

# ELTON 2 QUARRY WASTE PROCESSING & STORAGE ENVIRONMENTAL PERMIT APPLICATION

## Environmental Risk Assessment

Prepared for: Ingrebourne Valley Limited  
Client Ref: 01526

SLR Ref: 416.01526.00029  
Version No: 1  
October 2021



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## 1.0 INTRODUCTION

Ingrebourne Valley Limited (IVL) has instructed SLR Consulting Limited (SLR) to prepare a bespoke Environmental Permit (EP) application for inert waste processing and storage activities associated with the proposed restoration of Elton 2 Quarry, located near Warmington, Northamptonshire.

This Environmental Risk Assessment (ERA) provides an assessment of the risks to the environment and human health from emissions that may be associated with waste operations at the Site. It has been completed in accordance with the Environment Agency (EA) Guidance: Risk assessments for your environmental permit<sup>1</sup>. The aim of the assessment is to identify any significant risks and demonstrate that the risk of pollution or harm will be acceptable by taking the appropriate measures to manage the risks.

EA guidance requires that all receptors that are near the Site and could reasonably be affected by the activities are identified and considered as part of the assessment.

For the purposes of this risk assessment, a 2km radius from the Site's EP boundary has been adopted to identify the presence of any Sites of Special Scientific Interest, a 1km radius for potentially sensitive receptors of ecological importance along with features such as Sites of cultural and natural heritage and a radius of 500m for all other potentially sensitive receptors (for example, residential, commercial, industrial, agricultural and surface water receptors).

### 1.1 Proposed Development

The site will be used for the treatment and storage of inert waste before it is transferred to Elton 2 Quarry for restoration of the quarry void as a recovery activity.

Treatment will consist of the crushing and screening of inert waste materials to ensure that they are of a suitable size for the quarry restoration and to remove any non-conforming material.

The site will only accept inert waste. Strict waste acceptance procedures will be in place at the site to ensure that non inert waste is not accepted at the site. These procedures include the following:

- Pre-acceptance checks prior to accepting waste at the Site, including source checking of the waste characterisation data provided by the waste producer;
- Waste acceptance checks upon delivery to site to ensure that the wastes are as described, and as permitted within the Environmental Permit; and
- Actions to be taken if waste not permitted by the Environmental Permit is delivered to site.

Inert waste will be stored in stockpiles within the processing area pre- and post-treatment.

It is anticipated that restoration of the quarry will be carried out for 9 months of each year in order to avoid the wetter winter months. It is therefore proposed that up to 30,000m<sup>3</sup> (54,000 tonnes) of material would be stockpiled at any one time. This is in order to provide the operational flexibility required to meet the restoration timescales required by the planning permission.

Articulated dump trucks (ADT) will be used to transfer the inert wastes via the haul road to the restoration site at Elton 2 Quarry.

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<sup>1</sup> Environment Agency Guidance Risk Assessments for your environmental permit, last updated December 2020

## 2.0 ENVIRONMENTAL RISK ASSESSMENT

### 2.1 Overview of approach

This ERA has been carried out in accordance with the EA's guidance which uses the following approach for identifying and assessing the risks in six steps:

**Step 1** Identify and consider risks for your Site, and the sources of the risks;

**Step 2** Identify the receptors (people, animals, property and anything else that could be affected by the hazard) at risk from your Site;

**Step 3** Identify the possible pathways from the sources of the risks to the receptors;

**Step 4** Assess risks relevant to your specific activity and check they're acceptable and can be screened out;

**Step 5** State what you'll do to control risks if they're too high;

**Step 6** Submit your assessment as part of your permit application.

### 2.2 Consideration of risks

#### 2.2.1 Potential Risks

Step 1 considers the potential risks to the environment from the proposed development. The risk assessment must identify whether any of the following risks could occur and what the environmental impact could be:

- any discharge, for example sewage or trade effluent to surface or groundwater;
- accidents;
- odour (not for standalone water discharge and groundwater activities);
- noise and vibration (not for standalone water discharge and groundwater activities);
- uncontrolled or unintended ('fugitive') emissions, for which risks include dust, litter, pests and pollutants that shouldn't be in the discharge;
- visible emissions, e.g. smoke or visible plumes;
- release of bioaerosols, for example from shredding, screening and turning, or from stack or open point source release such as a biofilter.

In addition, the EA guidance identifies risks from specific activities for which additional risk assessments must be complete depending on the activity your bespoke permit relates to and where substances are released or discharged into the environment. The EA dust management guidance risk assessment for installations, waste and mining waste operations and landfill Sites indicates that a Dust Management Plan (DMP) should be used to consider the additional risks for activities keeping or treating (or both) aggregates, soils, ashes or similar materials. Accordingly, an assessment of those risks and measures for their appropriate management is provided in the DMP report in section 7 of this application and are not considered in this ERA.

Potential risks can be screened out if they are not relevant for the site or by carrying out tests to check whether they're within acceptable limits or environmental standards. If they are, any further assessment of the pollutant is not necessary because the risk to the environment is insignificant.

## 2.2.2 Risks relevant to the site

The storage and pre- and post-treatment of inert waste will not result in any point source discharges to air, surface water or groundwater, visible emissions or releases of bioaerosols.

Therefore, only the following risks are required to be assessed for the recovery operation:

- Odour;
- Noise and Vibration;
- Fugitive Emissions (including dust, mud, litter and pests); and
- Accidents.

## 2.3 Receptors

Step 2 of the risk assessment considers the receptors (people, animals, property and anything else that could be affected by the hazard) that could be at risk from the site. The surrounding land use and receptors are described in detail below and a summary is provided in Table 2.

### 2.3.1 Site Setting

The area to be occupied by the proposed facility is approximately 10 hectares in size and is located to the north of the village of Warmington and to the west of Elton at National Grid Reference TL 08175 92245. The A605 lies adjacent to the southern boundary of the site, from which the site is accessed via a road leading to the north-eastern corner of the processing area. A track runs adjacent to the northern boundary beyond which lie agricultural fields. The river Nene runs to the west and north of the facility and the existing Elton 1 site, now restored to an agricultural reservoir, which lies to the west. Beyond Elton 1 lies the proposed Elton 2 Quarry which will be served by this proposed waste treatment facility.

The proposed facility will occupy the existing plant and processing area which was used for the processing and restoration of the Elton 1 site. The area also includes silt settlement lagoons associated with mineral washing during the extractive phase of Elton 2, which will be separately permitted as a mining waste operation.

The site location is shown in Drawing 01 and the Environmental Setting of the site is illustrated on Drawing 03.

A summary of the immediate surrounding land use is provided in Table 1 below.

**Table 1 Immediate Surrounding Land Uses**

Boundary	Description
North	A track lies along the northern boundary, beyond which lies an area of agricultural land and woodland.
East	The A605 lies to the immediate east of the Site, beyond which lies an area of agricultural land.
South	The A605 lies adjacent to the southern boundary, beyond which lies agricultural land and residential dwellings in the village of Warmington.
West	Immediately to the west lies a woodland, a ditch and the agricultural reservoir (formed from restoration of the Elton 1 site) and then the river Nene.

The immediate surrounding land use and receptors are described in further detail below

### 2.3.2 Agricultural

Agricultural land lies directly adjacent to the northern boundary and beyond the A605 to the south.

### 2.3.3 Commercial and Industrial

The nearest commercial properties are the HW Development Ltd, Independent Mortgage Helpline and PDG Architects, which lie 480m south of EP boundary.

There are no industrial premises with 500m of the EP boundary.

### 2.3.4 Local Transport Network

The A605 runs adjacent to the southern boundary of the site. A bridleway lies along the western boundary.

### 2.3.5 Recreational

The closest recreational receptor is the Warmington Fun Field, which lies 400m southeast from the EP boundary.

### 2.3.6 Residential

The nearest residential properties are dwellings within the village of Warmington, 450m south of the site along Peterborough Road.

### 2.3.7 Woodland and Open Land

There are various parcels of woodland and open land within 500m of the Site. The closest priority woodlands are located adjacent to the western and northern boundary of the Site, which are unnamed. Additional priority woodland parcels lie 150m east, 315m north, 400m west and 450m east of the EP Boundary.

An area of open land lies immediately north of the Site boundary. Open land lies beyond the A605 to the east and south.

## 2.4 Geology

The bedrock for the site comprises of the Grantham Formation and Whitby Mudstone Formation<sup>2</sup>. The superficial deposits for the site are alluvium which consists of clay, silt, sand and gravel.

## 2.5 Hydrogeology

### 2.5.1 Aquifer Characteristics

The Multi-Agency Information for the Countryside (MAGIC) map classifies the underlying bedrock of Blisworth Clay Formation and Cornbrash Formation as a Secondary A described as:

*“permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers.”*

The Groundwater Vulnerability Map on MAGIC identifies that the majority of the Site lies within a “high” groundwater vulnerability zone. Along the western boundary the site lies within a “unproductive” groundwater vulnerability zone.

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<sup>2</sup> [Geology of Britain viewer | British Geological Survey \(BGS\)](#) accessed March 2021



## 2.6 Hydrology

### 2.6.1 Surface Water in the Vicinity of the Site

A drainage ditch is located 30m north of the haulage road, which drains west to the river Nene. Three further drainage ditches are located 75m west, 100m east, west and 450m southeast of EP boundary.

The agricultural reservoir, formed from the restoration of the Elton 1 Site, is located 100m to the west.

The River Nene, at its nearest point, lies 140m west of the site.

### 2.6.2 Catchment Area

A review of the Data Catchment Explorer<sup>3</sup> confirms that the Site lies within the Nene Middle operational catchment area.

### 2.6.3 Flood Zone

The Flood Map for Planning<sup>4</sup> confirms that the Site does not lie within a flood zone.

### 2.6.4 Abstractions & Source Protection Zone

The MAGIC map confirms that the site does not lie within a Source Protection Zone<sup>5</sup>. A review of the Envirocheck report identified that the nearest licensed or private abstraction is located 240m to the west of the Site.

## 2.7 Ecology

### 2.7.1 European/International Designated Sites

A review of the MAGIC map confirms that there are no SSSI located within 2km of the site EP boundary, and that there are none of the following within a 1km radius of the site's EP Boundary:

- Special Areas of Conservation;
- RAMSAR; or
- Special Protection Areas.

### 2.7.2 National/Locally Designated Sites

A review of MAGIC map confirms that there are none of the following within a 2km of the EP boundary:

- Ancient Woodland;
- Local Nature Reserves (LNR);
- Area of Outstanding Natural Beauty; or
- National Nature Reserve.

### Local Wildlife Sites

A review of the Nature and Heritage Conservation Screening Report identifies two Local Wildlife Sites:

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<sup>3</sup> Environment Agency, Catchment Data Explorer, available at <https://environment.data.gov.uk/catchment-planning/>. Accessed in March 2021

<sup>4</sup> Gov.uk, Flood Map for Planning, available at <https://flood-map-for-planning.service.gov.uk/>, accessed in March 2021

<sup>5</sup> Multi-Agency Geographical Information for the Countryside (MAGIC) Map, available at [www.magic.gov.uk](http://www.magic.gov.uk), accessed in March 2021

- Lady Margaret’s wood which lies adjacent to the western and northern EP boundaries. Designated for supporting nine ancient woodland indicator species; and
- Eaglethorpe New Lake (formed from the restoration of Elton 1 site and is only part of the Elton 1 reservoir in the shallows) which lies beyond Lady Margaret’s Wood to the west. Designated for its marsh, fen and swamp indicator species which are present including meadowsweet *Filipendula ulmaria* and water forget-me-not *Myosotis scorpioides*. This area is safeguarded from the Elton 2 proposals.

### Protected Species

The Nature and Heritage Conservation Screening Report in Appendix 1, confirms that the River Nene, which lies approximately 140m west of the Site at its nearest point, is a protected species European eel migratory route.

### Protected Habitats

The Nature and Heritage Conservation Screening Report confirms that a protected habit including deciduous woodland lie immediately to the west and north of the Site.

## 2.8 Other Designated Receptors

### 2.8.1 Listed Buildings

There are multiple listed buildings within 1km of the Site. The buildings are located to the northeast and west, with the closest listed building, Eaglethorpe House which is a Schedule II being located 480m from the southern EP boundary. The closest Schedule II\* building is located 600m northeast of the EP boundary. The closest Schedule I building, Elton Hall is located 590m northeast of the EP boundary. These are illustrated on Drawing 03 Environmental Site Setting & Receptors.

### 2.8.2 Registered Parks and Gardens

A review of the MAGIC Map confirms that one Registered Parks and Gardens (Elton Hall) lies to the north-east of the site boundary.

### 2.8.3 Scheduled monuments

A review of the MAGIC map confirms that one Scheduled Monument, the Little Green moated site lies within 1km of the EP boundary, located approximately 460m to the south-east.

### 2.8.4 Other Receptors

A review of MAGIC map confirmed that none of the following are situated within 2km of the Site:

- Registered Battlefields; or
- World Heritage Sites.

## 2.9 Summary of Receptors

Local Receptors within 500m of the Site are identified in Table 2, along with cultural and ecological receptors within 1km.

**Table 2 Identified Receptors**

Receptor Name	Receptor Type	Direction from Site	Approximate Distance from Site Boundary (at nearest point) (m)
Local receptors within 500m of the Environmental Permit Boundary as shown on Drawing 03 Environmental Site Setting			
A605	Road Network	East and South	Adjacent
Bridleway	Local Transport Network	North and West	Adjacent
Woodland	Priority Woodland /Protected Habitat	North and West	Adjacent
Agricultural Land	Agricultural	North, East, South and West	Adjacent
Surface water drains	Surface water	North, East, Southeast and West	30
Agricultural reservoir (formed from the Elton 1 site)	Surface water	West	100
Woodland	Priority Woodland	East	150
Woodland	Priority Woodland	North	315
Woodland	Priority Woodland	West	400
Woodland	Priority Woodland	East	450
Houses in Warmington	Residential	Southwest	450
Warmington Fun Field	Recreational	Southeast	400
HW Development Ltd	Commercial/industrial	South	480
PDG Architects	Commercial/industrial	South	480
Independent Mortgage Helpline	Commercial/industrial	South	480
Cultural and ecological receptors within 1km of the EP boundary as shown in Drawing 03 Environmental Site Setting and Receptors and the Nature and Heritage Report within Appendix 1.			
Elton Hall	Registered Parks and Gardens	West	Adjacent
Lady Margaret's Wood	Local Wildlife Site	West	Adjacent
Eaglethorpe New Lake (shallows of the reservoir)	Local Wildlife Site	West	80
River Nene – eel migratory route	Protected Fish Migratory Route/ protected species	West	140
Eaglethorpe House	Listed Building – Schedule II	South	480
Little Green moated site	Schedule Monuments	Southeast	460
Elton Hall	Listed Building – Schedule I	Northeast	590
Listed building	Listed Building – Schedule II*	Northeast	600

## 2.10 Pathways, control measures and risk assessment

The following tables, 3-6, present a summary of the potential risks to receptors based on an assessment of the hazard and the pathway (Step 4) for the relevant factors identified in section 3.3.2 as follows:

- Odour;
- Noise and Vibrations;
- Fugitive Emissions (including dust, mud, litter and pests); and
- Accidents.

The assessment includes consideration of the control measures which will be in place to mitigate potential harm and manage these risks (Step 5).

**Table 3 Odour Risk Assessment and Mitigation Plan**

What do you do that can harm and what could be harmed			Managing the Risk	Assessing the Risk		
Hazard	Receptor	Pathway	Risk Management	Probability of Exposure	Consequences	What is the overall risk
What has the potential to cause harm?	What is at risk/What do I wish to protect?	How can the hazard get to the receptor?	What measures will you take to reduce the risk? Who is responsible for what?	How likely is the contact?	What is the harm that can be caused?	What is the risk that still remains? The balance of probability and consequence
Odour from receipt of non-conforming waste	Sensitive receptors listed in Table 2 including residential, commercial and recreational receptors.	Air	<p>Only uncontaminated inert materials sourced from the local area, suitable for use in the quarry restoration, will be processed. The permitted waste types are not odorous.</p> <p>Strict waste acceptance procedures will ensure that no unauthorised materials are accepted at the Site, including but not limited to basic characterisation and visual inspection.</p> <p>Site operatives will conduct daily inspection of the perimeter to identify any unacceptable odours. Site personnel will also conduct informal olfactory monitoring throughout the working day and are encouraged to report any odours they notice.</p> <p>If any odours are identified the cause will be investigated and odorous materials will be isolated in a sealed container before removal off site to a suitably licenced treatment facility.</p> <p>The results of all inspections or investigations in response to complaints will be recorded in the Site Diary.</p> <p>The Site Manager will be responsible for implementing Risk Management measures in accordance with operational and management procedures.</p>	Low	Odour Nuisance and loss of amenity	Low

**Table 4 Noise Risk Assessment and Management Plan**

What do you do that can harm and what could be harmed			Managing the Risk	Assessing the Risk		
Hazard	Receptor	Pathway	Risk Management	Probability of Exposure	Consequences	What is the overall risk
What has the potential to cause harm?	What is at risk/What do I wish to protect?	How can the hazard get to the receptor?	What measures will you take to reduce the risk? Who is responsible for what?	How likely is the contact?	What is the harm that can be caused?	What is the risk that still remains? The balance of probability and consequence
Engine noise from vehicles entering and exiting the Site	Sensitive receptors listed in Table 2 including residential, commercial, agricultural, recreational and ecological receptors.	Air	<p>The following measures will be employed to minimise emissions of noise as far as possible for the sensitive receptors identified in Table 2:</p> <ul style="list-style-type: none"> <li>• Site operations will be restricted to hours specified in the planning consent to minimise impact on receptors;</li> <li>• Speed limits will be implemented for vehicles using the Site;</li> <li>• Traffic calming measures will be implemented to enforce speed limits;</li> <li>• All visitors and haulage companies will be made aware of IVL's commitment to minimising noise emissions at the Site;</li> <li>• Access roads will be inspected regularly and maintained and repaired to minimise emissions of noise due to uneven and poor surfacing; and</li> <li>• Soil screening bunds will be used to block noise emissions.</li> </ul> <p>If any unacceptable noise levels are identified, the cause will be investigated. If a solution cannot be found within</p>	Low – Vehicle noise will be during operational hours only.	Noise disturbance	Low

			<p>an appropriate timeframe, operations will cease if required, until a solution can be implemented.</p> <p>Auditory inspections will be carried out daily and in response to complaints. A record of the inspection findings will be made in the Site diary.</p> <p>The Site Manager will be responsible for implementing risk management measures in accordance with operational and management procedures.</p>			
Noise from on-Site plant	Sensitive receptors listed in Table 2 including residential, commercial, agricultural recreational and ecological receptors.	Air	<p>The following measures will be employed to minimise emissions of noise as far as possible for the sensitive receptors identified in Table 2:</p> <ul style="list-style-type: none"> <li>• Site operations will be restricted to hours specified in the planning consent to minimise impact on receptors;</li> <li>• Soil screening bunds will be used to block noise emissions;</li> <li>• Plant will be selected and operated to minimise noise. All Site plant and machinery will be operated and maintained in accordance with manufacturer’s specifications;</li> <li>• Plant will be fitted with silencers where possible;</li> <li>• Plant will benefit from preventative maintenance to prevent fault-related noise;</li> <li>• The plant will be turned off when not in use; and</li> <li>• Mobile plant will use alternative non tonal reversing signals.</li> </ul> <p>If any unacceptable noise levels are identified, the cause will be investigated. If a solution cannot be found within</p>	Low-mobile, intermittent and during operational hours only.	Intermittent disturbance to receptors during operational hours.	Low

			<p>an appropriate timeframe, operations will cease if required, until a solution can be implemented.</p> <p>Noise monitoring will be carried out periodically to ensure that noise levels are acceptable.</p> <p>Auditory inspections will be carried out daily &amp; in response to complaints. A record of the inspection findings will be made in the Site diary.</p> <p>The Site Manager will be responsible for implementing risk management measures in accordance with operational and management procedures.</p>			
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**Table 5 Fugitive Emissions Risk Assessment and Management Plan**

What do you do that can harm and what could be harmed			Managing the Risk	Assessing the Risk		
Hazard	Receptor	Pathway	Risk Management	Probability of Exposure	Consequences	What is the overall risk
What has the potential to cause harm?	What is at risk/What do I wish to protect?	How can the hazard get to the receptor?	What measures will you take to reduce the risk? Who is responsible for what?	How likely is the contact?	What is the harm that can be caused?	What is the risk that still remains? The balance of probability and consequence
To Air:						
Dust from stockpiles and processing of inert materials.	Sensitive receptors listed in Table 2 including residential, commercial, agricultural recreational and ecological receptors.	Air	<p>The site will be operated in accordance with an approved Dust Management Plan.</p> <p>The following measures will be used to prevent mobilisation of dust from the loading and unloading and the screening, crushing and storage of materials:</p> <ul style="list-style-type: none"> <li>• Use soil screening bunds;</li> <li>• Monitoring of weather forecasts;</li> <li>• Cessation of deposition of dusty waste during dry or windy weather conditions;</li> <li>• Use of bowsers in dry conditions;</li> <li>• Locate equipment away from site boundary and receptors;</li> <li>• Drop heights will be minimised when depositing and screening inert materials; and</li> <li>• Equipment will be designed with dust mitigation.</li> </ul>	Low – due to operational measures, screening plantation which encloses the site and distance to receptors	Nuisance and harm to human health	Low

			<p>Visual inspections will be carried out daily and in response to complaints. The result of any inspections or investigations will be recorded in the Site Diary.</p> <p>The Site Manager will be responsible for implementing risk management measures in accordance with operational and management procedures.</p>			
Dust from vehicle movements.	Sensitive receptors listed in Table 2 including residential, commercial, agricultural recreational and ecological receptors.	Air	<p>The following measures will be used to prevent mobilisation of dust from vehicle movements:</p> <ul style="list-style-type: none"> <li>• Good housekeeping of roads and surfaces;</li> <li>• Enforcement of a speed limit to prevent mobilisation of dust;</li> <li>• Vehicle movement around site will be minimised where possible;</li> <li>• Monitoring of weather forecasts;</li> <li>• Cessation of deposition of dusty waste during dry or windy weather conditions;</li> <li>• Use of bowsers in dry conditions;</li> <li>• Vehicles will be sheeted when arriving and leaving;</li> <li>• All vehicles leaving the site will use the wheel wash; and</li> <li>• Abrupt changes in direction will be avoided.</li> </ul> <p>Visual inspections will be carried out daily and in response to complaints.</p> <p>The result of any inspections or investigations as a result of complaints will be recorded in the Site Diary.</p>	Low – due to operational measures and distance to receptors	Nuisance and harm to human health	Low

			The Site Manager will be responsible for implementing risk management measures in accordance with operational and management procedures.			
To Water:						
Contaminated Site run off	Sensitive receptors listed in Table 2 including road network and agricultural. Groundwater.	Land	<p>The following measures will be used to prevent contaminated Site run off:</p> <ul style="list-style-type: none"> <li>• Strict waste acceptance procedures will ensure that no unauthorised materials are accepted at the Site.</li> <li>• Only uncontaminated inert materials will be accepted at the site. Accordingly, contaminated leachate and run-off will not be generated as a result of waste accepted;</li> <li>• Vehicles will benefit from a schedule of preventative maintenance to prevent leaks;</li> <li>• All tanks containing potentially polluting substances will be adequately bunded i.e. to 110% of the maximum capacity;</li> <li>• Spill kits will be provided on Site containing appropriate absorbent materials for use in the event of a spillage;</li> <li>• Bunds are located around the perimeter of the site to prevent site runoff.</li> </ul> <p>The Site's operational areas will be inspected twice-daily for signs of spillages.</p> <p>The result of any inspections or investigations as a result of complaints will be recorded in the Site Diary.</p> <p>The Site Manager will be responsible for implementing risk management measures in accordance with operational and management procedures.</p>	Low	Contamination	Low

Percolation of contaminated liquid into groundwater	Groundwater		<p>Strict waste acceptance procedures will ensure that no unauthorised materials are accepted at the Site. Only uncontaminated inert materials will be accepted. Accordingly, contaminated leachate and run-off will not be generated as a result of waste accepted.</p> <p>Liquids will be stored in impermeable containers and bunds located in areas with hardstanding.</p> <p>The result of any monitoring or investigations as a result of complaints will be recorded in the Site Diary.</p> <p>The Site Manager will be responsible for implementing risk management measures in accordance with operational and management procedures.</p>	Low	Contamination	Low
Pests						
Birds, pests and insects attracted to Site	Sensitive receptors listed in Table 2 including residential, commercial, agricultural recreational and ecological receptors.	Land, Water and Air	<p>The inert waste types accepted at the Site are unlikely to attract birds, pests and insects.</p> <p>Strict waste acceptance procedures will ensure that no unauthorised wastes are accepted.</p> <p>In the event that birds, pests and insects are identified at the Site appropriate remedial action will be taken. If necessary, a specialist pest control contractor will be employed to relocate the pests.</p> <p>Investigations will be conducted daily by Site personnel of the operational areas to identify birds, pests and insects.</p> <p>The result of any inspections or investigations as a result of complaints will be recorded in the Site Diary.</p> <p>The Site Manager will be responsible for implementing risk management measures in accordance with operational and management procedures.</p>	Low	Nuisance, potential risk to health	Low

Mud/Litter							
Litter from waste	Sensitive receptors listed in Table 2 including road and bridleway network, residential, commercial, agricultural recreational and ecological receptors.	Air	<p>Waste acceptance procedures will ensure that only authorised wastes are accepted. The waste type accepted at the Site are unlikely to generate litter.</p> <p>The Site will benefit from good housekeeping and daily sweeping or cleaning of operational areas/the Site perimeter.</p> <p>The Site and its immediate surrounding will be inspected on a daily basis and action will be taken to maintain the area free of significant accumulations of litter and debris.</p> <p>The result of any inspections or investigations as a result of complaints will be recorded in the Site Diary.</p> <p>The Site Manager will be responsible for implementing risk management measures in accordance with operational and management procedures.</p>	Low	Nuisance from litter. Dangerous conditions on roads, and bridleways.	Low	
Mud on roads	Local Road Network	Transferral of mud on vehicles wheels	<p>Site surfaces and the access road will benefit from good housekeeping and maintenance to maintain the integrity of the surfacing.</p> <p>A road brush will be used when necessary to sweep the main access road.</p> <p>A wheel wash will be provided for muddy vehicles.</p> <p>In the event that mud, debris or waste arising from the Site is deposited outside the Site, the affected area will be cleaned, and traffic will be isolated from sources of mud and debris within the Site.</p> <p>The Site and its immediate surrounding will be inspected on a daily basis and action will be taken to maintain the area free of significant accumulations of mud.</p> <p>The result of any inspections or investigations as a result of complaints will be recorded in the Site Diary.</p>	Low	Nuisance from mud. Dangerous conditions on roads.	Low	

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			The Site Manager will be responsible for implementing risk management measures in accordance with operational and management procedures.			
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**Table 6 Accidents Risk Assessment and Management Plan**

What do you do that can harm and what could be harmed			Managing the Risk	Assessing the Risk		
Hazard	Receptor	Pathway	Risk Management	Probability of Exposure	Consequences	What is the overall risk
What has the potential to cause harm?	What is at risk/What do I wish to protect?	How can the hazard get to the receptor?	What measures will you take to reduce the risk? Who is responsible for what?	How likely is the contact?	What is the harm that can be caused?	What is the risk that still remains? The balance of probability and consequence
Leakage of fuel and oils from Site plant	Groundwater, agricultural land, road network.	Land	<p>The following measures will be implemented to manage leaks from Site plant:</p> <ul style="list-style-type: none"> <li>Liquids will be stored in impermeable containers and bunds located in areas with hardstanding;</li> <li>All tanks containing potentially polluting substances will be adequately bunded i.e. to 110% of the maximum capacity;</li> <li>Mobile plant will be monitored by Site personnel for identification of leaks and repairs carried out if necessary;</li> <li>Spill kits will be provided on Site containing appropriate absorbent materials for use in the event of a leakage;</li> <li>Mobile plant will benefit from preventative maintenance in accordance with manufacturers instructions; and</li> <li>The Site staff will undertake daily visual monitoring for evidence of spillage and leakage.</li> </ul> <p>The result of any inspections or investigations as a result of complaints will be recorded in the Site Diary.</p>	Low	Contamination of surrounding land and road network.	Low

			The Site Manager will be responsible for implementing risk management measures in accordance with operational and management procedures.			
Fire	Sensitive receptors listed in Table 2 including residential, commercial, recreational, ecological and agricultural receptors.  Site personnel.	Air and Land	<p>Only inert waste which will not burn will be accepted at the Site. In order to minimise the occurrence of fire from other sources, and ensure Site personnel are equipped to deal with any unlikely occurrences, the following measures will be implemented:</p> <ul style="list-style-type: none"> <li>• No burning of other waste will take place on Site;</li> <li>• Smoking will not be permitted in the operational areas of the Site;</li> <li>• Employees will receive annual training in fire prevention including the identification of fire hazards, the use of fire extinguishers, emergency procedures and evacuation;</li> <li>• Firefighting equipment will be kept in the Site office;</li> <li>• In the unlikely event of a fire, water bowsers will be used to dampen material and prevent fire spreading;</li> <li>• Any fire on Site will be treated as an emergency.</li> </ul> <p>The operational areas of the Site will be inspected twice a day for signs of a fire. The plant inspection schedule will include checks of electrical equipment within the Site to ensure that any faults are identified and repaired.</p> <p>The results of all inspections will be recorded in the Site Diary.</p> <p>Actions to be taken in the event of a fire:</p> <ul style="list-style-type: none"> <li>• Notify the fire brigade immediately and the EA as soon as practicable;</li> </ul>	Low	Harm to human health, harm to operations, pollution of surroundings.	Low



			<ul style="list-style-type: none"> <li>Isolate the burning area and attempt to extinguish the fire utilising the onsite fire extinguishers, if safe to do so;</li> <li>Prevent, if possible, contaminated Site drainage from entering any unsurfaced ground; and</li> <li>Evacuate the Site if the fire is not containable.</li> </ul> <p>The Site Manager will be responsible for implementing risk management measures in accordance with operational and management procedures.</p>			
Flooding	Sensitive receptors listed in Table 2 including road network, residential, commercial, agricultural and recreational Site personnel. Groundwater.	Land	<p>The Flood Map for Planning confirms that the Site does not lie within a flood zone.</p> <p>An evacuation plan will be implemented in the unlikely event of flooding.</p> <p>The Site Manager will be responsible for implementing risk management measures in accordance with operational and management procedures.</p>	Low	Harm to human health, contamination of groundwater and surface water.	Low
Contamination caused by unauthorised waste receipt	Sensitive receptors listed in Table 2 including road network, residential, commercial, agricultural recreational and	Air, Land and groundwater	<p>Strict waste acceptance procedures will ensure only authorised inert materials will be accepted at the Site.</p> <p>These procedures include pre-acceptance checks, an approved suppliers list, basic characterisation and visual checks.</p> <p>Any non-conforming or unauthorised waste will be rejected.</p> <p>In the event that unauthorised waste is identified after the delivery vehicle has left the Site, it will be isolated, before</p>	Low	Nuisance, Contamination and harm to human health.	Low

	Site personnel.		being removed off Site to a suitably licenced facility for treatment and disposal.			
Security and Vandalism	Sensitive receptors listed in Table 2 including road and bridleway network, residential, commercial, agricultural and recreational Site personnel.	Air, Land and Water	<p>The Site will benefit from the following infrastructure to keep the Site secure, and prevent unauthorised access:</p> <ul style="list-style-type: none"> <li>• Visitor Sign in/Sign out book;</li> <li>• Perimeter fencing/hedging and lockable gates.</li> </ul> <p>Site has security presence out of hours at all times.</p> <p>Operational procedures, including regular inspections, ensure continual monitoring of security provision at the Site.</p> <p>Site personnel will carry out daily inspections of the security infrastructure to ensure their continued integrity. In the event that repairs need to be made, temporary repairs will be made same day, and permanent repairs will be fitted within 5 working days.</p>	Low	Nuisance, Contamination and harm to human health.	Low

## 3.0 CONCLUSION

This environmental risk assessment has been undertaken in accordance with EA guidance. The assessment is provided as part of the application for the environmental permit for Elton 2 Quarry Waste Processing facility.

Qualitative risk assessment has considered odour, noise, fugitive emissions, dust, litter, mud, birds, vermin and insects, and potential for accidents and incidents. The assessment concludes that with the implementation of the risk management measures described above, including the implementation of the Dust Management Plan, that potential hazards from the proposed development are not likely to be significant and no further assessment is required.

# APPENDIX 1

## Nature & Heritage Conservation Screening Report

# Nature and Heritage Conservation

## Screening Report: Bespoke Waste

Reference	EPR/KB3305FK/A001
NGR	TL 08024 92214
Buffer (m)	270
Date report produced	29 March 2021
Number of maps enclosed	3

The nature and heritage conservation sites and/or protected species and habitats identified in the table below must be considered in your application.

### Nature and heritage conservation sites

Local Wildlife Sites (LWS)  
Eaglethorpe New Lake  
Lady Margaret's Wood

### Screening distance (m)

200

### Further Information

[Appropriate Local Record Centre \(LRC\)](#)

### Protected Species

European Eel migratory route

### Screening distance (m)

up to 500m

### Further Information

[Natural England](#)

Environment Agency. Dial 03708 506 506 for your local Fisheries and Biodiversity team

### Protected Habitats

Deciduous Woodland

### Screening distance (m)

up to 50m

### Further Information

[Natural England](#)



Where protected species are present, a licence may be required from [Natural England](#) to handle the species or undertake the proposed works.

The relevant Local Records Centre must be contacted for information on the features within local wildlife sites. A small administration charge may also be incurred for this service. [

**Please note** we have screened this application for protected and priority sites, habitats and species for which we have information. It is however your responsibility to comply with all environmental and planning legislation, this information does not imply that no other checks or permissions will be required.

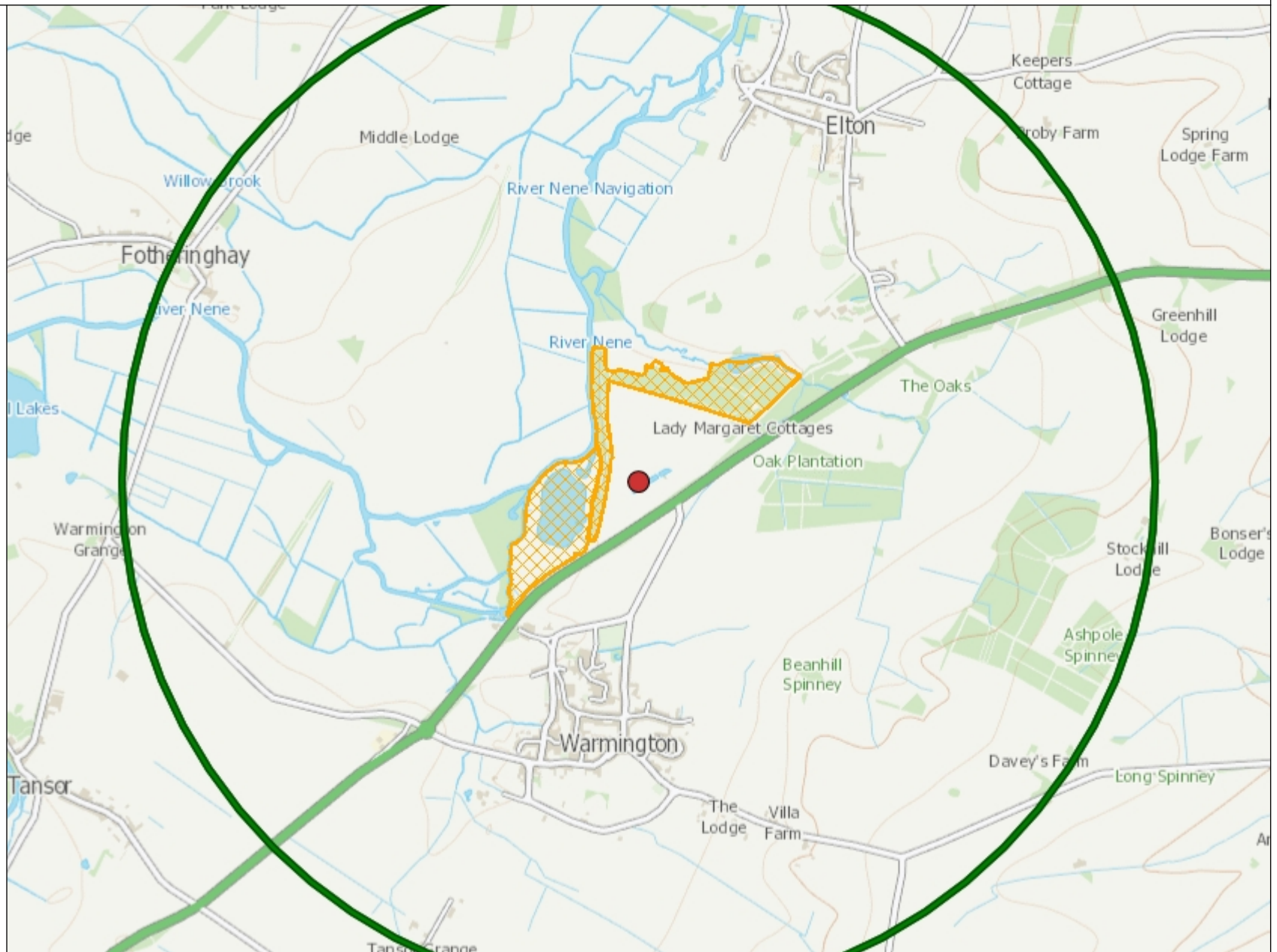
**Please note** the nature and heritage screening we have conducted as part of this report is subject to change as it is based on data we hold at the time it is generated. We cannot guarantee there will be no changes to our screening data between the date of this report and the submission of the permit application, which could result in the return of an application or requesting further information.

# Local Wildlife Sites



## Legend

 Local Wildlife Sites



1: 25,000

0 625




Metres

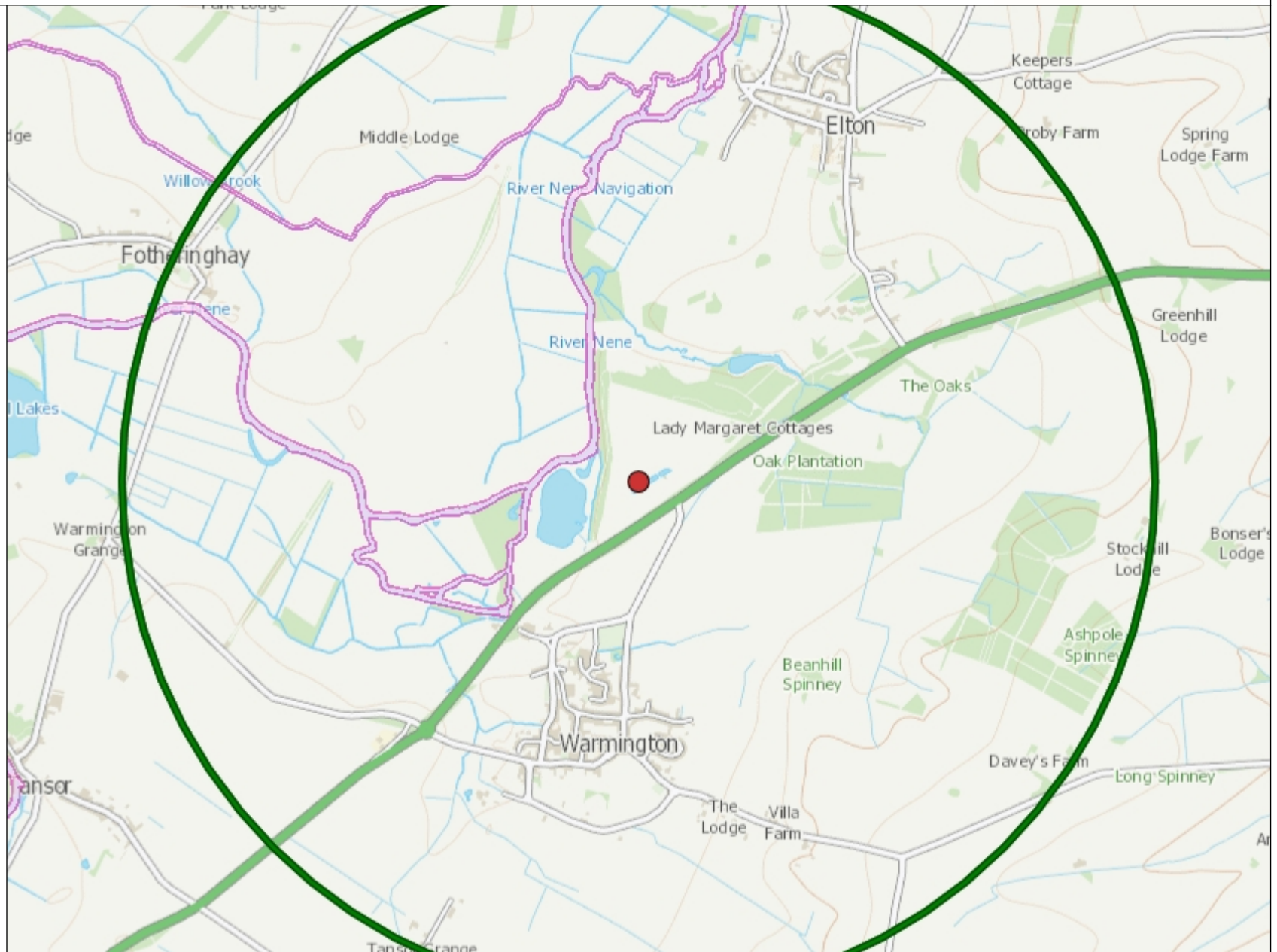


# Protected Species

## Legend

Protected species screened for Env Permits - complete set


-  Protected species, non fish
-  Protected fish
-  Protected fish migratory route

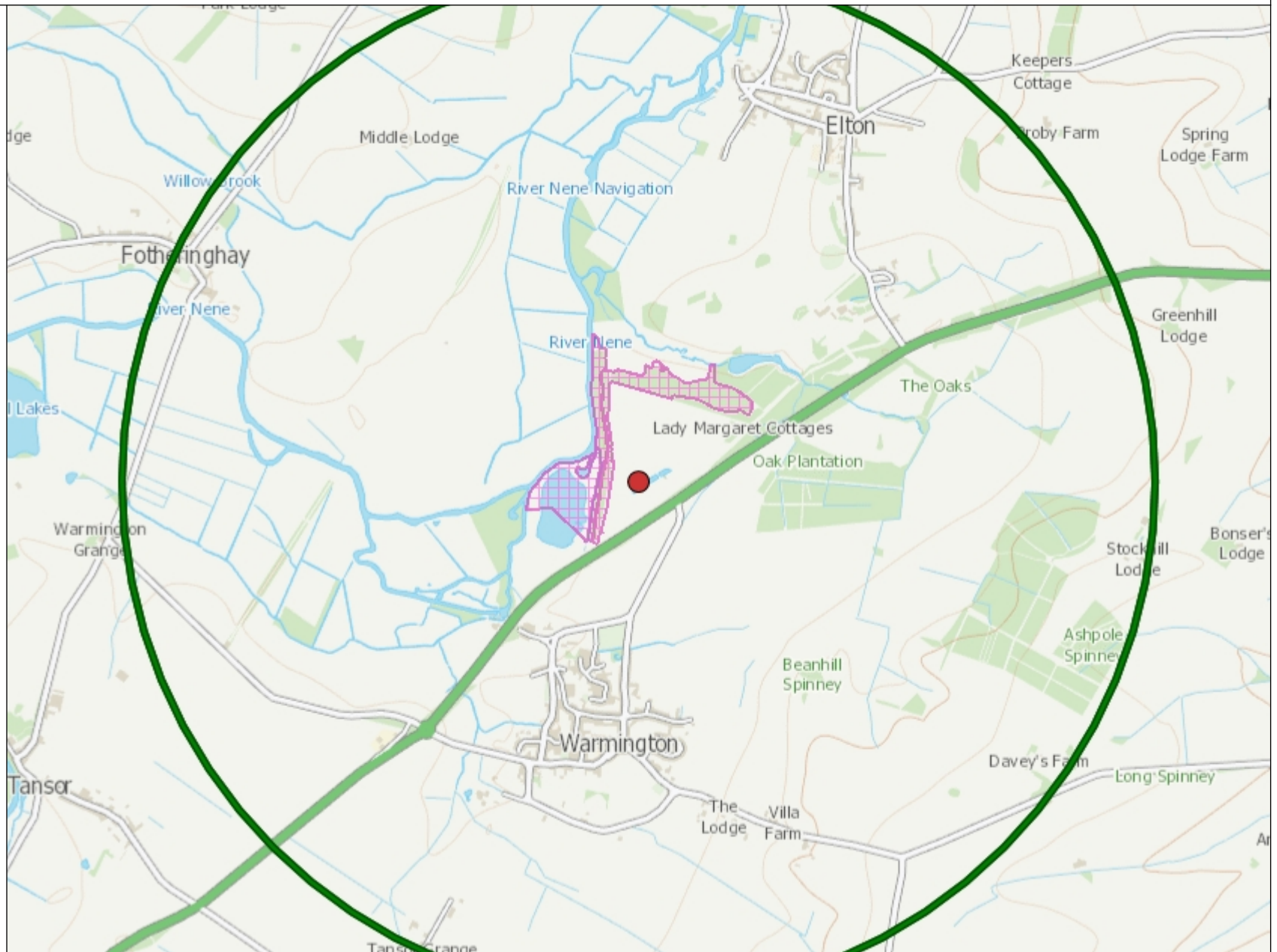




# Protected Habitats

## Legend

-  Protected Habitats screened for En Permits



## EUROPEAN OFFICES

### United Kingdom

#### AYLESBURY

T: +44 (0)1844 337380

#### BELFAST

T: +44 (0)28 9073 2493

#### BRADFORD-ON-AVON

T: +44 (0)1225 309400

#### BRISTOL

T: +44 (0)117 906 4280

#### CARDIFF

T: +44 (0)29 2049 1010

#### CHELMSFORD

T: +44 (0)1245 392170

#### EDINBURGH

T: +44 (0)131 335 6830

#### EXETER

T: + 44 (0)1392 490152

#### GLASGOW

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#### GUILDFORD

T: +44 (0)1483 889800

#### LONDON

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#### MAIDSTONE

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#### MANCHESTER

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#### NEWCASTLE UPON TYNE

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#### NOTTINGHAM

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#### SHEFFIELD

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#### SHREWSBURY

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#### STIRLING

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#### WORCESTER

T: +44 (0)1905 751310

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#### DUBLIN

T: + 353 (0)1 296 4667

### France

#### GRENOBLE

T: +33 (0)6 23 37 14 14