



Land West of Roughetts Road, West Malling

Environmental Impact Assessment Scoping Report

August 2023

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Preface

This Environmental Impact Assessment (EIA) Scoping Report, which relates to the proposed extraction of aggregate (sand) at an 8.6 hectare (ha) site to the west of Roughetts Road, near West Malling in Kent, has been prepared by Waterman Infrastructure & Environment Ltd for the purpose of consulting with Kent County Council (KCC), as the minerals planning authority and determining authority, Tonbridge and Malling Borough Council (TMBC), as the local planning authority, and key consultees.

In accordance with Regulation 15(2) of the Town and Country Planning (Environmental Impact Assessment) Regulations 2017 (as amended), this Scoping Report includes the following information:

- A plan sufficient to identify the land;
- A brief description of the nature and purpose of the development, including its location and technical capacity; and
- An explanation of the likely significant effects of the development on the environment.

The purpose of the Scoping Report is to request a Scoping Opinion from KCC in accordance with Regulation 15 (1) of the Town and Country Planning (Environmental Impact Assessment) Regulations 2017 (as amended). The resultant Scoping Opinion will in turn allow the Applicant to be clear on what KCC and its consultees consider to be the likely significant environmental effects of the proposed scheme and thus what will need to be the focus of the EIA process.

1. Introduction

1.1 Background

A firm engaged in the winning and working of land won sand (hereafter referred to as 'the Applicant') is preparing to submit a detailed planning application for the extraction of aggregate (sand) at a site located between the M20 and the A20 to the north-west of West Malling in Kent. The site (hereafter referred to as 'the Application Site') is roughly centred at grid reference TQ66575920.

The Application Site covers an area of approximately 8.6 hectares (ha) and falls within the administrative boundary of Tonbridge and Malling Borough Council (hereafter referred to as 'TMBC') and within the wider county boundary of Kent County Council (hereafter referred to as 'KCC' and comprising the minerals planning authority ('MPA')). The Application Site currently comprises agricultural land. The location of the Application Site is shown on **Figure 1** and the planning application boundary on **Figure 2**.

Initial studies have confirmed a workable minerals reserve extending to around 1,000,000 (one million) tonnes in total that lies above the water table. The Applicant proposes to undertake the extraction of sand over an 8-year period, with an extraction rate of approximately 125,000 tonnes per annum (tpa) (on average). Extraction will be followed by restoration to existing contours and current agricultural land use, following progressive backfilling with imported inert material. The scheme of mineral extraction and restoration will be phased over a period of some 14-years with an estimated aftercare period of 5-years. The proposed use will therefore be temporary in nature. The Applicant's proposals are subsequently referred to in this report as 'the Proposed Development' and further detail is provided in **Section 3**.

The Application Site falls outside of the defined urban area and within an area designated as Green Belt within the adopted Tonbridge and Malling Local Plan¹. It lies to the immediate south of (and outside the boundary of) the Kent Downs Area of Outstanding Natural Beauty (AONB).

The Application Site has previously been promoted for inclusion in KCC's Minerals Sites Plan, which covers the period 2013 - 2030². Representations were made throughout the plan preparation process. The Minerals Sites Plan was adopted in September 2020 without allocating the Application Site. The Applicant has now decided to pursue the Proposed Development by way of a planning application.

This document, which comprises an Environmental Impact Assessment ('EIA') Scoping Report, prepared by Waterman Infrastructure & Environment Limited (hereafter referred to as 'Waterman') on behalf of the Applicant, provides background information to assist KCC in providing a Scoping Opinion under Regulation 15 of the Town and Country Planning (Environmental Impact Assessment) Regulations 2017³ (the 'EIA Regulations').

1.2 Environmental Impact Assessment

EIA is a formal process of identifying, predicting, evaluating and mitigating the likely significant environmental effects arising from a project, and is a requirement of the EIA Regulations for developments of a certain size and scale. EIA is an iterative process, allowing for the evolution of the most practicable environmentally sustainable design. It seeks to ensure that, where necessary and feasible, all measures are considered and implemented at the design stage, to prevent, reduce, and where possible, offset, any potentially significant adverse environmental effects. The EIA process also aims to ensure that potentially beneficial effects of development are maximised.

The EIA process ensures that decision-makers consider the likely environmental effects of new

¹ Tonbridge and Malling Borough Council Local Development Framework Core Strategy, adopted September 2007

² Kent County Council Kent Minerals and Waste Local Plan 2013 - 2030 Minerals Sites Plan September 2020

³ HMSO, 2017 The Town and Country Planning (Environmental Impact Assessment) Regulations 2017, Statutory Instrument 571

development when determining a planning application. Where an EIA is required, all relevant assessment information must be provided by the Applicant in a document referred to as an Environmental Statement (ES). The ES must accompany the submission of the planning application.

The EIA Regulations specify which developments are required to undergo EIA and schemes are listed under either 'Schedule 1' or 'Schedule 2'. Those developments listed in Schedule 1 must be subject to EIA, while developments listed in Schedule 2 must only be subject to EIA if they are considered "... likely to have significant effects on the environment by virtue of factors such as its nature, size or location...". The criteria on which this judgement must be made are set out in Schedule 3.

The Proposed Development does not fall within Schedule 1(19) of the EIA Regulations (relating to quarries and open cast mining) for which EIA is mandatory, as it is less than 25 hectares in size. However, it is considered to fall under Section 2(a) of Schedule 2 of the EIA Regulations, where EIA screening must be carried out in the case of all development comprising quarries, open cast mining and peat extraction.

The indicative screening criteria and thresholds published by the UK Government to guide the EIA screening process⁴ suggest that EIA is more likely to be required for clay, sand and gravel workings, quarries covering more than 15 hectares or involving the extraction of more than 30,000 tonnes of minerals per year. At 8.6 ha, the Application Site falls below this size threshold, but the likely proposed extraction rate of 125,000 tpa exceeds the 30,000 tonnes of mineral per annum indicative threshold. Further considerations to determine whether EIA is required relate to scale and duration of the works, and the likely consequent impacts of noise, dust, discharges to water and visual intrusion.

Given that the proposed extraction rate exceeds the indicative threshold and having regard to the location of the Application Site directly to the south of the AONB, the Applicant considers that EIA is likely to be required. In order to expedite the preparation of the necessary supporting documentation to accompany the detailed planning application, the Applicant has therefore proceeded straight to a request for a scoping opinion under Regulation 15, to which this report relates.

Waterman has been appointed by the Applicant to co-ordinate the EIA process and to prepare an ES for the Proposed Development. The ES will be submitted with the detailed planning application.

1.3 EIA Scoping

Scoping is an important, although optional, exercise undertaken during the early stages of the EIA process. It refers to the process of identifying those environmental aspects that may be significantly affected by the Proposed Development. In doing so, the potential significance of effects associated with each environmental aspect becomes clearly defined, resulting in the identification of a number of priority issues to be addressed in the EIA (i.e. these aspects are 'scoped in' to the ES).

In accordance with Regulation 15 (2) (a) of the EIA Regulations, this EIA Scoping Report sets out the following information to assist KCC (as MPA) in formulating its EIA Scoping Opinion:

- A plan sufficient to identify the land (**Figure 1** and **Figure 2**);
- A brief description of the nature and purpose of the development, including its location and technical capacity (**Section 2**); and
- An explanation of the likely significant effects of the development on the environment (**Section 4**).

⁴ <https://www.gov.uk/guidance/environmental-impact-assessment#the-indicative-thresholds>

Regulation 15 (2) (a) of the EIA Regulations also allows for the submission of “such other information or representations as the person making the request may wish to provide or make”. The opportunity has also been taken to provide additional information to KCC that sets out:

- The proposed approach to the EIA;
- The consultation that will be undertaken as part of the EIA; and
- The intended structure of the ES.

This EIA Scoping Report is structured as follows:

- **Section 2** provides a summary of the existing environmental conditions of the Application Site and its immediate surroundings, together with a brief description of the nature of the Proposed Development;
- **Section 3** describes the consultations that will be undertaken as part of the pre-submission and EIA process;
- **Section 4** provides a description of the potential likely significant environmental effects that have been identified, together with the overall approach and methodology for the assessment of each topic;
- **Section 5** summarises the likely insignificant environmental issues that are proposed to be ‘scoped-out’ of the EIA;
- **Section 6** defines the way in which significant environmental effects will be determined; and
- **Section 7** provides a draft outline of the structure of the ES which will accompany the detailed planning application.

1.4 Competent Experts

Regulation 18(5) of the EIA Regulations states:

“... In order to ensure the completeness and quality of the environmental statement: (a) the developer must ensure that the environmental statement is prepared by competent experts; and (b) the environmental statement must be accompanied by a statement from the developer outlining the relevant expertise or qualifications of such experts...”.

Waterman is a Registered Environmental Impact Assessor Member of the Institute of Environmental Management and Assessment (IEMA), providing independent recognition of the quality of Waterman’s EIA work.

This EIA Scoping Report has been prepared by Waterman, with the support of a team of environmental technical specialists engaged by the Applicant to undertake the necessary works to progress the EIA. The expertise and qualifications of the consultant team are set out in **Table 1**.

Table 1: Competent Experts’ Qualifications and Experience

Name and Role (Organisation)	Qualifications	Relevant Experience
[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]

Name and Role (Organisation)	Qualifications	Relevant Experience
[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]

Name and Role (Organisation)	Qualifications	Relevant Experience
[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED] Social Impact [REDACTED]

The ES will be prepared by competent experts and will contain a table summarising their relevant expertise and qualifications.

2. The Application Site and Proposed Development

2.1 Location, Setting and Existing Land Uses Within the Application Site

The Application Site lies to the west of Roughetts Road and to the north-west of West Malling, Kent. It is 8.6 ha in extent. The Application Site lies to the immediate south of the M20 motorway and to the north of the A20 trunk road. It is centred at grid reference TQ66575920 and lies within the administrative areas of TMBC and KCC.

The Application Site largely comprises open grazing land, which has been confirmed by survey to comprise predominantly Agricultural Land Classification (ALC) Grade 2, with smaller strips of Grade 3b land.

Belts of trees and hedgerow are located along the northern, western and southern boundaries of the Application Site. Its northern boundary runs contiguous with the M20, and comprises a well vegetated embankment, which slopes down towards the motorway. Its western and southern boundaries largely abut additional agricultural land, together with the West Malling Golf Course which lies to the west. To the north-east / east there are a number of residential dwellings, comprising 2-4 Roughetts Row and 1-2 Roughetts Cottages to the north-east and three individual detached properties (including Greystones Farm) to the east. Roughetts Road provides local access to the east. A public footpath (Public Right of Way (PRoW) MR153) runs along the southern boundary of the Application Site.

The Application Site is defined by a generally flat topography. It falls gently from west to east with a high point of approximately 55m AOD at the westernmost extent and a low point of approximately 40m AOD at its eastern extent. The Application Site is situated at a higher elevation than the immediately adjacent part of the M20 (within cutting) and falls gently towards adjoining land uses to the east, south and west.

The Application Site lies within the south-eastern corner of the London Area Green Belt.

2.2 Existing Land Uses Surrounding the Application Site

The wider area comprises a mixture of open countryside primarily used as arable or grazing land, with some pockets of woodland interspersed, and a series of small to medium sized settlements and other scattered hamlets. The village of Addington lies around 650m to the west, and Ryarsh around 600m to the north-east (on the opposite side of the M20). Leybourne lies around 2km to the east and West Malling around 1.6km to the south-east. West Malling Golf Course extends from approximately 10m to the west of the Application Site to the south of Addington. The A20 (London Road) runs on an east-west axis, parallel to the M20, around 450m from the southern boundary of the Site. To the west of the Application Site, Wrotham Quarry operates on both sides (north and south) of the M20.

The Application Site lies approximately 50m to the south (and thus outside of) the Kent Downs AONB. The M20 forms a physical barrier between the Application Site and the AONB to the north.

Another public footpath runs around 150m to the south of the southern Application Site boundary (PRoW MR152), parallel to footpath MR153 described above. This intersects with public footpath MR153 at a point to the west of the Application Site boundary.

2.3 Issues and Constraints

As mentioned in **Section 1**, the Application Site was put forward as a candidate site for minerals extraction within the then emerging KCC Minerals Sites Plan. The candidate site also included land to the south of the Application Site which does not form part of the detailed planning application.

The candidate site was referred to during that process as ‘Site M8 West Malling Sandpit, Ryarsh’. The Options Consultation⁵ issued by KCC to inform the preparation of the Minerals Sites Plan outlined those specific sites with potential for future mineral extraction, including the technical issues to which further consideration should be given.

While the candidate site was not progressed by KCC to the allocation stage, key issues which were noted by KCC (and which can therefore also be considered to be of relevance to the proposed planning application) were outlined in the Options Consultation. Those key issues included: the setting of the Kent Downs AONB; soil quality within the site; the BAP deciduous woodland surrounding the site; the settings of those listed buildings closest to the site; the presence of the aquifer and ground source protection zone within the site; the amenity of residents of nearby properties; and the potential cumulation of effects, taking into account Wrotham Quarry approximately 900m away.

The initial screening process applied by KCC to determine potential mineral extraction sites within the Options Consultation suggests that there are “.... *no constraints which cannot be overcome by appropriate mitigation....*” in relation to ‘Site M8 West Malling Sandpit, Ryarsh’.

The issues and constraints identified above have been given due consideration in drafting this EIA Scoping Report and will be considered during the EIA process and the preparation of the subsequent Environmental Statement (ES).

2.4 Potentially Sensitive Receptors

During the EIA scoping process, a number of receptors have been identified that would be potentially sensitive to adverse effects resulting from the Proposed Development. The list of sensitive receptors to be considered as part of the EIA are presented in **Table 2**.

Individual technical assessments may identify additional receptors that require assessing, however this will be confirmed within the ES.

Table 2: Potentially Sensitive Receptors

Category	Existing Sensitive Receptor / Land Use	Nearest Approximate Distance from Application Site Boundary
Residential properties	Roughetts Cottages and Roughetts Row	Adjacent to the east
	Residential properties on Roughetts Road, including Greystones Farm	Adjacent to the east
	Residential properties on Church Road	20m east
	Residential properties on East Street	230m west
	Residential properties off London Road	335m south
	Residential properties on The Links	445m south-west
	Residential properties off Trottscliffe Road	550m west
	Residential properties on Sandy Lane	555m south-east
	Residential properties on Church Road	690m south-west
Built heritage assets	Bumblebee Farm, Grade II Listed (Ref. 1070564)	275m west
	Church of St Martin, Grade II* Listed (Ref. 1070477)	430m east
Archaeology (within 1km)	Known and previously unknown archaeological remains	To be confirmed

⁵ Kent County Council, 2017, Mineral Sites Plan - Options Consultation

Category	Existing Sensitive Receptor / Land Use	Nearest Approximate Distance from Application Site Boundary
Pedestrians, cyclists and vehicle road users	Users of Public Rights of Way (PRoW)*, the closest of which is public footpath MR153	Adjacent to the south
	Users of Roughetts Road	Adjacent to the east
	Users of the local road network, such as Church Road	20m east
	Users of London Road / A20	345m south
	Users of public bridleway MR154	360m east
Controlled waters	Secondary (undifferentiated) Aquifer within superficial deposits	Underlying north-eastern and south-eastern tips of the Site
	Principal Aquifer within bedrock geology	Underlying entire Site
	Groundwater Source Protection Zone 3 (total catchment)	Underlying entire Site
	Closest drain*	Adjacent to the east
	Closest pond*	225m north-east
	Leybourne Stream	225m south
Habitats and species	Closest priority habitat - deciduous woodland*	Adjacent to the west and north-west
	Kent Downs AONB	50m north
	Closest area of Ancient and Semi-Natural Woodland* (Ref. 1487063)	180m south

Notes:

(*) against a receptor indicates where several exist within the study area (1km or 2km). In these instances, the closest receptor of its type is included in the table.

2.5 Planning Context and the Need for the Proposed Development

As mentioned above, the Application Site has not been allocated for future mineral extraction within the Kent Minerals Site Plan adopted in September 2020. However, the Applicant has undertaken thorough and comprehensive technical analysis which demonstrates that the requirement for soft sand within the Plan period will not be met by the allocated sites, and that the shortfall would be further exacerbated by uplifts in housing delivery requirements, taking into account the Government's housing delivery targets. This gives the Applicant the assurance that the need for the Proposed Development is proven, and justification that the detailed planning application can be progressed with confidence. The arguments regarding need for the Proposed Development will be set out in the Planning Statement which accompanies the planning application.

2.6 The Proposed Development

A plan showing the extent of the 8.6 ha Application Site which is to be the subject of the detailed planning application for minerals extraction is included at **Figure 2**.

2.6.1 Geology and Proposed Working Area

Initial geological investigations have established the presence of the Folkestone Formation (sand) with an estimated workable mineral reserve of 1,000,000 (one million) tonnes within the Application Site, all of which lies above the recorded local water table. The sand reserve comprises approximately 1/3 silica sand and 2/3 soft sand. The estimated average output is anticipated to be in the order of 125,000 tpa.

The working area is likely to comprise just over half of the overall Application Site area and would be focused on the western and central areas, comprising a potential extraction area of around 5.5ha. Appropriate stand-off distances would be incorporated to residential properties to the east and existing tree stock to the south and west, together with additional landscape planting to strengthen the boundary buffers where necessary.

2.6.2 Site Preparation and Enabling Works

As part of the enabling works, topsoil would be stripped from the internal access road and first extraction phase and stored separately. Overburden would then be excavated over the same areas and used to create screening bunds along the eastern boundary and at the entrance to the Application Site. The bunds would be grass-seeded to provide visual screening to Roughetts Road and to act as an acoustic barrier. Stand-off boundaries would be created to the north, west and south of the Application Site, comprising existing planting strengthened where necessary.

The enabling works would also include the installation of a new access junction, internal haul road, site offices, welfare facilities, heavy goods vehicle (HGV) and staff car parking.

Access / egress to the Application Site is proposed to be taken from the existing field access on Roughetts Road, located adjacent to the unnamed access road leading to properties 1-2 Roughetts Cottages and 2-4 Roughetts Row, directly into the north-eastern part of the Application Site. The existing access would be upgraded, with the exact configuration to be discussed and agreed with KCC.

The proposed access has been subject to feasibility work, including technical highway review and swept path analysis, and is considered capable of operating safely and effectively. A Stage 1 Road Safety Audit has been undertaken, alongside prior consultation with KCC. An associated haul road would be created from the access point to the extraction area. The haul road would comprise a 10m wide ramped access dropping down from the road at a 1:15 gradient. A bund would be incorporated to the east providing visual and acoustic screening to the adjacent road and associated sensitive receptors, as part of the enabling works detailed above.

The site offices (single storey) and welfare facilities, together with the HGV and staff car parking areas, would be located within the north-eastern part of the Application Site, adjacent to the haul road. Initially, these structures and parking areas would be located at ground level. However, they would be re-located below ground level within around six months of extraction commencing, as detailed in **Section 2.6.3** below.

A weighbridge would be installed within the Application Site adjacent to the site offices.

A turning facility would be provided within the Application Site to enable vehicles to enter/exit the Application Site in a forward gear.

2.6.3 Operational Phases of the Development

The extraction area would be worked in phases (likely to be either two or three principal phases) in accordance with the phasing plans, ensuring that workable gradients (including for access and egress) and safe slope faces are maintained throughout. An initial soil strip and removal of the overburden would be undertaken per phase, with arisings stockpiled within the Application Site for future re-instatement. The mineral would then be worked in phases, prior to progressive backfill with inert materials, resulting in the restoration of each phase to its pre-existing contours. On completion of the backfilling operations in each phase, soils would be re-instated and basic restoration (likely to comprise grass seeding) implemented.

Initial operational works would comprise solely minerals extraction as the first phase area is worked, however, as works progress, the excavation and backfilling activities would take place simultaneously as progressive restoration of the first phase area takes place and the second phase area is worked. In time, the latter years of the Proposed Development would comprise only backfilling.

Following the removal of overburden to facilitate the working of the first mineral extraction phase and the use of the associated soil arisings to create the eastern bunds (as part of the enabling works described in the preceding section) further soils associated with the overburden strip would be stored temporarily in the western margin of the Application Site, adjacent to the West Malling Golf Course, as the workings progress. In the later phases, the soils would be directly placed as the progressive backfilling raises the land, prior to final restoration to agricultural land.

Within the first six months of the extraction period, a level platform would be created within the north-eastern part of the Application Site, around 5m below current ground level, upon which the site offices, welfare facilities, parking and weighbridge area would be located.

Within the proposed extraction area, mobile plant (wheeled loading shovels and tracked excavator) would be used to excavate the mineral and feed a mobile tracked screener that would separate the sands from any oversized material (gravels / clay lumps). The screener would move with the advancing sand face and would discharge the material into conical shaped stockpiles. The digging, screening and storing would follow the excavation as it progresses down into the base of the quarry, therefore gradually making its way below ground level.

It is anticipated that up to 100 HGV movements per day (50 in and 50 out) would occur routinely once the Proposed Development is fully operational. This would comprise HGV movements associated with both the sand extraction and importation of inert backfill. However, during periods of high demand (for example if a large sand contract is being delivered by the Applicant to a tight timescale, in response to the requirements of the construction industry) the likely daily movements could increase in order to deliver the required outputs to necessary timescales. Any such requirements would be short-term in nature. The exact number of movements will be confirmed as part of the transport assessment process, which will in turn inform the EIA.

HGV traffic transporting excavated minerals from the Application Site and importing inert materials for the progressive backfill would travel to and from the Application Site from London Road to the south, with no movement of HGVs to the north of the access point on Roughetts Road.

Staff and visitors (approximately 8 per day) would also attend the Application Site. It is anticipated this would be by car, although other modes will be provided for (for example provision of a bicycle rack).

The Proposed Development would operate 07:00 to 17:30 Monday to Friday, 07:00 to 12:00 Saturday, no working on Sundays, Bank or Public Holidays.

The Proposed Development would require a continuous supply of water for dust suppression purposes, particularly during periods of dry weather, and also for the operation of the wheel wash, throughout its operational period. It is intended that this would be taken from either an on-site attenuation basin / lagoon, which would be constructed to harvest surface water run-off, or from the mains supply (existing connection point at Roughetts Row).

2.6.4 Site Reinstatement

Following completion of the backfill and restoration, the final landscaping scheme would be implemented, including final finishes and planting. This would be followed by another five years of aftercare.

The site reinstatement stage would also include the removal of bunds, site offices / welfare, and haul route.

2.6.5 Timescales

It is anticipated that works would commence in 2025.

The site preparation and enabling works are estimated to take six months to implement, followed by mineral extraction over a period of 8-years and associated progressive backfill and restoration to pre-existing contour levels over 6-years. The combined timeline for extraction and restoration processes is estimated to be approximately 14 years.

Following implementation of the final landscaping scheme, a further five years of aftercare would then be allowed for full reinstatement to occur.

3. Consultation

Consultation with relevant bodies assists in ensuring that all relevant environmental issues are identified, together with the likely significant environmental effects of the Proposed Development. This enables the EIA to operate as part of an iterative process whereby environmental issues are identified and considered as part of the design process. In this way, the Proposed Development design can be refined through the incorporation of mitigation measures serving to limit its adverse effects and enhancing its beneficial effects. Consultations have been and will continue to be undertaken as part of the design and EIA process, and will include (but not necessarily be limited to) the following organisations:

- Tonbridge and Malling Borough Council (TMBC);
- Kent County Council (KCC);
- Environment Agency (EA);
- Natural England (NE);
- Historic England (HE);
- National Highways (NH);
- Southern Water;
- South East Water; and
- The Health & Safety Executive (HSE).

Each technical chapter of the ES will (as appropriate) include a summary of consultations undertaken as part of the EIA.

The Applicant will organise public consultation events and will continue to engage with and update the local community on the Proposed Development both prior to submission of the planning application and during its determination. The planning application will be accompanied by a **Statement of Community Involvement**, setting out the approach taken.

The Applicant has set up a dedicated website to keep members of the public informed of the proposals: www.landwestofroughettsroad.co.uk.

4. Key Issues to be Addressed by the EIA

4.1 Introduction

The EIA will be undertaken in accordance with the requirements of the EIA Regulations. The legal minimum requirements for the content of an ES are set out in Regulation 2(1) and Schedule 4 of the EIA Regulations. It is recognised that for the ES to fulfil its primary objective of enabling environmental considerations to be incorporated into the decision-making process, it must be focused on the likely significant environmental issues.

The following sections of this EIA Scoping Report therefore set out the likely significant environmental issues to be considered in the ES and define the focus, or scope, of the EIA.

4.2 Alternatives

In accordance with the requirements of Schedule 4(2) of the EIA Regulations, the ES will present a description of the reasonable alternatives to the Proposed Development that were considered by the Applicant prior to selection of the final scheme, and an indication of the main reasons for selecting the chosen option, including a comparison of the environmental effects.

The following alternatives are likely to be considered:

- **'Do nothing' scenario:** the consequences of no development (i.e. no minerals extraction) taking place, with particular respect to the current state of the environment (the baseline conditions) whereby the EIA Regulations stipulate that an ES must provide “...an outline of the likely evolution thereof without implementation of the development as far as natural changes from the baseline scenario can be assessed...”;
- **Alternative designs:** the ES will provide a summary of the main design alternatives considered when progressing the operational layout of the Proposed Development, including the access alternatives and any alternative approaches to boundary treatment / bunds or operational plant location / layout;
- **Alternative reinstatement scheme:** consideration will be given to any potential different reinstatement designs.

While alternative uses are typically considered within the EIA process, in this case alternative uses *per se* are not considered relevant. Mineral must be won where it is found, and the proposed use is therefore directly related to the mineral reserve contained below the Application Site. For this reason also, no alternative sites have been considered by the Applicant.

4.3 The Proposed Development

In line with the EIA Regulations, the ES will include a description of the Proposed Development, as described by the planning application drawings and other documents submitted for approval, in a level of detail appropriate to a detailed planning application, including a factual description of the following:

- Site layout;
- Temporary buildings and operational plant to be employed;
- Access routes, vehicle routing and staff and visitor parking arrangements;
- Minerals handling procedures and processes, including dust suppression;
- Extent of the working area (laterally) and void depth;
- Restoration backfill design features:

- specifications (permeability and thickness) of the geological barrier (whether in situ or artificially established);
 - restoration contours;
 - principles as to surface water control and management; and
 - a description of the principles of site operations.
- Subsoil and topsoil spreading by machinery;
 - Restoration plans for the completed Proposed Development;
 - Surface water drainage strategy;
 - Working hours;
 - Measures to control dust and noise emissions; and
 - Sustainability measures.

The description of the Proposed Development, together with the planning application drawings and restoration plans, comprise the information that will be assessed as part of the EIA process and reported in the ES.

4.4 Proposed Development Programme

The ES will consider the following principal stages of the Proposed Development:

- **Site preparation and enabling works:** those works necessary to prepare the Application Site for minerals extraction, including the installation of site access / haul route, installation of boundary treatment / bunds, installation of operational infrastructure (including site office / welfare facilities / weighbridge) and parking areas; initial soil stripping and creation of soil storage area(s);
- **Extraction and restoration backfill works:** the works associated with the extraction of sand and backfilling with inert waste, including the initial periods of sand extraction, the period during which sand extraction and backfilling are undertaken concurrently, and completion of the site pre-restoration levels once extraction ceases - i.e. the operational stage of the Proposed Development; and
- **Site reinstatement:** removal of bunds and haul route, and implementation of final finishing and planting.

The ES will include a description (as relevant) of the following in relation to each of the above stages:

- Proposed programme and sequencing of the relevant works;
- Key activities that will take place during the stage;
- Equipment and vehicles likely to be involved;
- Traffic and access considerations;
- Profiling, contouring and gradients;
- Resource use and waste minimisation processes; and
- General site management in relation to environmental management and protection.

Detailed assessments of the likely significant effects arising from each stage of works will be provided in each technical ES chapter. These will be based on available information pertaining to the timetable and the description of works outlined above. Further information is provided in the sections below.

The ES will also set out how typical environmental effects associated with the above works (such as dust, noise, visual impact) would be managed, to offset, reduce and, where possible, eliminate significant adverse effects.

4.5 Transport and Access

4.5.1 Key Issues

The Application Site is to be accessed from Roughetts Road, a single carriageway rural road running north to south, which is approximately 6m wide. It links The Street and Ryarsh Village to the north with the A20 London Road to the south. A bridged section of Roughetts Road passes over the M20 to the north of the Application Site, however there is no direct access to the M20 from Roughetts Road. As noted in **Section 2.6.2**, the detailed Application Site access / egress arrangement is still to be agreed with KCC, however access would be taken from Roughetts Road, making use of an existing unnamed access road leading to the properties at 2-4 Roughetts Row and 1-2 Roughetts Cottages. Options for site access in this location have been subject to feasibility work, including technical highway review and swept path analysis, and the site access is considered capable of operating safely and effectively.

Roughetts Road is subject to a 40mph speed limit and kerbed with a footway on the eastern side of the carriageway, opposite the Application Site. There are no vehicle weight, width or height restrictions on the route along Roughetts Road between the Application Site and the A20 to the south.

Key issues to be considered will include the impact of traffic associated with the Proposed Development on the surrounding highway network, as well as the impact on the amenity of other modes of transport in the local area.

4.5.2 Likely Effects

The likely effects in relation to transport and access to be addressed in the ES are as follows:

- Temporary disturbance to local road users, including pedestrians and cyclists, arising from the site preparation and enabling works and their associated vehicle movements, and during the site reinstatement period; and
- Changes to the flows of traffic on the local road network, in particular HGV movements, during the operational stage of the Proposed Development, and any associated effects on traffic movements, junction capacity and highway safety.

4.5.3 Approach and Methodology

A Transport Assessment (TA) will be undertaken by Waterman in accordance with best practice. The TA will be prepared with reference to the National Planning Policy Framework (NPPF)⁶ and current local planning policy. The detailed scope of the TA will be agreed with KCC.

The TA will outline the existing and predicted future transport and access conditions at and surrounding the Application Site. This will include consideration of the traffic capacity of the surrounding highway network, taking into account other committed developments as agreed with the local planning and highway authorities. The TA will present the access proposals and highlight safe access / egress from the Application Site. Consideration will also be given to the accessibility of the Application Site by public transport, walking and cycling for staff working at the Proposed Development. Potential effects on PRoW will also be considered and reported. Mitigation measures will be proposed where necessary.

The baseline and future traffic flows will be derived in agreement with the highway authority from traffic surveys and traffic models as appropriate. This will include the outcomes of Automatic Traffic Counts (ATCs) undertaken on Roughetts Road and on the A20 London Road adjacent to Roughetts Road in April 2018 and updated in July 2023. Calculations to establish the number of vehicular trips generated by the Proposed Development will be based on the trip generation data to be agreed with KCC. Junction

⁶ National Planning Policy Framework, Ministry of Housing, Communities & Local Government, July 2021

capacity modelling will be undertaken for scenarios and future years in agreement with the local highway and planning authorities.

The outcome of the above assessment will be reported in an ES Transport and Access Chapter. The TA, which will be submitted as a standalone document to support the planning application, will include a Travel Plan and Parking / Servicing Statement.

4.6 Noise and Vibration

4.6.1 Key Issues

Reflective of the Application Site's location and established through baseline noise survey undertaken in July 2018, the dominant source of noise at the Application Site and its surrounds is road traffic noise from the M20 to the north. Secondary contributions are from Roughetts Road to the east and the A20 to the south.

There are a number of sensitive residential receptors proximate to the Application Site that may be impacted by the Proposed Development. These are described **Table 3** below and also shown on **Figure 3**.

Table 3: Sensitive Residential Receptors

Sensitive Receptor (SR)	Description / Name
SR A	Roughetts Cottages / Roughetts Row (adjacent, north-east of the Application Site)
SR B	Ahremee, The Granary and Greystones Farm on Roughetts Road (adjacent, east of the Application Site)
SR C	The Coach House and The Old Vicarage (approximately 15m south-east of the Application Site)
SR D	Manora, Roughetts and Ramscombe (approximately 175m south of the Application Site)
SR E	Brook Cottages (approximately 260m south-east of the Application Site)
SR F	Mayhill House (approximately 330m south of the Application Site)
SR G	Properties at East Street (approximately 250m west of the Application Site)

Given the lapse in time from the last baseline survey, it is proposed to conduct a new baseline survey to establish current prevailing noise levels on which to base the assessment. The results of the 2023 survey will be used for assessment purposes. The results of the previous survey undertaken in 2018 illustrate that day and night-time noise levels are broadly comparable, which is not unexpected given the proximity of the M20 motorway which serves as an access route to the Channel Tunnel and the Port of Dover. Noise levels in 2018 ranged from 47dB LAeq to 54 dB LAeq in the daytime period and 49 LAeq to 52 LAeq during the night-time period at various locations within and adjacent to the Application Site.

The 2018 measured noise levels indicate there is the potential for prevailing noise levels to increase during operational hours, even when they are compliant with noise limits based on established background noise levels (LA90+10dB 1-hour) with a maximum of 55dB LAeq,1h. Operational hours associated with minerals workings and restoration backfill would be daytime only.

4.6.2 Likely Effects

The potential noise and vibration effects would be dependent on the various stages of the mineral workings. Effects to be assessed within the EIA are summarised below:

- Noise and vibration effects during site preparation and enabling works (access road / soil stripping / construction of bunds);
- Noise and vibration effects during mineral extraction and progressive backfill;
- Noise and vibration effects during site reinstatement works; and
- Noise effects arising from changes in traffic volume and composition movements on the local road network, namely from the increase in HGV movements.

4.6.3 Approach and Methodology

As described above, a baseline noise survey was undertaken in July 2018. Given the passage of time and that we are now in the post-Covid era and taking into account changes to the Application Boundary since the 2018 survey, it is proposed to conduct an updated baseline survey to allow a robust assessment to be undertaken. The proposed monitoring locations are presented in **Figure 3**.

The noise and vibration assessment will be carried out by Waterman. It will incorporate the following:

- Agreement with KCC on the survey protocol and agreement of which existing (and future, if applicable) sensitive receptors near the Site should be included in the assessment.
- Assessment of temporary noise and vibration effects during the various stages of the Proposed Development in line with:
 - Technical Guidance to the NPPF on Minerals⁷;
 - British Standard (BS) 5228-1:2009+A1:2014 Part 1⁸ - methodology for calculating noise levels arising from the works; and
 - BS 5228-2:2009+A1:2014⁹ Part 2 - guidance on potential effects from vibration.
- Assessment of the likely significant effects of changes in road traffic noise levels resulting from traffic generated at each stage of the the Proposed Development (HGVs and staff vehicles), using data from the project Transport Consultant (Waterman), in accordance with:
 - the Calculation of Road Traffic Noise (CRTN) memorandum¹⁰; and
 - significance criteria detailed in the Design Manual for Roads and Bridges LA111 (DMRB)¹¹.
- Where likely significant adverse effects from any of the aforementioned sources are identified, consideration will be given to appropriate mitigation measures to safeguard amenity and ensure temporary compatibility with adjoining land uses.

The results of the noise and vibration assessment will be set out in an ES Noise and Vibration Chapter that will be supported by a number of technical appendices (presenting baseline survey methodology and results, operational assessment calculations, and road traffic noise assessment).

⁷ See <https://www.gov.uk/guidance/minerals> (accessed 24 May 2023)

⁸ British Standards Institute (2014) BS 5228-1:2009+A1:2014, *Code of practice for noise and vibration control on construction and open sites, Part 1 - Noise*.

⁹ British Standards Institute (2014) BS 5228-2:2009+A1:2014, *Code of practice for noise and vibration control on construction and open sites. Part 2 -Vibration*

¹⁰ Department of Transport (1988) *Calculation of Road Traffic Noise (CRTN)*, HMSO, London.

¹¹ Highways England (2020) *Design Manual for Roads and Bridges (DMRB)*, LA111 Sustainability and Environment Appraisals, Noise and Vibration, Revision 2.

4.7 Air Quality

4.7.1 Key Issues

The Application Site lies within the administrative boundary of TMBC. In accordance with the UK's Air Quality Strategy¹² and part IV of the Environment Act¹³, TMBC has reviewed, and will continue to review, the ambient air quality within its administrative boundary. Work to date has concluded that levels of nitrogen dioxide (NO₂) and particulate matter (PM₁₀) have exceeded permitted levels within the Borough. As such, TMBC have declared six areas as Air Quality Management Areas (AQMA) for annual mean NO₂ objectives¹⁴.

The Application Site is not located within an AQMA. The nearest AQMA is an area encompassing the A20 London Road in East Malling, Larkfield and Ditton, including the junction with New Hythe Lane, located approximately 3.5km east of the Application Site.

Key issues in relation to air quality will relate to the potential for dust and particulates to be generated by any stage of the Proposed Development, together with the potential for local air quality to be adversely affected by traffic emissions.

4.7.2 Likely Effects

It is anticipated that dust and particulate matter emissions produced during the mineral extraction and restoration activities would be controlled through the implementation of a Dust Management Plan (DMP). The DMP would include prevention and mitigation measures, such as dampening materials and surfaces, and screening stockpiles. It would set out requirements for ongoing monitoring and liaison with the local community and KCC.

The likely effects in relation to air quality to be addressed in the ES are as follows:

- Changes in local air quality particularly in relation to dust and particulate matter (PM₁₀ and PM_{2.5}) levels due to emissions from the site preparation and enabling, mineral extraction / progressive backfill and site reinstatement works; and
- Changes in local air quality particularly in relation to NO₂, PM₁₀ and PM_{2.5} levels due to emissions from vehicles associated with the site preparation and enabling, mineral extraction / progressive backfill and site reinstatement works .

4.7.3 Approach and Methodology

The air quality assessment will comprise the following:

- Identification of the locations of potentially sensitive existing and future receptors which could be affected by changes in air quality resulting from the operation of the Proposed Development;
- A review of relevant air quality baseline conditions, including relevant KCC / TMBC air quality data, and assessment documents and data from the KCC / TMBC monitoring network;
- A qualitative assessment of the potential dust impacts using the Institute of Air Quality Management

¹² Defra (2007) *The Air Quality Strategy for England, Scotland, Wales and Northern Ireland*, available from <https://www.gov.uk/government/publications/the-air-quality-strategy-for-england-scotland-wales-and-northern-ireland-volume-2> (accessed 11 January 2021).

¹³ Part IV (Air Quality) Environmental Act, available from <http://www.legislation.gov.uk/ukpga/1995/25/part/IV> (accessed 11 January 2021).

¹⁴ AQMA details available from <https://uk-air.defra.gov.uk/aqma/list?la=all&country=england&pollutant=all> (accessed 11 January 2021).

(IAQM) Guidance for the Assessment of Mineral Dust Impacts (2016)¹⁵, detailing any mitigation measures required;

- Model verification using available local authority monitoring data;
- Application of the ADMS-Roads¹⁶ air quality dispersion model using data from the project Transport Consultant (Waterman) to assess the likely effects of emissions from traffic generated by the Proposed Development (this will assess the likely effects of changes in NO₂, PM₁₀ and PM_{2.5} concentrations at existing sensitive receptors in proximity to the road network affected by the Proposed Development);
- Comparison of the predicted pollutant concentration with the Air Quality Strategy objectives;
- Determining the significance of impacts at individual receptors following the Environmental Protection UK and IAQM guidance on Planning for Air Quality¹⁷, following which the overall significance of the air quality effects will then be determined, following this guidance and using professional judgement;
- Formulation of appropriate mitigation and monitoring measures, where necessary; and
- Detailing any direct and indirect measures to be incorporated within the Proposed Development design that would have a beneficial effect on air quality.

The outcome of the above assessment will be provided in an ES Air Quality Chapter, supported by an air quality modelling technical appendix.

4.8 Hydrogeology

4.8.1 Key Issues

Information from the British Geological Survey (BGS) confirms the geology within the Application Site as comprising up to 0.5m topsoil, underlain by around 0.20m - 1.0m of Head Deposits in the north-east and south-east. In the remainder of the Application Site, topsoil is underlain by the Folkestone Formation to depths of at least 25m. The underlying Sandgate Formation is approximately 6m thick, the Hythe Formation up to 60m thick, which is underlain by 10m -15m of Atherfield Clay Formation.

Borehole records from a previous ground investigation undertaken within the Application Site largely confirm the BGS information, proving the Folkestone Formation to borehole termination depths of between 18m and 30mbgl. Groundwater monitoring undertaken as part of the investigation recorded standing water levels of between 25.6mAOD in the north, rising to 30.3mAOD on the southern boundary. The Environment Agency (EA) has classified the Head Deposits as a Secondary Undifferentiated Aquifer. The Folkestone Formation and Hythe Formation are classified as Principal Aquifers. The Sandgate Formation is classified as Secondary A Aquifer and Atherfield Clay Formation as an Unproductive Stratum.

The Application Site is located in a Zone 3 (Total Catchment) Groundwater Source Protection Zone (SPZ). SPZs are areas defined by the EA within which all groundwater is assumed to discharge into water source and where certain developments with a greater potential to result in groundwater contamination may be restricted or additional mitigation required to protect public water supply boreholes from groundwater contamination.

¹⁵ Institute of Air Quality Management (IAQM) Guidance for the Assessment of Mineral Dust Impacts (2016)

¹⁶ ADMS-Roads is a version of the Atmospheric Dispersion Modelling System (ADMS)

¹⁷ Environmental Protection UK & Institute of Air Quality Management (IAQM) Land-Use Planning & Development Control: Planning For Air Quality, January 2017

4.8.2 Likely Effects

With regard to the proposed depth of working, it is assumed that a 1m standoff from the existing natural winter water table will be applied (i.e. there will be no sub-water table working). As such, the proposed mineral extraction activities are unlikely to have a significant direct effect on hydrogeology. However, potential indirect effects of the excavation activities (i.e. the introduction of contaminants (e.g. fuels, oils) from the operation of plant and machinery on site) cannot be entirely discounted, together with similar effects to soils during the enabling works and reinstatement stages. Any such effects would be minimised and mitigated via the implementation of an Environmental Management Plan (EMP) which would ensure adequate controls to minimise the risk of process-related pollution.

Subsequent infilling activities (depending on the physical and chemical characteristics of the materials used) could potentially have an effect on groundwater recharge rates and flow patterns (with indirect effects on off-site abstractions) and surface water flow. Consideration should also be given to the potential for effects upon groundwater quality as a result of the infill process, albeit the inert nature of the backfill material and the requirement for compliance with a separate Environmental Permit (EP) should mitigate any such risk.

An assessment of likely direct and indirect effects upon the hydrogeological environment as a result of the proposed mineral extraction and subsequent restoration will therefore be undertaken, including, as appropriate, assessment of the influence of extraction upon the existing groundwater table, alteration in recharge rates and resultant alteration of surface water and groundwater flow patterns and rates.

Taking into account the above, potential effects associated with the Proposed Development to be considered in the ES will include the following:

- Potential changes to groundwater flow rates and recharge;
- Potential associated effects upon licensed abstractions related to the Source Protection Zone- quality / quantity; and
- Potential effects to soil, surface water and groundwater quality from the operation of plant and machinery and from restoration via backfill.

4.8.3 Approach and Methodology

In view of the setting, nature and scale of the Proposed Development, and taking into account the requirement to import material for the purposes of restoration, a Hydrogeological Risk Assessment will be prepared to support the planning application. The HRA will be appended to the ES and will inform the assessment of likely effects as outlined above.

A Hydrogeology ES Chapter will be prepared, comprising the following:

- An explanation of the assessment methodology and significance criteria to be applied;
- A description of the baseline conditions, including a review of the history, geology, hydrogeology and previous environmental assessments for the Application Site;
- An assessment of the potential effects to soil, groundwater, groundwater resources and surface water arising from the mineral extraction, operation and subsequent infilling activities;
- Formulation of precautionary mitigation measures / monitoring programmes as necessary; and
- An assessment of residual effects arising from the mineral extraction, operation and following completion of infilling. This will consider the potential impact to soil and groundwater, off-site groundwater resources and the future use of the Application Site post-restoration.

Recommendations for further mitigation will be outlined if necessary.

4.9 Landscape and Visual

4.9.1 Key Issues

The Application Site lies within the London Area Green Belt and sits to the south of the Kent Downs AONB. Two PRoW lie in close proximity to the Application Site: one along the southern boundary of the Application Site (MR153) and the second further south and west (MR152). Residential properties located on Roughetts Road (including Roughetts Cottages and Roughetts Row) lie immediately to the east.

The Application Site forms an open greenfield which is surrounded by well vegetated boundaries that conceal it to some extent from its surroundings. Vegetation in close proximity to the Application Site also includes two designated areas of ancient and semi natural woodland within 180m of the northern and southern boundaries. The presence of the M20, within cutting to the north, influences the character of the Application Site and wider local area, where glimpsed views of moving traffic are possible and associated road traffic noise affects the tranquillity of this largely rural area. Generally, the Application Site has an enclosed character emphasised by the boundary vegetation, with limited views in and out.

The visibility from the Kent Downs AONB to the north of the Application Site will be limited due to the overall low topography of the area and the intervening vegetation along the M20 restricting views towards the Application Site. Furthermore, the Proposed Development comprises buildings of low height and mineral extraction / inert backfill works, which will not likely be visible during the extraction stage from further distances and above vegetation level.

While the Proposed Development would result in localised impacts to the landscape character of the Application Site, these will be temporary in nature and will cease upon its restoration and reinstatement.

4.9.2 Likely Effects

The likely effects in relation to landscape and visual impact to be addressed in the ES are as follows:

- **Landscape effects:** the effects of the Proposed Development on the physical and cultural characteristics of the Application Site and on the surrounding landscape character; and
- **Visual effects:** the effects of the Proposed Development on views from visual receptors (including users of PRoW, users of local highways (in particular Roughetts Road and the A20 London Road) and local residents) and on the amenity value of these views.

4.9.3 Approach and Methodology

A Landscape and Visual Appraisal (LVA) of the Application Site and associated land to the south was undertaken by Waterman in 2018. This included establishment of the baseline conditions, a site visit, baseline photography of eight representative views, and an evaluation of anticipated effects on the landscape character and views.

A Landscape and Visual Impact Assessment (LVIA) would be undertaken as part of the EIA to provide an in-depth assessment of the likely significant effects of the Proposed Development, drawing upon the baseline conditions described in the 2018 LVA. The LVIA would be produced according to best practice guidance from the following sources:

- Guidelines for Landscape and Visual Impact Assessment¹⁸;
- An Approach to Landscape Character Assessment¹⁹; and

¹⁸ Landscape Institute and Institute of Environmental Management and Assessment 2013, Guidelines for Landscape and Visual Impact Assessment, Third Edition, Routledge

¹⁹ Christine Tudor, October 2014, An Approach to Landscape Character Assessment, Natural England

- TGN 06/19 Visual Representation of development proposals²⁰.

The proposed scope of works for the LVIA would include:

- Review and update of relevant planning policy reported in the 2018 LVA;
- Review of baseline conditions of the Site including designations and landscape features reported in the 2018 LVA;
- Review of landscape character assessment reported in the 2018 LVA and updated where necessary;
- Preparation of a Zone of Theoretical Visibility (ZTV) map based on revised proposals for the reduced size site, in order to review previously agreed representative viewpoints used as part of the 2018 LVA;
- Site visit to undertake baseline photography and confirm character assessment and baseline conditions; and
- Preparation of an LVIA assessing the likely significant landscape and visual effects of the proposed Development.

An initial ZTV map, indicating proposed viewpoint locations, has been developed based on those agreed with KCC previously; this is shown in **Figure 4**.

The outcome of the LVIA, which will be presented as Volume 4 of the ES, will be supported by baseline photography and relevant graphics such as terrain analysis, ZTV, landscape character map and designations map.

4.10 Ecology and Biodiversity

4.10.1 Key Issues

The Application Site contains a low diversity of habitats consisting of fields which are currently grazed by sheep and were previously grazed by horses. There are a low number of scattered mature trees at the boundaries and small areas of scrub / bracken. A hedgerow delineates the southern boundary of the Application Site. The Application Site is adjacent to the planted tree embankment for the M20 motorway.

There are six ponds within a 500m radius of the Application Site. Two of these are to the north of the M20 motorway and the other four are to the west of the Application Site. A large breeding population of great crested newt (GCN) (*Triturus cristatus*) was confirmed to be present in one of the ponds to the west of the Application Site in 2018. GCN are also known to be present in the two ponds to the north from desk study records.

Further targeted species surveys across the Application Site recorded a small population of grass snake (*Natrix natrix*), common lizard (*Zootoca vivipara*) and slow worm (*Anguis fragilis*) in 2018, 2019 and 2020. Bat surveys confirmed a low level of foraging and commuting activity within the Application Site in 2018 and 2020. In 2018, a non-breeding long-eared (*Plecotus* sp.) bat roost was identified in a tree to the south of the current Application Site boundary. An active badger (*Meles meles*) hole within the embankment of the M20 motorway, adjacent to the northern boundary, was found in 2020; however, the status of this sett has not been determined to date. Dormouse (*Muscardinus avellanarius*) surveys were completed in 2018 and 2020. No evidence of their presence was found; therefore, they are considered likely absent.

Update reptile, bat, GCN, and botanical surveys (including a Biodiversity Net Gain (BNG) assessment) are being undertaken in 2023, and badger setts will be monitored, where found.

The closest SSSI, Trottiscliffe Meadows SSSI, is located approximately 1.8km to the north-west. While

²⁰ Landscape Institute 2019, Technical Guidance Note 06/19 Visual Representation of Development Proposals, Landscape Institute

the Application Site lies within the impact risk zone for the SSSI, no impacts are considered likely due to the distance and location of the SSSI relative to the Application Site. The closest Local Wildlife Site (LWS) lies approximately 500m to the north-west and this is Ryarsh Wood LWS. This is similarly considered likely to be unaffected by the Proposed Development, given the separation afforded by the M20 motorway, and the direction of all operational traffic to the A20 south of the Application Site, rather than the north.

According to the Multi-Agency Geographic Information for the Countryside (MAGIC), priority habitat is present in the form of deciduous woodland adjacent to the western and north-western boundaries of the Application Site. The area to the north-west consists of semi-mature trees along the motorway embankment whilst to the west there is a small area of mature scattered trees. The closest area of ancient and semi-natural woodland is 180m to the south.

In summary, the Application Site supports reptiles, foraging and commuting bats, and potentially GCN. Badgers have historically been found to utilise the Application Site. Update surveys are currently underway to establish if the baseline has changed with regards to protected species presence within the Application Site. The proposed works and changes in habitat have the potential to result in both significant beneficial and adverse effects for populations of protected species that inhabit and / or utilise the Application Site.

4.10.2 Likely Effects

The likely effects in relation to ecology as a result of the proposed site preparation and enabling, extraction and progressive backfill, and subsequent site reinstatement works, to be addressed in the ES, are as follows:

- Temporary habitat loss to facilitate access and complete the extraction / restoration works;
- Increases in temporary noise, disturbance, lighting, and pollution and changes in the water table have the potential to affect adjacent priority habitats (deciduous woodland);
- Potential for the above works to affect the suitability of the Application Site for protected species; and
- Changes in habitat have the potential to result in both significant beneficial and adverse effects for populations of protected species that inhabit or utilise the Application Site.

4.10.3 Approach and Methodology

A desk study and Phase 1 Habitat Survey and protected species assessment, encompassing the entire Application Site, have been undertaken by a suitability qualified ecologist. These have subsequently been used to establish the scope of further targeted protected species surveys required to assess the effects of the Proposed Development on protected species. The following surveys have been undertaken and will inform the baseline presented in the ES:

- Phase 1 Habitat Survey;
- Detailed botanical surveys;
- Bat surveys including bat activity surveys, tree assessment, and bat emergence surveys;
- Reptile surveys;
- Dormouse surveys;
- Amphibian surveys of off-Site ponds; and
- Badger survey.

The outcome of the above will inform the ecological impact assessment to be provided in the ES Ecology Chapter, supported by individual reports for each of the surveys as technical appendices in addition to a BNG Assessment based on Defra Biodiversity Metric 4.0, which will be submitted as a standalone document to accompany the planning application. The ES will also have reference, as necessary, to the Landscape and Ecology Restoration Plan prepared to support the planning application.

The ecological impact assessment will follow the Guidelines for Ecological Impact Assessment in the UK and Ireland ('EclA') produced by the Chartered Institute of Ecology and Environmental Management ('CIEEM').

4.11 Cultural Heritage

4.11.1 Key Issues

Based on a review of designated heritage assets, there are 22 Listed Buildings (one Grade II*, one Grade I, and 20 Grade II) within a 1km study area. A Scheduled Monument (a long barrow) is situated c.900m to the west of the Application Site.

Those heritage assets more immediate to the Application Site, within 500m, are located:

- along East Street, c.280m west of the Application Site, consisting of the Grade II Listed Post-Medieval Bumblebee Barn, East Street Farmhouse and Old Cardicote farmhouse;
- on London Road, c.460m to the south, consisting of a Grade II Listed Post-Medieval milestone; and
- along Church Road, c.480m to the east, consisting of the Grade II* Listed St Martins Church and Grade II Listed Church Farmhouse.

Further afield, there are:

- two assets along Woodgate Road, c.630m north-west of the Application Site;
- seven assets associated with the settlement of Ryarsh, c.650m to the north-east; and
- seven designated assets (including the Scheduled Monument) associated with the settlement of Addington (c.850m to the west).

An initial review of non-designated heritage assets indicates only one (a Roman coin) is recorded within the Application Site. The site of a farmstead, south-west of Wynside House, is noted off Roughetts Road (just to the east of the Application Site). Within the 1km study area, at least 61 known non-designated heritage assets are identified, comprising a Roman cremation burial (at East Street), an undated linear feature with possible ring ditch, a brick pit and several post-medieval oasts and farmhouses.

A rapid review of historic Ordnance Survey (OS) mapping shows that the Application Site consisted of fields intersected by footpaths (connecting East Street to Roughetts Road) to the south in 1867. The use of these fields is considered to be agricultural in nature. Roughetts Row buildings can also be noted bordering the north-eastern corner of the Application Site at this date.

By the 1895 OS map, the only noticeable change included an orchard to the west of Roughetts Row which extended into the Application Site. Aside from the additions of further buildings (mainly farms) along Roughetts Row, no further changes are noticed until the 1936 OS map, which shows that the orchard now covered a larger area within the north-eastern extent of the Application Site.

Based on the above, there could potentially be temporary changes in the setting of several Listed Buildings (particularly those along East Street and Church Road) during the site enabling works and the subsequent operational period, which could harm their heritage significance or affect the appreciation of their setting. A site visit has confirmed negligible intervisibility between most of these assets and the

Application Site. However, minor intervisibility between the Grade II Listed Bumblebee Barn and the Application Site, as well as the tower of the Grade II* Listed Church of St Martin and the Application Site, has been identified, leading to potential harm to heritage significance through temporary alteration of setting.

The Application Site does not appear to have been developed in the past, and the Archaeology Data Service (ADS) does not record any previous intrusive archaeological investigations within or adjacent to the Application Site, with only a landscape heritage statement undertaking a shallow assessment of the Application Site as part of a far wider assessment to the north of the motorway. Therefore, the potential for archaeological remains is currently unknown without further assessment.

4.11.2 Likely Effects

The likely effects in relation to cultural heritage to be addressed in the ES are as follows:

- Effects to identified Listed Buildings (specifically the Grade II Listed Bumblebee Barn and the Grade II* Listed Church of St Martin) in terms of settings impacts; and
- Effects to as yet unknown archaeological remains that might be present within the Application Site (effects would likely be permanent).

4.11.3 Approach and Methodology

At present, there have been no previous intrusive archaeological investigations within the Application Site. Furthermore, the Application Site also does not appear to have been subject to previous desk-based assessment, other than the landscape heritage assessment of the Birling Estate to the north, technically including the land within the Application Site. As such, in the first instance, an assessment adhering to the Chartered Institute for Archaeologists' guidance on historic environment desk-based assessment (updated 2020) would be produced. The scope of this would be agreed with KCC's heritage advisors, Heritage Conservation. The results of the assessment would inform the likely need for further investigations which may be required prior to enabling works commencing.

Subject to agreement with KCC's heritage advisors, the historic environment desk-based assessment (HEDBA), would comprise the following:

- Review of designated and non-designated heritage assets within the Application Site and a 1km study area surrounding the Application Site, based on the National Heritage List for England dataset and Kent Historic Environment Record data;
- A review of legislation, policy and guidance pertinent to the Application Site and the local planning authority within which it is sited (KCC / TMBC);
- A site walkover survey of the Application Site and study area;
- A review of pertinent online archive material held by Kent Archives and Local History Centre including a review of available historic mapping (also held by other sources, such as National Library of Scotland Online);
- The preparation of an historic and archaeological background of the Application Site, including an assessment on the likely potential for as yet unknown remains;
- An assessment on the likely significance of assets likely to be impacted by the Proposed Development;
- An assessment of likely impacts to identified heritage assets;
- Consultations with Heritage Conservation on the scope of the assessment and likely archaeological constraints; and

- Recommendations on next steps (based on the results of the assessment and consultations with Heritage Conservation).

The outcome of the above assessment will be presented in an ES Cultural Heritage Chapter, supported by the HEDBA and other technical reports which might be required (such as archaeological investigation reports, if required).

4.12 Soils and Agricultural Land

4.12.1 Key Issues

The Application Site currently predominantly comprises pasture grazed by livestock. A detailed Agricultural Land Classification (ALC) survey and assessment has been undertaken for the Application Site area (May 2023), following Natural England guidance²¹. This assessment has found predominantly Grade 2 agricultural land (which represents 'best and most versatile' (BMV) agricultural land²²) present within the Application Site, alongside smaller areas of Grade 3b land which are not classified as BMV.

4.12.2 Likely Effects

The likely effects in relation to soils and agricultural land to be addressed in the ES are as follows:

- Loss of the agricultural land resource, including best and most versatile land, during the site preparation and enabling works and throughout the operational period;
- Loss of soil quality through disturbance and storage; and
- Loss of land to farm business currently occupying the Application Site.

It should be noted that it is proposed to retain the soil resource for restoration of the Application Site to agricultural use following completion of the extraction and restoration works. Defra have produced a study paper²³ which demonstrates that mineral sites can be restored to agricultural land without loss of ALC Grade. As such, effects to the agricultural land resource would be temporary in nature.

4.12.3 Approach and Methodology

A detailed ALC survey has been undertaken in accordance with the methodology as provided in 'Agricultural Land Classification of England and Wales: revised guidelines and criteria for grading the quality of agricultural land'²⁴.

The assessment has found predominantly best and most versatile agricultural land. Results will be provided in a detailed ALC Report, describing the methodology used, the results of the assessment and the distribution of ALC grades within the Application Site. In addition, the report will include a statement of physical characteristics describing the topsoil and subsoil units present at the Application Site that should be kept separate when stripping, storing and reinstating soil material. This would inform the agricultural land assessment and proposed mitigation measures presented in the Soils and Agricultural Land ES Chapter, with the report forming a technical appendix.

²¹ Natural England (2009) Agricultural Land Classification: protecting the best and most versatile agricultural land (TIN049). Available online: <https://publications.naturalengland.org.uk/publication/35012>

²² National Planning Policy Framework (NPPF) - Ministry of Housing, Communities and Local Government, July 2021

²³ Department for Environment, Food & Rural Affairs (1999) Evaluation of mineral sites restored to agriculture -LE0206. Available online: <https://scienceresearch.defra.gov.uk/ProjectDetails?ProjectId=3621>

²⁴ Ministry of Agriculture, Fisheries and Food (1988) Agricultural Land Classification of England and Wales: revised guidelines and criteria for grading the quality of agricultural land (ALC011). Available online: <https://publications.naturalengland.org.uk/publication/6257050620264448>

The ES Chapter will also include an assessment of farming circumstances, based on an interview with the agricultural occupant, to assess the likely effect of the Proposed Development on the existing farm business occupying the Application Site.

4.13 Cumulative Effects

4.13.1 Key Issues

The EIA Regulations require that, in assessing the effects of a particular development proposal, consideration is also given to the cumulative effects that may arise from the proposal in conjunction with other scheme proposals in the vicinity. Cumulative effects are those effects of a development that may interact in an additive or subtractive manner with the effects of other reasonably foreseeable schemes that are not currently in existence but are likely to be by the time the Proposed Development is implemented.

4.13.2 Likely Effects

Cumulative effects can be categorised into two types:

- **Intra Development Effects:** the combined effects of individual effects resultant from the Proposed Development upon a set of defined sensitive receptors, for example noise, dust and visual effects; and
- **Inter Development Effects:** the combined effects arising from the Proposed Development together with other reasonably foreseeable schemes, which individually might be insignificant, but when considered together, could create a significant cumulative effect.

4.13.3 Approach and Methodology

Intra Development cumulative effects will be qualitatively assessed in line with the Proposed Development programme and will take account of all assessments scoped into the ES.

In respect of likely Inter Development cumulative effects, a set of specific criteria have been set in order to determine the 'other' schemes to be included within the Inter Development cumulative effects assessment. The criteria commonly used for such EIA projects are as follows:

- Schemes within 1km of the Application Site which have been granted planning permission where there is a net change in traffic generation of greater than 100 vehicle movements a day and which are considered likely to result in some Inter Development cumulative effect;
- Any schemes close to the Application Site which have been granted planning permission which fall below the traffic threshold stated above, but where their proximity to the Application Site is such that the potential for cumulative effects with the Proposed Development cannot be ruled out; and
- Other mineral and waste sites (existing or allocated in the Kent Minerals Sites Plan) within 5km of the Application Site.

A list of cumulative schemes will be agreed with KCC as part of the scoping process.

An assessment of Inter Development cumulative effects will be presented in each of the technical topic chapters. An assessment of Intra Development cumulative effects for all topic areas scoped into the ES will be presented in a separate ES chapter.

5. Topics Proposed to be ‘Scoped Out’ of the ES

As already noted, the aim of the EIA scoping process is to focus on those environmental issues that are likely to be significantly affected by the Proposed Development. In doing so, issues may be ‘scoped out’; in that the potential for significant effects in respect of specific topics or receptors is deemed unlikely. The following section provides details of the issues that are intended to be ‘scoped out’ of the EIA and ES.

Some topics scoped out of the ES may be covered in technical assessments submitted to support the planning application. Where relevant, these technical reports are highlighted under the relevant discipline below.

It is acknowledged that scoping is an ongoing process. Should any aspect currently proposed to be scoped out of the EIA/ES later be deemed to result in likely significant effects (and vice versa), then this will be discussed with KCC and reported in the EIA Methodology chapter of the ES.

5.1 Population and Health

In 2018, an area of land that included the Application Site was subject to consideration by the minerals planning authority (KCC) as part of the development of its Minerals Sites Plan. The process included public consultation. Following a review of the consultation responses received in 2018, community health concerns were noted, and primarily centred around the potential for changes in local air quality, noise and transport.

These potential hazards, however, are well known, understood and addressed through the regulatory planning process to environmental objective thresholds that are protective of health, and preclude any significant risk to public health.

All hazards with the potential for any significant environmental or health risk will be assessed and addressed within the pertinent technical disciplines (i.e. air quality, noise and transport) as per the proposed scopes of works identified within the preceding section of this report (refer to sections 4.5, 4.6 and 4.7), and the application will neither gain consent or a permit to operate should it be unable to demonstrate compliance with the regulatory requirements set to protect the environment and health.

In terms of wider population effects, the minerals extraction and restoration of the Application Site would create new employment, estimated at c.3 site operatives and 10 drivers, but this would not be significant at the population level locally. Reference to likely employment creation will be made within the introductory sections of the ES but does not warrant further assessment.

On the above basis, a separate Population and Health Chapter is not considered necessary.

5.2 Greenhouse Gases and Climate Change

Due to the nature and scale of the Proposed Development (which comprises a temporary operation, and which does not result in a permanent built development form) it is considered that its potential impacts on greenhouse gases and climate change primarily arise as a result of vehicle emissions and energy consumption during the enabling works and operational stages. The air quality effects associated with vehicle emissions (in terms of NO₂) will be considered in the ES (refer to **Section 4.7: Air Quality**). In relation to CO₂, locally derived emissions contribute to climate change effects experienced on a global scale and it is therefore considered that there would be little merit in attempting to try to quantify their significance within the ES for local decision-making purposes, taking into account the scale and nature of the Proposed Development as described above. Furthermore, as the Proposed Development will fulfil the requirement for sand extraction to support the building industry in Kent, the effects upon the generation of greenhouse gases and climate change will be minimised on the basis that the

implementation of the Proposed Development will prevent sand resource being imported to Kent from further afield, with potentially less sustainable patterns of transport. The proximity of the Application Site to the market will therefore help to minimise the impacts on climate change.

The generation of greenhouse gases and the vulnerability of the Proposed Development to climate change will be considered as appropriate within the design development, and the key sustainability attributes of the Proposed Development will be summarised in **ES Chapter 4: The Proposed Development**. For example, with respect to climate change adaptation, the FRA undertaken as a standalone report (refer to **Section 5.4**) will, in accordance with relevant guidance, account for the effects of climate change, therefore ensuring that the Proposed Development would be resilient to climate change. The proposed landscape restoration scheme will also have regard to climate adaptation and resilience.

On the basis of the above, it is proposed that the topic of greenhouse gas and climate change, as a technical chapter, is scoped out of the ES, although appropriate reference will be made elsewhere within the ES to appropriate interfaces with this topic.

5.3 Risk(s) of Major Accidents and / or Disasters

The EIA Regulations relate to a very broad range of development types; these development types include, for example, power stations and hazardous waste facilities. Clearly, it is these types of project that would be more likely prone to major accidents and / or disasters. It therefore follows that the consideration of risk(s) of major accidents and / or disasters in the context of EIA needs to be proportionate to the likelihood of the risk(s).

The Application Site preparation and enabling works stage would not comprise works likely to result in any particular hazards or giving rise to specific risk.

In terms of potential risks arising during the minerals extraction and restoration, the works would be undertaken using best practice processes in accordance with defined method statements and subject to appropriate environmental controls. These issues would be considered in the relevant topic chapters of the ES.

Upon completion of extraction and restoration works, it is not considered likely that there will be any specific risks associated as it is proposed to restore the Application Site to its current agricultural land use.

Accordingly, the risk(s) to the Proposed Development arising from major accidents and / or disasters is considered unlikely and this topic can be scoped out of the ES.

5.4 Flood Risk

The Application Site is located in Flood Zone 1, indicating a low probability of tidal and fluvial flooding. The Environment Agency's surface water mapping also shows that the Application Site has a very low risk of overland surface water flooding. There are no Main Rivers or Ordinary Watercourses within the Application Site boundary.

As set out in **Section 2.6.1**, it is not proposed to extract mineral from below groundwater level. A Geological Report prepared by Greenfield Enviro (May 2020) indicates that groundwater levels vary between 25.6mAOD and 30.3mAOD, with the higher groundwater levels recorded on the southern boundary. The water level will be continuously monitored to confirm the level of the water table and to ensure that extraction does not occur below the groundwater level on site. There is therefore no risk of groundwater flooding as a result of the Proposed Development.

Given the above, the Proposed Development is not considered likely to result in significant effects in relation to flood risk, which is therefore proposed to be scoped out of the ES.

As the Application Site is over 1 hectare in size, a separate Flood Risk Assessment (FRA) will be prepared and submitted in support of the planning application. This will assess flood risk from all sources and confirm that the Proposed Development can be undertaken safely and that flood risk is not increased off-site. The FRA will consider the risk of flooding from all sources, accounting for the effects of climate change for the lifetime of the Proposed Development. It will also take into account the proposed drainage strategy for the Proposed Development, noting that the planning application will also be accompanied by a standalone Drainage Assessment. Consultation will be undertaken with the EA, KCC in its role as Lead Local Flood Authority (LLFA) and Southern Water as part of the preparation of the FRA.

5.5 Ground Conditions and Contamination

A review of historical maps obtained from Groundsure Insight has been undertaken. Mapping from the 1860s shows the Application Site was in agricultural use which has continued to the present day. The use of the Application Site as agricultural land is unlikely to have caused significant contamination and historical review suggests that there is limited potential for made ground as significant former development has not been identified, although the potential for localised areas of made ground or contamination associated with historical farming practices cannot be entirely discounted.

Whilst the Proposed Development will incorporate excavations, the adoption of standard health and safety procedures, including the use of personal protective equipment (PPE) and adherence to relevant regulations, would minimise any potential contaminant exposure by site operatives.

Site restoration operations would be controlled by an Environmental Permit (EP) issued by the Environment Agency which will specify waste acceptance criteria, infill design standards and emissions management and monitoring. Once infilling is complete, the Application Site will be reinstated using, in part, existing soils and subsoils stored within bund, together with capping materials and soils confirmed as suitable for use, and subject to an aftercare programme including monitoring of the restoration works to ensure risks to future users of the Application Site remain low.

Given the above, it is proposed that the topic of ground conditions and contamination is scoped out of the ES. Potential effects upon groundwater and other controlled waters as a result of the Proposed Development would be assessed in the Hydrogeology Chapter of the ES.

5.6 Waste

The construction of infrastructure at the Application Site as part of the infrastructure and enabling works may create waste, but not in any significant quantity.

Minerals excavated will be removed from the Application Site for sale as aggregate and do not comprise waste materials. The subsequent backfill with inert waste comprises part of the Proposed Development and will be described (and assessed) within the ES. Waste pre-acceptance controls and at the weighbridge will ensure that only suitable materials are presented to the Application Site. Should any tipped materials be found to be non-compliant, they will be segregated, placed into a quarantine area, subsequently reloaded and dispatched from the Application Site. The quantity of such material is unlikely to be significant.

The subsequent reinstatement of the Application Site, including the excavation of hard surfacing within the yard / parking areas and the dismantling / removal of welfare and office buildings, will create some demolition and excavation waste, but this will not be significant at a local scale. Materials unsuitable for re-use will be removed from the Application Site for re-use elsewhere or disposal as the case may be.

Taking into account the above, it is considered that the topic of waste can be scoped out of the ES.

5.7 Light Pollution

At present there is no lighting within the proposed boundary of the Application Site. Lighting associated with the Proposed Development would be localised, directional and in many cases intermittent, and would only be used during operational hours in the winter months. Lighting would likely include: task lighting on mobile plant and vehicles in the quarry area; lighting on posts or fitted to the office / welfare blocks; and security lighting which would typically come on only when triggered.

Any lighting on building exteriors or in parking / access areas would be downward facing to minimise light spill and it not expected to cause light pollution for neighbours or habitats outside the Application Site. No significant effect is anticipated as a result of the introduction of any introduced lighting and it is proposed that this topic is scoped out of the ES.

5.8 Utilities

Any service diversions, extensions or upgrades which are necessary to facilitate the Proposed Development will be described as part of the description of the Proposed Development, with appropriate reference made in the relevant topic chapters if any associated works are likely to result in significant effects. A separate assessment of utilities is not considered necessary and is proposed to be scoped out of the ES.

6. Defining the Significance of Environmental Effects

For each of the environmental topic areas assessed as part of the EIA process, and reported within the ES, an assessment will be made in relation to the relative significance of the likely environmental effects identified. These assessments will be carried out with reference to definitive standards and legislation, where available. Where it is not possible to quantify effects, qualitative assessments will be carried out, based on available knowledge and professional judgement.

The significance of predicted effects will be determined with reference to assessment criteria for each environmental topic considered. These criteria apply a common EIA approach of classifying effects according to whether they are major, moderate or minor as well as adverse, beneficial, or insignificant.

Specific criteria for each issue will be developed, giving due regard to the following, as relevant:

- Extent and magnitude of the effect;
- Duration of the effect (short, medium or long-term);
- Permanence of the effect (temporary or permanent);
- Nature of the effect (direct or indirect, reversible or irreversible);
- Whether the effect occurs in isolation, is cumulative or interactive;
- Performance against environmental quality standards or other relevant pollution control thresholds;
- Sensitivity of the receptor; and
- Compatibility with relevant environmental policies.

In order to provide a consistent approach in reporting the outcomes of the various studies undertaken as part of the EIA, the following terminology will be used throughout the ES to describe the likely significance (or otherwise) of identified effects:

- **Negligible:** No significant effect to an environmental resource or receptor;
- **Significant beneficial:** Advantageous or positive effect to an environmental resource or receptor; and
- **Significant adverse:** Detrimental or negative effect to an environmental resource or receptor.

Whilst there is no recognised definition of what constitutes a 'significant' effect, it is good practice to identify the degree of significance or importance. It is therefore proposed that, where adverse or beneficial effects have been identified, they will be addressed as being of either:

- **Minor significance:** Slight, very short or highly localised effect;
- **Moderate significance:** Limited effect (by extent, duration or magnitude) which may be considered significant; and
- **Major significance:** Considerable effect (by extent, duration of magnitude) of more than local significance or in breach of recognised acceptability, legislation, policy of standards.

Specific definitions of significance will be provided in relation to each environmental topic within the individual ES chapters. In some cases, there may be slight variations to the above significance criteria to reflect industry guidance in respect of a specific topic; where this occurs this will be clearly stated.

In accordance with the EIA Regulations, where significant environmental effects are identified, mitigation measures will be recommended and the significance of the residual effect (with the mitigation measures implemented) will be stated within the ES. The significance of residual effects will also be determined in line with the assessment criteria established for each environmental topic and using the terminology provided above.

Where relevant, information will also be provided regarding the monitoring of mitigation measures, in accordance with the requirements of the EIA Regulations.

7. Proposed Structure of the Environmental Statement

The proposed structure of the ES is set out below, based on the EIA Regulations, current best practice, and the analysis described in the previous sections of this EIA Scoping Report.

7.1 Non-Technical Summary

This will provide an accurate and balanced account of the key information presented in the ES in non-technical language. The Non-Technical Summary (NTS) will be produced as a stand-alone document in a format suitable for public dissemination.

7.2 Environmental Statement Volume 1: Main Text

This will contain the findings of the EIA and will be reported in accordance with the EIA Regulations. The proposed chapter headings are set out below:

- Introduction;
- EIA Methodology;
- Existing Land Uses and Activities;
- The Proposed Development;
- Alternatives;
- Transport and Access;
- Noise and Vibration;
- Air Quality;
- Hydrogeology;
- Ecology;
- Cultural Heritage;
- Soils and Agricultural Land;
- Residual Effects and Effect Interactions; and
- Next Steps.

7.3 Environmental Statement Volume 2: Figures

Figures accompanying all of the chapters of ES Volume 1 will be presented in a separate volume.

7.4 Environmental Statement Volume 3: Appendices

This will provide detailed supporting data, information and the full text of all relevant technical assessments undertaken as part of the EIA. The final list of appendices will be confirmed following completion of the technical studies, however, they are likely to include the following:

- Extended Phase 1 Habitat Assessment and Protected Species Reports;
- Noise and Vibration Monitoring Data;
- Preliminary Risk Assessment;
- Hydrogeological Risk Assessment; and
- Historic Environment Desk-Based Assessment.

7.5 Environmental Statement Volume 4: LVIA

The Landscape and Visual Impact Assessment (LVIA) is provided as a separate volume to prevent the main text of the ES becoming excessively long and to allow the accompanying figures to be presented clearly alongside the technical assessment work.

7.6 Technical Reports to Support Planning

In addition, a number of environmental reports would be produced to support the planning application, but which would not form part of the ES. These are expected to include:

- Transport Assessment;
- Flood Risk Assessment.
- Drainage Strategy;
- Arboricultural Impact Assessment Report.

8. Next Steps

This request for a scoping opinion is made under Regulation 15 of the EIA Regulations 2017.

Under Regulation 15(4) KCC must, within 5 weeks beginning with the date on which that request was received, or such longer period as may be agreed in writing with the person making the request, adopt a scoping opinion and must send a copy to the person who made the request.

In accordance with Regulation 15(3), should KCC consider that they have not been provided with sufficient information to adopt an EIA scoping opinion, they should notify the person making the request of the points on which they require additional information.

FIGURES

Figure 1: Site Location

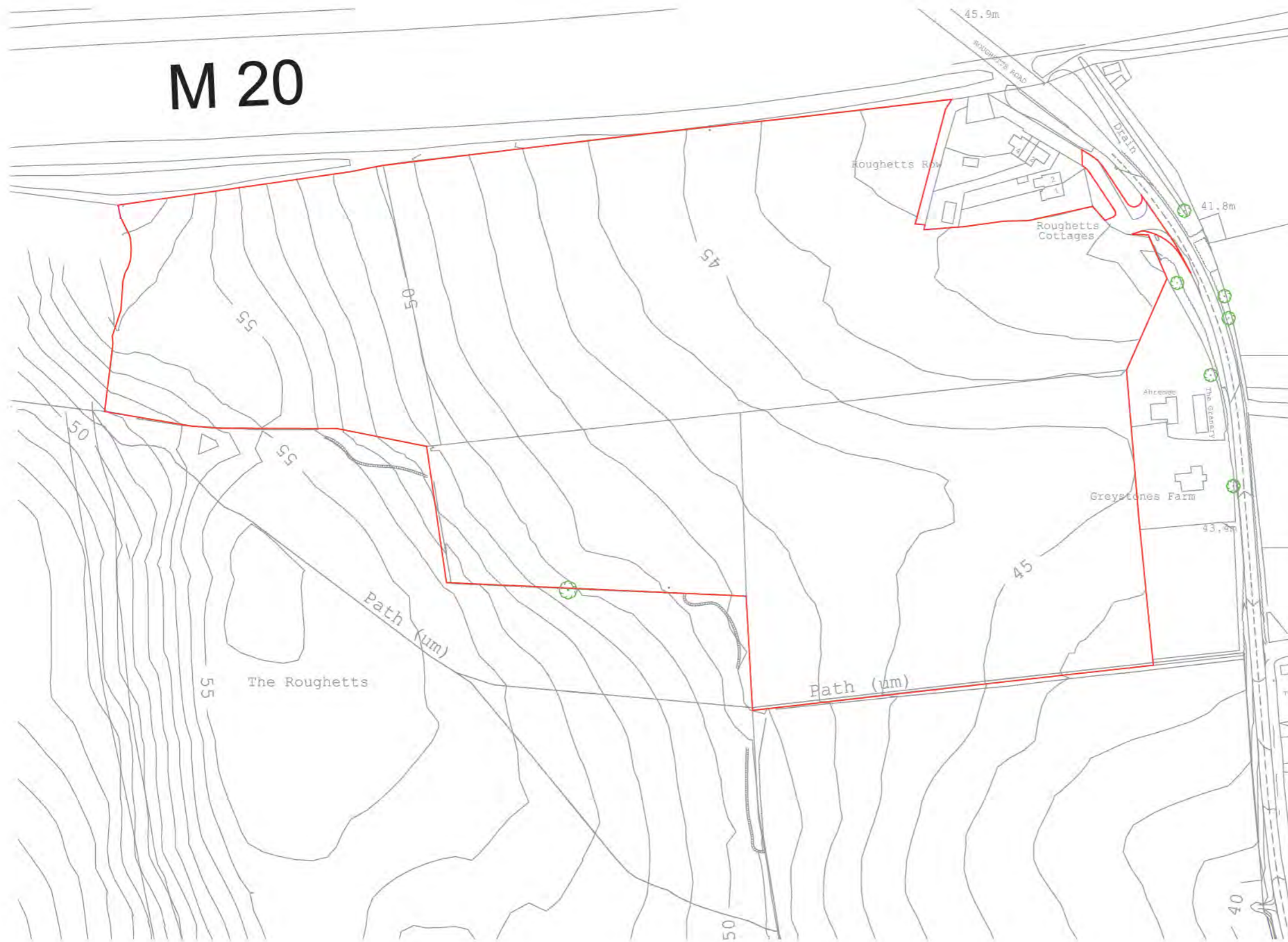


Project Details	WIE12631-117: Land West of Roughetts Road, Ryarsh, West Malling
Figure Title	Figure 1: Site Location
Figure Ref	WIE12631-117_GR_EIA_1A
Date	2023
File Location	\\s-incl\wiel\projects\wie12631\117\graphics\eia\issued figures

Figure 2: Planning Application Boundary

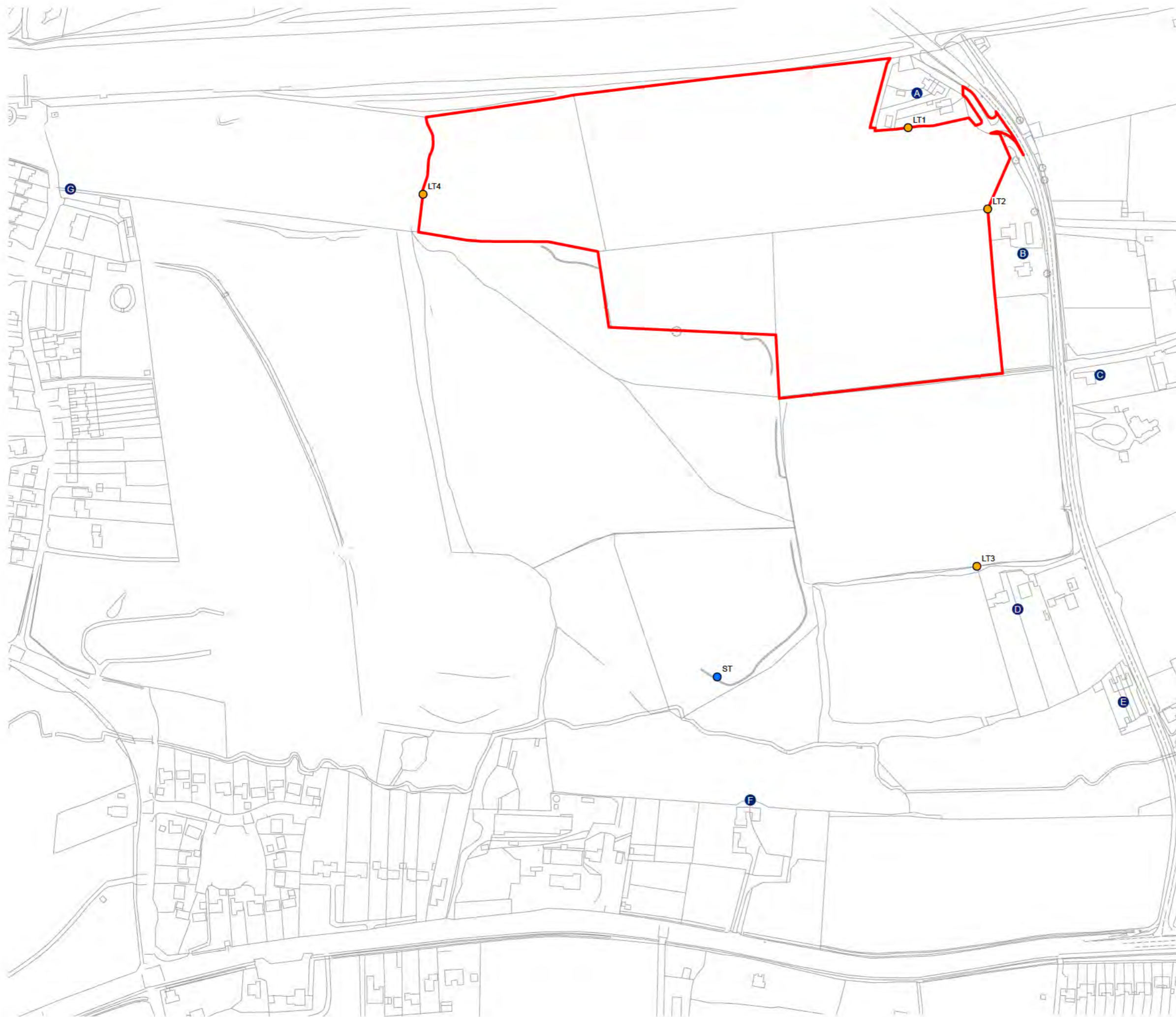
M 20

 Site Boundary

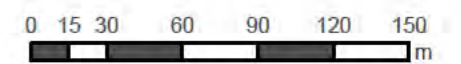


Project Details	WIE12631-117: Land West of Roughetts Road, Ryarsh, West Malling
Figure Title	Figure 2: Site Boundary
Figure Ref	WIE12631-117_GR_EIA_2A
Date	2023
File Location	\\s-incs\wie\projects\wie12631\117\graphics\eia\issued figures

Figure 3: Noise Monitoring and Sensitive Receptor Locations

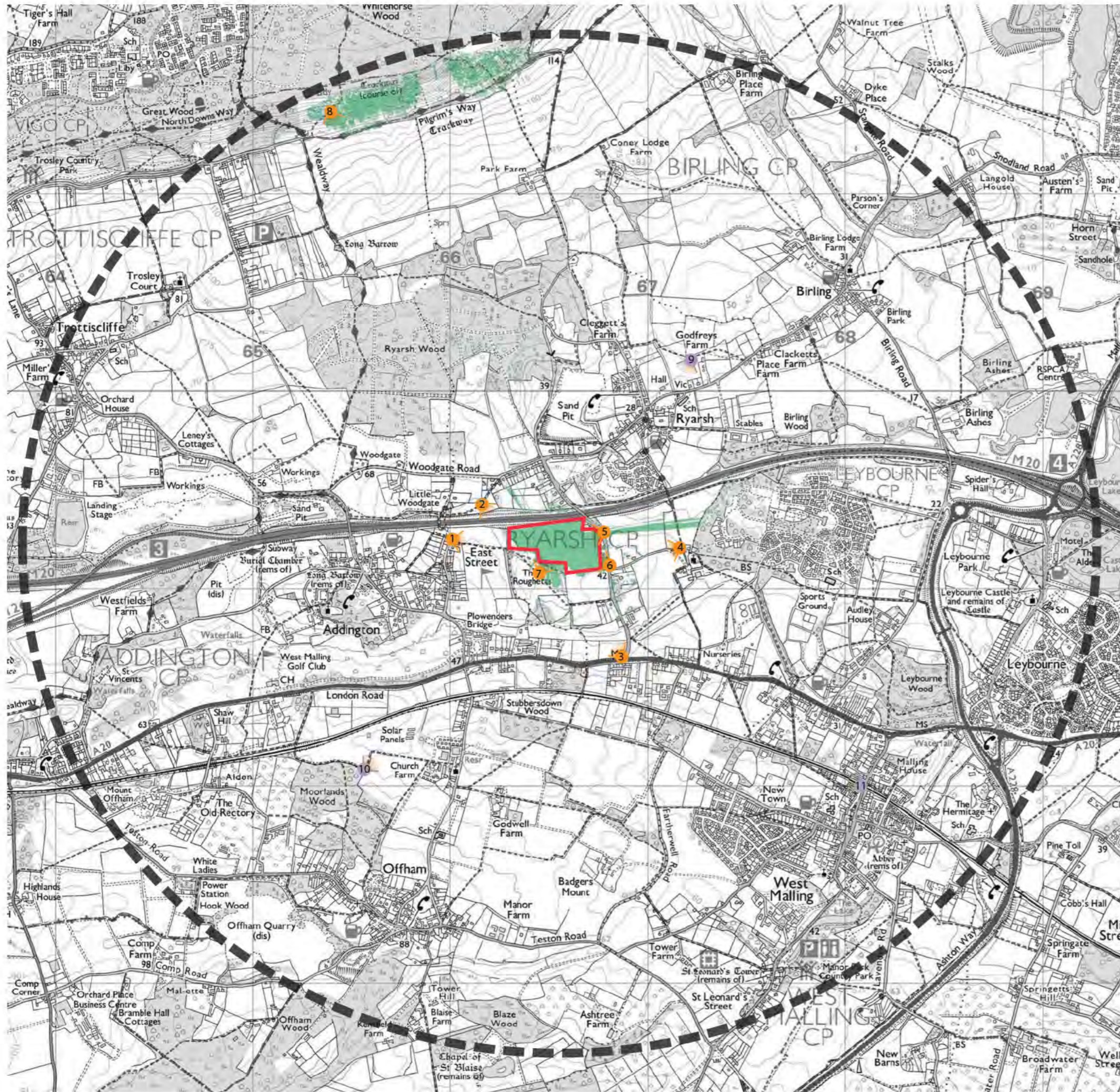


-  Planning Application Boundary
-  Long Term Monitoring Location
-  Short Term Monitoring Location
-  Sensitive Receptor Locations



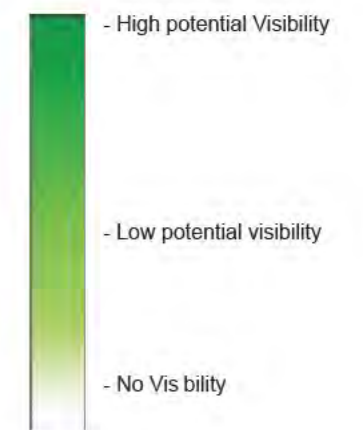
Project Details	WIE12631-117: Land West of Roughetts Road, Ryarsh, West Malling
Figure Title	Figure 3: Noise Monitoring and Sensitive Receptor Locations
Figure Ref	WIE12631-117_GIS_SR_3A
Date	2023
File Location	N:\Projects\WIE12631-117\GIS\WIE12631-117_GIS_EIA

Figure 4: Zone of Theoretical Visibility and Proposed Viewpoints



-  Site Boundary
-  2.5km Study Area
-  Potential Viewpoint Location
-  Viewpoint considered but scoped out

Key for Theoretical Visibility:



Notes:

The Zone of Theoretical Visibility (ZTV) uses a Digital Surface Model (DSM) which is overlain on a 1:25,000 Ordnance Survey base map. The ZTV map indicates the potential area from which visibility of the existing site might be possible. The ZTV map is based on the baseline surface model which does not account for the effects of the proposed development. The ZTV map does not account for the likely orientation of a viewer for example when travelling in a vehicle nor does it account for the diminishment of visibility with increased viewing distance caused by the limitations of the human eye and prevailing atmospheric conditions. As such, the ZTV is an over-estimate of the extent of visibility. It is an assessment tool but should not be considered an absolute measure of visibility and does not represent the visual impact.



Project Details	WIE12631-117: Land West of Roughetts Road, Ryarsh, West Malling
Figure Title	Figure 4: ZTV and Viewpoints
Figure Ref	WIE12631-117_GR_EIA_4A
Date	2023
File Location	\\s-inc\wief\projects\wie12631\117\graphics\eia\issued figures

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