependencies with the "Traffic and Transportation" chapter in terms of assessing noise effects of vehicle movements.

Chapter 9: Archaeology and Cultural Heritage

Baseline Information

- 5.52 A recent Environmental Statement produced in connection with a proposed Waste Transfer Facility (WTF) at the site contained a chapter on archaeology. This examined the current baseline in terms of below ground archaeology and would be referred to as appropriate within the baseline report for this project. It is noted that the study area for the WTF covered a radius of 2km. The waste transfer development proposed the reuse of existing structures, while the currently proposed development would include a relatively tall building and a stack. On this basis the baseline and EIA assessment would concentrate on the effect, if any, of the proposed development on the settings of designated heritage assets (the WTF ES chapter noted that there were 59 listed buildings and one registered park and garden within 2km of that development), while ensuring that any archaeological remains within the footprint of the proposed development area were adequately assessed.

Proposed Approach

- 5.53 As the principal concern is normally with regard to the visual effect on the settings, there is considerable overlap with the work that is undertaken for assessing the Landscape and Visual effects. The assessment of effects on settings uses the same Zone of Theoretical Visibility (ZTV) and very often some of the same viewpoints for photomontages as used for the assessment of Landscape and Visual effects.
- 5.54 For a development of this size we propose a study area for assessment of effects on settings of designated heritage assets in line with the following parameters:
- Designated heritage assets of the highest significance (World Heritage Sites, scheduled monuments (SMs), Grade I and II* listed buildings, Grade I and II* registered parks and gardens) – a circle of 5 km radius centred on the proposed site. These radii may be subdivided into distances of 1.5 km, 1.5 to 3 km and 3 to 5 km from the proposal site for greater clarity; and
 - Other designated heritage assets (e.g. Grade II listed buildings, Conservation Areas, locally listed buildings) – a circle of 3 km radius centred on the proposal site.

- 5.55 Only those heritage assets which lie within the ZTV will be assessed, using the guidance provided by Historic England in their document “Historic Environment Good Practice Advice in Planning Note 3: The Setting of Heritage Assets” along with “Conservation Principles” (English Heritage)
- 5.56 For buried archaeological sites that are recorded on the Historic Environment Record but not designated, the study area will be a circle of 1 km radius centred on the proposal site. Whilst there is no potential for direct effects on heritage assets outside the application site, it is considered that information from this study area may inform the assessment of the sensitivity of the application site and the archaeological resources within it.
- 5.57 The aim of the baseline desk based assessment is to assess the significance of heritage assets and the impact of the development proposal on that significance. The Historic Environment Record (HER) would be consulted. This is in accordance with NPPF paragraph 128 and would ensure that any new entries since the production of the Waste Facility ES are captured. Information on Conservation Areas and locally listed buildings will be obtained from the LPA. Information on Scheduled Ancient Monuments, Listed Buildings, Registered Parks and Gardens and Registered Battlefields will be obtained from Historic England. Relevant documentary and archival material both published and unpublished, held by the Gloucestershire County Archive, will be examined. An iterative approach will determine the scope of such consultations.

Issues Proposed to be Scoped Out

- 5.58 Intrusive archaeological surveys have been scoped out on the basis that the proposal site was covered by surveys undertaken for the previous EIA. (but this would need to be confirmed), or
- 5.59 The studies produced in support of the previous EIA demonstrated that there was little or no potential for archaeological remains to be present within the proposal site. This will be reviewed in the context of the proposed development to determine if effects on below ground archaeology can be scoped out.

Interlinkages with other EIA topics

- 5.60 Where possible, viewpoint locations are situated to ensure that they can be used to support assessments for both landscape and visual assessment and historic setting.

Chapter 10: Hydrology and Flood Risk

Baseline Information

- 5.61 The site is located at National Grid Reference 517122, 134333 and extends to an area of approximately 3.7 hectares. The site is approximately rectangular in shape, with the exception of a linear access road from the southeastern corner of the site to Langhurstwood Road to the east.
- 5.62 Ordnance Survey mapping shows that the site is located between the 55 m AOD and 50 m AOD contour. The 55 m AOD contour is shown to run through the eastern end of the site.
- 5.63 A watercourse, identified as Bolding Brook flows to the west of the site beyond a main railway line (and below the 50 m AOD contour line). The site is not located within the Environment Agency’s (EA) identified floodplain. However, due to the size of the development (larger than 1 hectare) a Flood Risk Assessment will be required for submission with the planning application.

- 5.64 Reference to the Environment Agency's online maps of surface water flooding, the majority of the site is located within an area of very low surface water flooding. Two small areas identified as having a low surface water flood risk are located within the south and east of the site and a small area of high flood risk is located adjacent to the western edge of the current site building.
- 5.65 The Environment Agency's online maps of reservoir flooding indicate that the site is not located in an area at risk of reservoir flooding.
- 5.66 A preliminary review of the British Geological Society website indicates that the ground conditions (bedrock) underlying the Site are likely to comprise Cretaceous-aged Wealden Clay: Mudstones with subsidiary siltstones sandstones and limestones. There are no reported superficial deposits shown to be underlying the site.
- 5.67 The Wealden Group mudstones are described by the BGS as unproductive strata, 'rocks with essentially no groundwater' although very small yields are possible from the subordinate sandstones and limestones, which are classified as secondary A aquifers. The site is not situated within a groundwater Source Protection Zone (SPZ) but part of the site is within a low groundwater vulnerability zone associated with a secondary A aquifer.

Proposed Approach

- 5.68 Consultation will be undertaken with the Lead Local Flood Authority and the Environment Agency to identify any particular surface water drainage issues/requirements. Sewer plans will be requested from Southern Water. The baseline conditions pertaining to hydrology and hydrogeology will be established. Using standard assessment criteria, the effects of the proposed development on Hydrological and hydrogeological receptors will be established for the Construction and Operational and decommissioning phases. Mitigation measures will be suggested where appropriate.
- 5.69 A Flood Risk Assessment would append Chapter 10 and will be prepared following the flood risk policy of the NPPF and its supporting guidance PPG ID7. This will consider the risk of river flooding, groundwater and surface water flooding and flooding due to infrastructure failure. The potential flood risk caused by the proposed development to the rest of the site and to off site receptors will also be considered. An assessment of the potential to use Sustainable Drainage Systems (SuDS) to mitigate the risk of flooding caused by the proposed development will be undertaken. The existing nature of surface water run-off from the site will be established, be this natural greenfield run-off or controlled discharge through an existing surface water drainage network. The receptor of surface water run-off from the site will be identified. The existing discharge rate from the site will be established and used to inform the sizing of the surface water attenuation storage required for the new development as part of an outline drainage strategy. This would ensure that the new development will be able to drain safely and where possible reduce overall surface water flood risk in the area.

Issues Proposed to be Scoped Out

- 5.70 No issues to be scope of the ES/FRA.

Interlinkages with other EIA topics

- 5.71 In addition to use of existing site investigation data the chapter will be cross-referenced with the Hydrogeology and Ground Conditions Chapter with particular regard to superficial and bedrock

geology, groundwater levels, ground conditions (including potential for presence of contamination) and hence the suitability of site for different SuDS techniques.

Chapter 11: Hydrogeology and Ground Conditions

Baseline Information

- 5.72 A preliminary review of the British Geological Society website indicates that the ground conditions underlying the Site will comprise Weald Clay Formation mudstone and limestone, with no superficial deposits. The mudstone bedrock is classified as unproductive strata. The Horsham Stone Member is found 60 m to the south of the site, which is designated as a Secondary A Aquifer. The site is not situated within a groundwater Source Protection Zone (SPZ).
- 5.73 There are two documented landfill sites within 500 m of the Site. The closest of which is located 133m north of the Site, at Warnham Brickworks. There are seven recorded operational licensed waste management sites within 500 m of the Site. The closest of which is 298 m to the north, associated with leachate treatment.
- 5.74 As a result of previous industrial activities at the site, there is considered to be the potential for the presence of contaminated Made Ground. A previous site investigation is understood to have identified hydrocarbon contamination in two areas of the site. The former brickworks building is believed to be partially constructed from asbestos containing materials.
- 5.75 We are aware of four key documents relating to the ground conditions and contamination at the Site as detailed below:
1. Ground Investigation Report, Capita Symonds, dated 2005.
 2. Phase 1 Desk Study of the Wealden Brickworks, Scott Wilson on behalf of Biffa Waste Services, dated 2010.
 3. Preliminary Land Quality Risk Assessment, SLR Consulting Ltd, dated Sept 2014.
 4. Land Quality Summary Chapter 12, SLR Consulting Ltd, no date provided.
- 5.76 Copies of document 1 -3 are not currently available and therefore we have not reviewed these in detail.

Proposed Approach

- 5.77 We understand that the planning authority accepted the information detailed above as sufficient to support a previous planning application in relation to the site (ref. WSCC/018/14/NH). These reports will be used to present the baseline and assess the risk to human and controlled waters, together with the risk from ground gas and unstable ground.
- 5.78 The chapter will include an assessment of ground conditions, ground contamination and groundwater contamination as determined from the reports outlined above. It will include a description of the methodology used for the assessment, a description of the baseline conditions and an assessment of the potential magnitude and significance of impacts during the construction and subsequent operational phases of the project. Appropriate mitigation measures will be identified and the significance of effects following implementation of the identified mitigation measures will be set out.

Issues Proposed to be Scoped Out

- 5.1 An intrusive ground investigation is scoped out as we consider that the current information is likely to be sufficient to support the application. Where the above information is not available for review or where it is considered that these reports provide insufficient information, a ground investigation will be undertaken. The ground investigation will comprise of shallow intrusive investigation locations using trial pitting and/or window sampling techniques. The investigation would be used to target the previously identified contamination and characterise the ground gas regime at the site given the documented landfill sites within the vicinity.

Interlinkages with other EIA topics

- 5.2 This chapter will link into the hydrology chapter identifying where ground contamination may impact surface water features and drainage solutions.

Chapter 12: Ecology and Nature Conservation

Baseline Information

- 5.3 An ecological site survey and ecology desktop study were undertaken in 2013 in support of the permitted waste transfer station (WTS). The findings of the survey were presented as target notes and a habitats map appended to the ES. A comprehensive ecological appraisal report was not produced. The majority of the onsite habitats were classified as having low ecological value largely comprising disused industrial buildings, hard standing with limited extents of herbaceous and scrub vegetation. A full ecological appraisal of the site immediately to the north of the WTS site was also undertaken in 2013 which provided additional information on the habitats adjoining the northern edge of the WTS.
- 5.4 The 2013 ecological surveys concluded that bat surveys and reptile surveys were not required for the WTS development due to the low suitability of the on-site habitats to be used by these species.
- 5.5 A great crested newt (GCN) presence / absence survey in 2013 identified a small population of GCN using two small ponds approximately 230m from the site boundary. The 2013 EIA concluded there would be no impacts on GCN and it is understood that a European Protected Species (EPS) mitigation licence with regard to great crested newts was not considered necessary.

Proposed Approach

- 5.6 Our approach will be to undertake a site walkover of land with the red line application boundary. The survey would be undertaken with reference to the findings of the 2013 ecological surveys and target notes. The aim of the ecology survey would be to confirm the degree to which the existing information accurately presents the site ecology including extent of each habitat, ecological value and the potential for features within the site to be used by fauna including legally protected species.
- 5.7 With construction of the WTS having been initiated it is likely that there will have been some change to on-site habitats since the 2013 survey. All the on-site habitats will be mapped in accordance with the Standard JNCC Phase 1 Habitat Survey technique on an updated Habitat Map.
- 5.8 The findings of the survey will be presented in a factual report making reference to the existing survey information where habitats have not significantly changed. Where there have been changes to the on-site habitats, these will be described with reference to the updated Habitat Map.

- 5.9 A desk study was undertaken in 2013 to obtain relevant habitat and species data for the surrounding area was undertaken as part of an earlier ecological assessment. Up to date information on international and national statutory designations within 10km will be collated from relevant websites. The desk study report would purchase the biological dataset for the area 2km around the site and the desk study review would be updated to include recent species records in the vicinity of the site. Information on nearby non-statutory nature conservation designations, provided by the local biological record centre, would also be presented.
- 5.10 The findings of the site walkover survey and desk study will provide an overall assessment of the ecological value of the site and define whether the habitats and features within the site and on adjoining land have potential value for populations of legally protected species or species of conservation importance.
- 5.11 The WTF ES chapter concludes that there would be no significant impacts on any protected species including commonly occurring species groups (bats and reptiles). In relation to great crested newts, the 2013 ES ecology chapter stated that an amphibian exclusion fence was present on the site boundaries between the site and off-site breeding ponds, which would prevent animals entering the site that therefore there would be no significant impact on GCN.
- 5.12 At this stage, based on the previous ecological assessment it is assumed that Phase II protected species surveys would not be required and that the issues relating to impacts on on-site receptors particularly protected species, could be addressed without the need for complex and detailed mitigation proposals. However, this would need to be confirmed following completion of the ecology site walkover, particularly for GCN, which will partly depend on the status of the amphibian fence and the quality and extent of on-site habitats.
- 5.13 The assessment of ecological impacts for the ES chapter will be compatible with the ecological impact assessment guidelines published by Chartered Institute of Ecology and Environmental Management (CIEEM) on their website.
- 5.14 The ES Chapter will comprise the evaluation of nature conservation value and identification of any key ecology receptors which will be impacted by the proposal. The impact of construction and operational on these features would be assessed.
- 5.15 The assessment will include cumulative and in-combination impacts as a result of other developments in the local area.
- 5.16 The predicted effects after the implementation of mitigation /compensation would be defined.

Issues Proposed to be Scoped Out

- 5.17 Phase II / Protected Species Surveys are scoped out. The 2013 Ecological appraisal determined that bat surveys and reptile surveys were not required due to the low suitability of the on-site habitats to be used by these species.
- 5.18 A great crested newt (GCN) presence / absence survey in 2013 identified a small population of GCN in two small ponds approximately 230m from the site boundary. The 2013 EIA concluded there would be no impacts on GCN and it is understood that a European Protected Species (EPS) mitigation licence with regard to great crested newts was not considered necessary.

- 5.19 In the absence of significant changes in the on-site habitats the potential for the site to support bats, and reptiles is expected to remain low, and it is considered unlikely that surveys would be required. Current Natural England guidance indicates that survey information up to 2-3 years old is acceptable for European Protected Species (EPS) Licence Applications. It is assumed therefore that the existing GCN survey information would remain current and acceptable for the planning application, and to inform an EPS mitigation licence application (if required) in 2015.
- 5.20 The requirement for protected species surveys and acceptability of existing GCN survey information would need to be confirmed following the ecological appraisal site walkover.
- 5.21 Based on the analysis set out above in relation to the Air Quality Assessment it is considered that indirect air quality impacts on nearby nature conservation sites can be scoped out.

Interlinkages with other EIA topics

- 5.22 The information presented in the ecology chapter may have cross-over with several other disciplines particularly air quality (in relation to potential emissions impacts on designated sites).

Chapter 13: Conclusions and Further Information

Proposed Approach

- 5.23 This concluding section of the ES will draw together the results of the topic specific assessments and set out where to view and obtain further copies of the ES documents. It will highlight areas where consideration has been given to the following categories of impacts:
- Cumulative impacts, which are those effects of development that may interact in an additive or subtractive manner with the impacts of other developments that are not currently in existence but may be by the time the development is implemented;
 - Interactions between impacts, where impacts in different categories as set out in the individual topic chapters may act in conjunction with either beneficial or detrimental effect; and,
 - Any effects which remain significant following the application of committed mitigation measures.

Summary of Issues Proposed to be Scoped Out of Topic Chapters

- 5.24 The table below provides a summary of the main issues to be scoped out as detailed above in each topic section.

Table 5.1: Issues Proposed to be Scoped Out of Topic Chapters

Chapter Title	Scoped Out
Chapter 5: Landscape and Visual Impact	No photomontages are proposed as part of the assessment.
Chapter 6: Traffic	A separate Transport Assessment is not considered necessary.

Chapter Title	Scoped Out
Chapter 7: Air Quality	Air Quality Impacts at nature conservation sites
Chapter 8: Noise	Quantitative assessment of the changes in noise levels on the local road network from activities associated with the proposed development on existing NSRs, Quantitative operational vibration assessment.
Chapter 9: Archaeology	Intrusive archaeological surveys The previous EIA demonstrated that there was little or no potential for archaeological remains to be present within the proposal site. This will be reviewed in the context of the proposed development.
Chapter 11: Hydrogeology and Ground Conditions	An intrusive ground investigation is scoped out as we consider that the current information is likely to be sufficient to support the application. Where the above information is not available for review or where it is considered that these reports provide insufficient information, a ground investigation will be undertaken.
Chapter 12: Ecology and Nature Conservation	Phase II / Protected Species Surveys are scoped out, subject to confirmation with a site walkover. Air Quality impacts on nature conservation sites are scoped out.

6 FIGURES

FIGURE 1A: SITE LOCATION PLAN (OS BASE)



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Notes

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Legend

Site Boundary

Rev	Description	Date	Initial	Checked



20 Western Avenue
Milton Park
Abingdon
Oxfordshire
OX14 4SH

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Client

Project Sussex EfW- Warnham

Title Site Location Plan

Status	Drawn By:	PM/Checked By
FINAL	CR	RC
Job Ref	Scale @ A3	Date Created
JPW0568	1:25,000	OCT 15

Figure Number	Rev
1a	2

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FIGURE 1B: SITE LOCATION PLAN (AERIAL BASE)



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Site Boundary

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Client

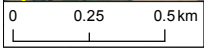
Project Sussex EfW- Warnham

Title Site Location Plan

Status	Drawn By:	PM/Checked By
FINAL	CR	RC
Job Ref	Scale @ A3	Date Created
JPW0568	1:25,000	OCT 15

Figure Number	Rev
1b	2

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FIGURE 2: RED LINE BOUNDARY



ED & Ward Bdy

Railway Lines

Material
Recycling
Facility

Signal
Post

Pond

Pond

Tanks

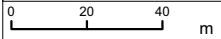
Mechanical
Biological
Treatment Plant

Pond

LANGHURSTWOOD ROAD

Bramblehurst

56.9



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Legend

Site Boundary
9.2 acre / 3.73 Ha

Rev	Description	Date	Initial	Checked



20 Western Avenue, Milton Park, Abingdon, Oxfordshire, OX14 4SH
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Client **Britaniacrest Recycling**

Project **Sussex EfW - Warnham**

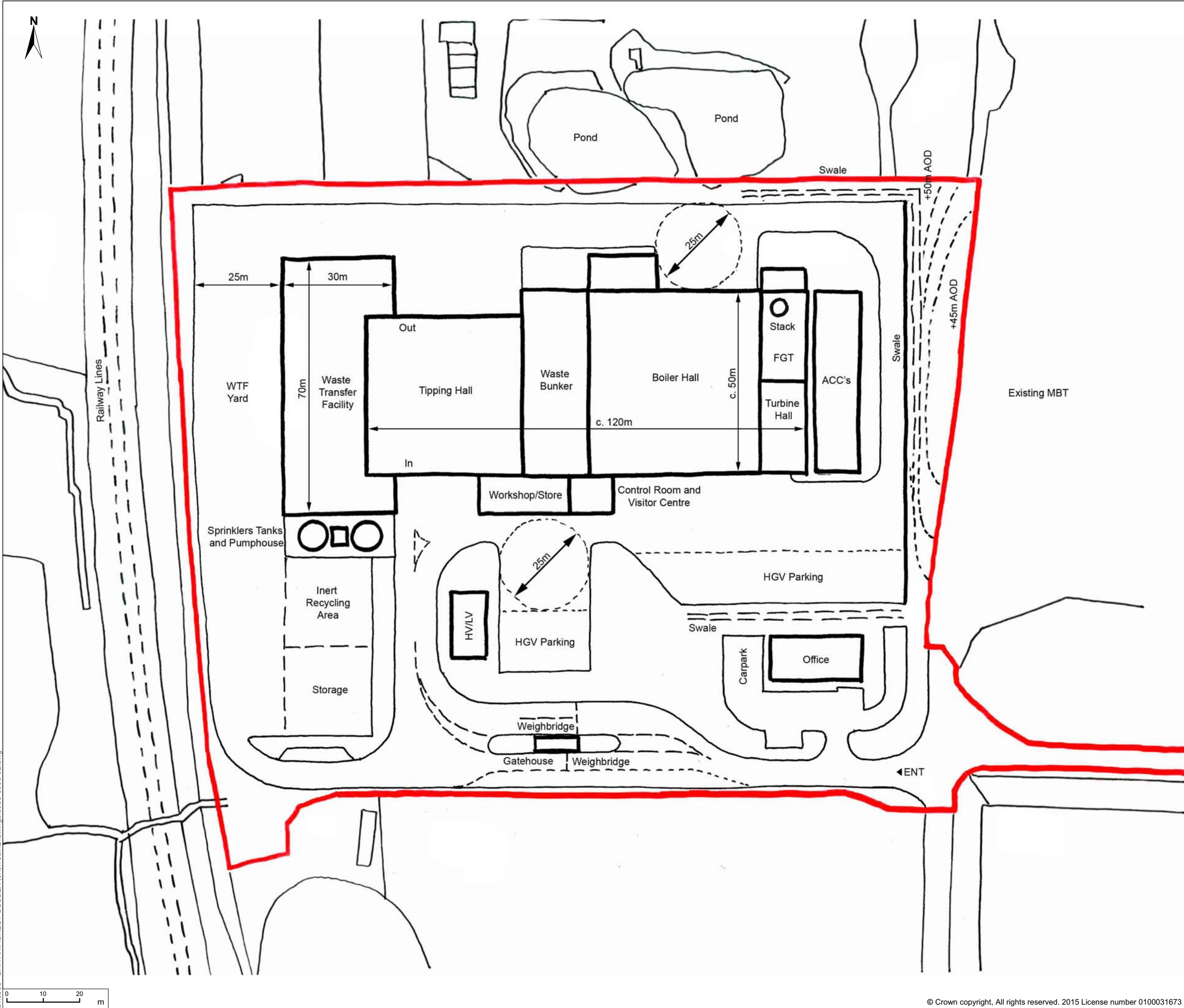
Title **Red Line Boundary**

Status FINAL	Drawn By RM	PM/Checked by RC
Job Ref JPW0568	Scale @ A3 1:2,000	Date Created Oct 15

Figure Number 2	Rev -
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FIGURE 3: PROPOSED SITE LAYOUT



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Client **Britaniacrest Recycling**

Project **Sussex EfW - Warnham**

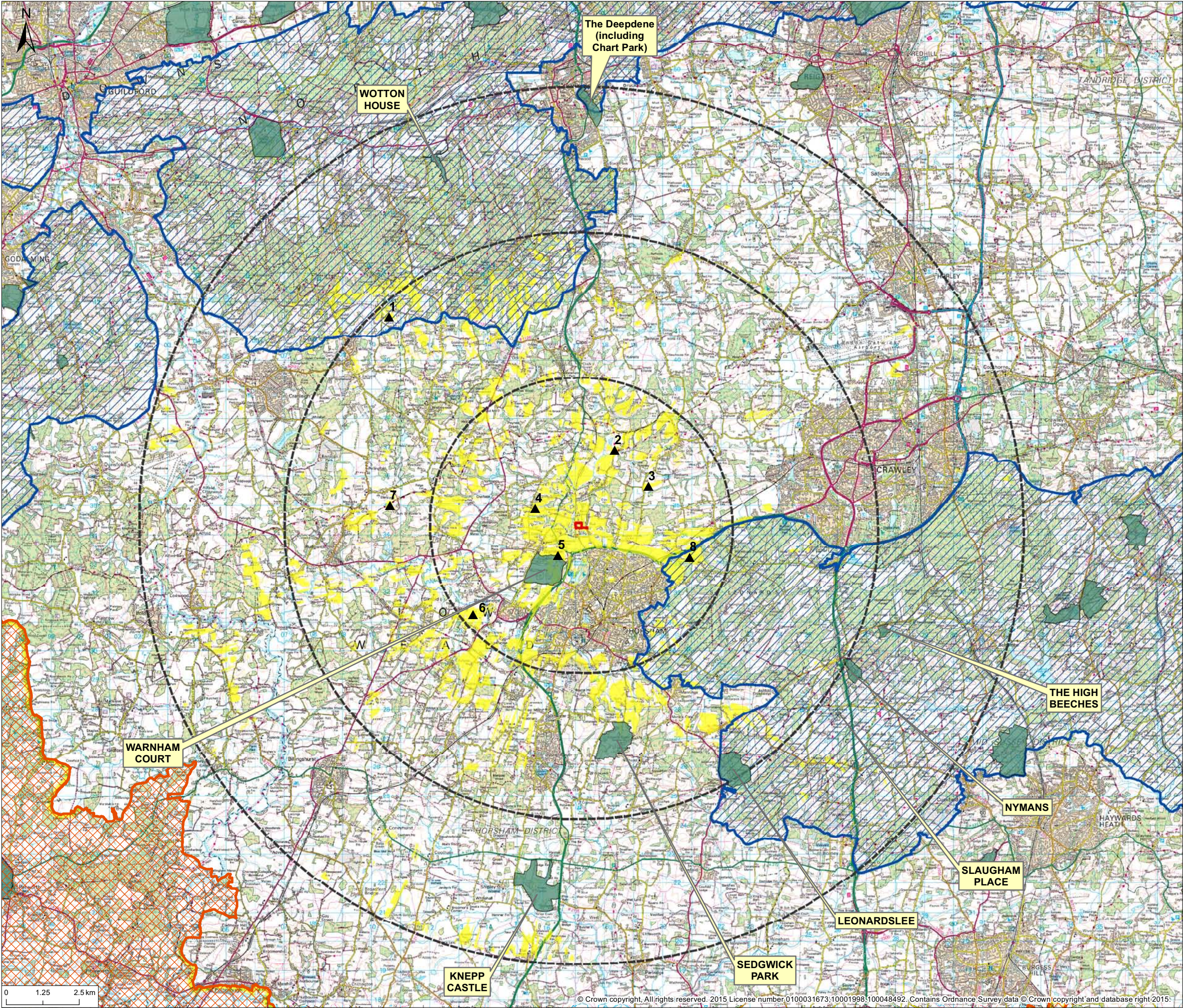
Title **Proposed Site Layout**

Status	Drawn By	PM/Checked by
FINAL	RM	RC
Job Ref	Scale @ A3	Date Created
JPW0568	1:1,000	Oct 15

Figure Number	Rev
3	-

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FIGURE 4: ZTV, LANDSCAPE DESIGNATIONS AND PROPOSED VIEWPOINT LOCATIONS



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Legend

- Site Boundary
- 5km Buffers from Site
- National Park
- Parks & Gardens
- AONB
- Zone of Theoretical Visibility (ZTV)
- Proposed Viewpoints

Rev	Description	Date	Initial	Checked

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Client

Britaniacrest Recycling

Project

Sussex EfW- Warnham

Title

ZTV, Landscape Designations and Proposed Viewpoint Locations

Status

FINAL

Drawn By:

CR

PM/Checked By

RC

Job Ref

JPW0568

Scale @ A3

1:125,000

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4

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