Fire Prevention Plan

Plan version: V1.0

Date of plan: November 2024

Site Details

Site name:	**Let's Recycle Artificial Grass Ltd (LRAG)**
Site address:	**Belvoir Business Park, Woolsthorpe Road, Nottinghamshire, NG13 0GN**
Operator name:	**Let's Recycle Artificial Grass Ltd (LRAG)**

Who this plan is for

This document is designed for site management, staff, contractors in the prevention of a fire and to aid staff, contractors, and emergency services in the event of a fire.

Contents

Types of Combustible Materials

Combustible Waste

The proposal is for the storage and treatment of waste artificial grass. The site will accept end of life artificial grass from businesses around the UK. Table 1 shows the risk for fire and ignition of the waste material.

Combustible wastes at the site will include:

- plastics
- rubber
- sand

Table 1 Risk of fire and ignition risk

Products which may contain combustible materials	Fire risk	Ignition risk
Rubber surfaces	High	Low
Plastics (scrap fibres)	Low	Very low
Incoming artificial waste grass	Low	Low
Sand	Very Low/None	Very Low/None

Persistent Organic Pollutants (POPs)

The site does not accept Persistent Organic Pollutants (POPs). The artificial grass does not contain POPs, refer to Appendix 12 of the bespoke permit application for the technical specifications of the artificial grass and the sample results.

Other Combustible Materials

There will be other combustible materials on site such as fuel for the on-site plant and vehicles. Table 2 lists the risks of fire and ignition from these materials. These will be contained in a bunded fuel store, refer to the site layout plan in Appendix i of the FPP. The combustible material will be kept in accordance with the Control of Substances Hazardous to Health Regulations (COSHH).

Table 2 Other combustible materials

Other combustible products on site (non-waste and not for processing)	Fire risk	Ignition risk
Hydraulic oils	High	Medium
Diesel fuel for machines	High	Medium

Using this Fire Prevention Plan

Where the Plan is Kept and How Staff Know How to Use It

This Fire Prevention Plan (FPP) forms part of the Environment Management System (EMS). It sets out the fire prevention measures and procedures that will be in place and to use on site. This FPP is a standalone document within the EMS so that it can be easily refer to.

During an incident the FPP will be provided to the Fire and Rescue Services (FRS) , if it is safe and practical to do so. There will also be a copy of the FPP in a Fire Box at the entrance to the site.

The FPP will be kept under regular review and will be revise where necessary for example if:

- There is a reason to suspect it no longer meets the objectives of the Environment Agency (EA) guidance.
- The site has a fire or identify a near miss for a fire.
- Change to site activities.
- Changes to the environment in which the site is operating in, for example, if a school or residential development is built nearby.
- The EA ask LRAG to revise it due to some concern over the risk posed by site operation.

Any revision of the FPP, will be sent to the EA for approval. LRAG will implement the approved and revised FPP.

Where the Plan is Kept and How Staff Know How to Use It

All staff and contractors working on site will understand the contents of the FPP, which will be relevant to them, so that they know what they must do:

- To prevent a fire happening.
- During a fire, if one breaks out.

Contractors will receive an induction, which will cover training in the relevant sections of the FPP depending upon their role on site.

A paper copy of the site plan will be kept in the office on site, so that staff can access it easily. There will also be another copy in the fire box at the entrance to the site and an electronic copy held in LRAG computer system. The directors and site manager will have access to this.

Staff will know how to use the FPP. Induction training for all new site staff to include details in the FPP. In addition, there will be a minimum annual training in the implementation of the FPP.

Testing the Plan and Staff Training

LRAG Staff will be trained and will conduct regular exercises (at least every six months) to test how well LRAG FPP works.

The exercises will include, but will not be limited to:

- What staff need to do to prevent a fire occurring.
- What to do during a fire if one breaks out.
- Staff will understand how to assist the FRS.

Fire tests will be carried out every six months and the fire drills will be the responsibility of the technical competent manager/site manager.

The FPP will be reviewed annually, or sooner in the event of an operational change, near-miss, or incident. The training records will be retained in the site office and an electronic copy held as a backup.

Fire Prevention Plan Contents

Activities at the Site

All incoming vehicles arrive at the site entrance and report to the site office. The details of the load will be recorded, and a duty of care documents checked by the operator. If acceptable, a visual inspection is made of the load to correlate the load with the paperwork and environmental permit. If the waste is not suitable, it is rejected and returned either to the producer or to a suitable facility. If the waste complies, the vehicle is directed to the appropriate unloading area (incoming waste stored in the front yard refer to Appendix i – Site layout).

During the unloading, a second visual inspection is carried out. Should the waste be found to be unsuitable, it is either reloaded and removed from the site or, quarantined with removal arranged within five days.

Waste is sorted both by hand picking or by various pieces of plant (including the trommel) and transported (either via on-site plant, and machinery) to appropriate storage area refer to Appendix i.

Rejected wastes discovered at any stage in the process will be deposited in the relevant bin/skip outside provided for non-conforming wastes or rejected wastes. Where necessary, particularly where the rejected waste discovered would be classed as difficult, hazardous, or clinical waste, the EA will then be contacted to agree a course of action. The contents of the rejected waste bin/skip will be recorded in the site diary.

The waste artificial grass will be stored outside on an impermeable surface with a sealed drainage system.

Physical treatment is carried out in a dedicated area outside on site. The physical treatment of the waste artificial grass is done by beating and washing the waste artificial grass to remove the sand and rubber granules.

The sand and rubber granules will be removed and go through a second washed and then screened and separated. The separated rubber granules and sand will be bagged separately in to 1 tonne hessian bags *i.e.* bag of sand, bag of rubber granules and then moved into the building for drying. The sand and rubber are not deemed a waste. The rubber granules and sand after washing and drying will be reused on new artificial grass surfaces as originally designed.

The shredded wet waste artificial grass plastic is stored outside following treatment. The shredded artificial grass waste plastic is removed from site for onward treatment at a permitted facility. All relevant documentation will be completed. The product (sand and rubber granules) or shredded wet artificial grass waste plastic will be loaded onto the transportation vehicle using the telehandler.

There is a site office with staff car park, which will be located near to the entrance.

It is anticipated that approximately 12,000 tonnes of waste artificial grass will be delivered to the site annually.

Site Plan

The site plans are at the end of this document as Appendix i, ii.

- Site layout plan – Appendix i of the FPP.
- Site boundary – Appendix ii of the FPP.

Plan of Sensitive Receptors Near the Site

The main potential receptors near to the site are shown in Appendix iii.

Map 1 identifies receptors within 1km of the site, and locations are listed in Table a. Table a consists of local residents, commercial businesses near to the site, the local highway.

Map 2 identifies receptors within 2km of the site, and locations identified are listed in Table b. Map 2 identified two SSSI sites that are located over 1.7km south, south east, and north, north east of the site (Muston Meadows – north, north east and Briery Wood Heronry, Belvoir – south, south east).

The ground water is also a potential receptor, identified as ground water vulnerability high.

Prevailing wind

The prevailing wind over the site is from a south west direction, refer to Figure 1.

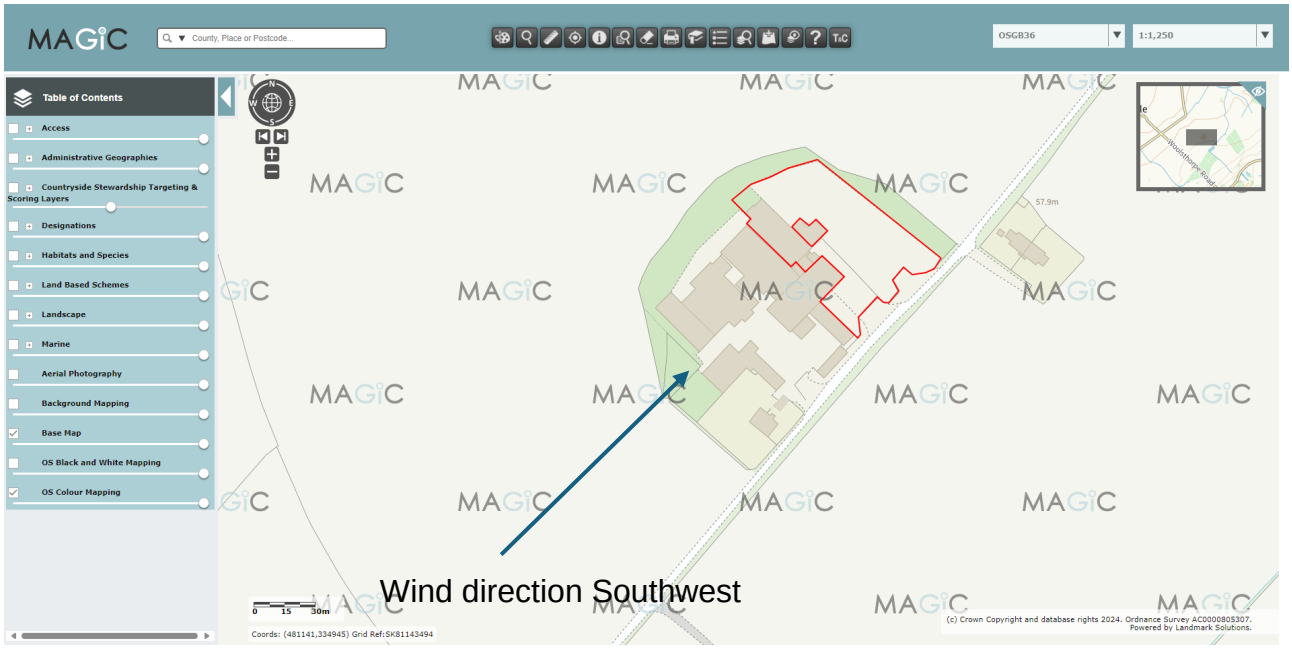


Figure 1 Prevailing wind over the site

Planned Events and Reasonably Foreseeable Unplanned Events

During planned downtime, material will be diverted to an alternative site through prior agreement, and in accordance with the environmental permit, no waste shall be accepted on site, unless the site can accommodate it and process without delay.

Temporary Site Closure/Unplanned Events

Preparation for reasonably foreseeable unplanned events will be made by prior agreement to divert waste to an alternative outlet with a local operator until the site is able to accept waste.

Manage common causes of fire

Arson

The site is surrounded by anti-climb fencing. The gate at the entrance is a steel structure, two meters high. The main gates will be padlocked when the site is not manned.

The site has Closed Circuit Television (CCTV) and the office has a fire alarm system. The CCTV can be accessed remotely.

The site has out of hours security monitoring, this is 24-hour security seven days a week.

The operating hours will be between 07:00 and 17:00 Monday to Friday, (Saturday and Sunday and Bank Holidays closed).

All perimeter fencing, gates will be checked on a regular daily basis. The results of the inspections will be marked on a record form. Defects in the gates or fencing which may permit unauthorised access to the site will be recorded in the site diary. Until repairs are carried out, temporary measures will be taken before the end of the working day, to ensure that access to the site through the defective gate/fence is not possible.

All gates will be locked, doors to buildings all locked and checked at the end of the working day. The office building has a security alarm system.

Procedures will be in place for all visitors/contractors to be escorted or, supervised within the building and main yard area of the site. During operational hours, all visitors will be asked to sign in to and out of the site.

Plant and Equipment

The following plant and equipment will be used on site for the movement and processing of waste:

- telehandler,
- unroller and pump tank,
- water storage and recirculating tank,
- screws,
- vibration screens,
- sand and rubber storage,
- graded bagging system,
- separator,
- settlement tank,
- inclined shredder,
- screens,

- bailing equipment.

Plant and equipment available on site for use to assist the FRS includes a telehandler. All mobile plant will be fitted with a fire extinguisher. The plant is maintained in accordance with the manufacturer's instructions and all plant and equipment is checked and serviced in accordance with the Health and Safety Executive (HSE) Lifting Operations and Lifting Equipment Regulations (L.O.L.E.R) and Provision and Use of Work Equipment (P.U.W.E.R) testing and recorded.

Electrical equipment is tested in accordance with HSE Portable Appliance Testing (PAT) and carried out annually.

Plant and equipment will be checked at the beginning of each day for leaks to the hydraulic systems, oils, and other fluids to prevent the trailing of any fluids around the site.

Plant and equipment which could accumulate dust will be regularly cleaned to ensure that no dust accumulates which could result in a fire hazard.

Plant keys will be removed from the ignition when unattended or not in use.

At the end of each working day the mobile plant will be parked in an area at least six metres away from the combustible wastes.

Plant equipment is only operated by trained driver / operators.

Electrical Faults Including Damaged or Exposed Electrical Cables

Electrics Certification

All electrical installations will be installed by competent and qualified contractors. The relevant test certificates will be kept on site. External cables will be armoured and checked as part of site daily checks.

Regular maintenance and electrical checks will be carried out by a qualified electrician throughout the year.

Electrical Equipment Maintenance Arrangements

Electrical equipment will be maintained in accordance with the recommendations issued by the installer. A competent and qualified electrical contractor will conduct all electrical maintenance. Electrical equipment is PAT tested and carried out annually.

All electrical equipment will be included in a ‘A17 - Electrical Equipment Maintenance Register’ and will be checked on an annual basis. The relevant test certificate will be kept at the site office.

Discarded Smoking Materials

Smoking on Site Policies

The entire site is a no smoking area.

Hot Works Safe Working Practices

Hot works would only occur on site as part of maintenance or repair programmes for plant and equipment, and do not form part of the waste processing operations at the site. A hot works permit must be gained prior to hot works commencing. This will only be granted once a risk assessment and method statement has been produced.

All dust and debris will be removed from the item requiring repair prior to hot works commencing, which will be confirmed by the site manager. A fire watch will be carried out for at least one hour following completion of hot works to ensure that the area is cooled and free from any source of re-ignition.

All hot works will have easy access to a fire extinguisher and will be monitored by the site manager. External contractors must be inducted and must also complete an appropriate risk assessment and method statement, agreed with the site manager who will issue the Hot Works Permit, prior to carrying out hot works.

Hot works do not form part of the waste process on site. Hot works may occur as part of plant maintenance, which may have to be carried out near to waste. Cutting by use of Stihl saw, oxyacetylene and/or welding is carried out in designated areas away from combustible waste storage. Manufactures instructions will be followed for safe use of equipment.

When required and approved, a registered sub-contractor with the required permit will be given permission to carry out hot-works. No gas bottles will be stored on site.

Industrial Heaters

Use of Industrial Heaters

No industrial heaters will be used on the site.

Hot Exhausts and Engine Parts

Fire Watch Procedures

There is a formal daily site inspection which takes place during the operating hours. This inspection will include detecting signs of a fire caused by dust settling on hot exhausts and engine parts. In addition, throughout the day, staff will be trained to be aware of any signs of a fire. If signs are detected, appropriate action will be taken to remove the risk or suppress the fire. A fire watch will also be carried out for an hour towards the end of the working day.

A fire watch is carried out as follows:

- Visual observations of the stockpiles will be recorded on the daily checklist, Environment Management System (EMS) form A20 ‘Site Environmental Inspection Form’.

- In the event of any concerns raised following visual observation of the waste artificial grass that may be on fire or at risk of being on fire, then fire procedures will be followed and actioned.

If there is a failure to tackle the fire safely, then the FRS would be called. The EA will be informed of any incident of fire, regardless of whether the FRS were required.

Ignition Sources

This section is not applicable as there will be no additional ignition sources other than those listed in this section *i.e.*: industrial heaters *etc*.

Ignition sources are listed in Table 3 and are kept at least six metres away from combustible materials.

Table 3 Ignition sources

Potential ignition source	Management of ignition source
Incoming waste contamination	Waste brought into the site could have contamination present including potential ignition sources *e.g.* batteries. Waste acceptance procedures will be in place and visual inspections are made at three points along the process. Any waste found to be non-conforming will be rejected at the earliest opportunity or quarantined ready for removal. Visual checks will be carried out throughout the day by the site manager and site operatives, and fire watches will be carried out.
Hot works	Hot works will be managed through a permit process and only carried out in designed areas, unless for specific parts of fixed plant. Fire extinguishers will be made available during all hot works and a fire watch is in place following completion of hot works for at least an hour.
Smoking	Smoking is prohibited on site.
Naked flames	There is a 'no naked flame' policy throughout the company.
Arson / vandalism	Security fencing and CCTV in place.
Heaters	There are no heaters on site.
Hot exhausts	All vehicles will be cleaned down, when necessary, throughout the day, and at the end of each shift.

Potential ignition source	Management of ignition source
	Regular fire watches will be carried out throughout the day.
Plant failure	Plant is maintained to the manufacturer's standards with planned preventative maintenance in place.
Operational sparks	Training is in place for all mobile plant operators to prevent contact or scraping of buckets on the floor of building / sealed surfaces areas to prevent the production of sparks.
Build-up of waste	Maximum volumes of waste will be in compliance with the EMS. All equipment is cleared of waste at the end of the day and periodically throughout the day, where necessary.

Hot and Dry Weather

The waste artificial grass has a very low risk of fire from external heating during hot and dry weather. The waste is stored in rolls and contains sand and rubber granules within the waste artificial grass. Refer to Appendix 15 – 'Labosport Technical report' of the bespoke permit application, that states, that the waste artificial grass material has a 'low radius' of ignition. The waste is stored outside (e.g. waste artificial grass, sand and rubber) and is unlikely to combust due to heating from sunlight. In addition, storage times will be kept to a minimum.

Batteries

No batteries will be stored on site.

Leaks and Spillages of Oils and Fuels

Fuels will be stored in a designed fuel store outside and combustible liquids such as waste oil will be stored in a covered metal bunded storage tank.

To minimise fluids leaking or trailing from site vehicles there is a preventative maintenance programme in place.

A spill kit will be located next to the oil and fuels store.

Build-up of Loose Combustible Waste, Dust and Fluff

Daily checks of plant and equipment include checks to ensure no build-up of dust or fluff. Dust and fluff will be cleared away immediately and the area regularly monitored to prevent further build-up. Regular inspections for maintenance / housekeeping will be in place throughout the site to prevent dust and fluff build-up. A cleaning regime is in place at the end of every day.

Drop heights will be also kept to a minimum to prevent excessive dust emissions caused by depositing loose wastes. If there is a risk that dust could be emitted following a malfunction or breakdown of plant, that piece of plant is shut down until it can be repaired, and the high dust risk will be reduced.

Reactions Between Wastes

The types of waste brought onto the site are unlikely to cause reactions. However, any incompatible waste encountered will be stored separately or quarantined until it can be removed to a suitably permitted site.

Waste Acceptance and Deposited Hot Loads

The waste acceptance procedure is as follows:

- All incoming waste vehicles report to the site office. The details of the load will be recorded, and a duty of care documents checked by the operators. Acceptable waste types as listed in the site's permit.
- During normal waste acceptance procedures, waste transfer notes will be checked, if applicable and any unauthorised wastes or wastes likely to be a fire hazard such as hot loads would be refused.
- If waste is not as described or not suitable, it is rejected.
- If accepted, a visual inspection is made of the load to correlate the load with the paperwork. The visual inspection also identifies potential fire risks and hot loads at an early stage. Each load is checked for steam or smoke, batteries (in particular lithium-ion batteries), oil or other contaminants (including rags soaked in oils or chemicals).
- If any such unauthorised waste is discovered once waste has been delivered, it will be isolated within the quarantine area and if hot either be left to cool, if appropriate, or a fire extinguisher used if there is an imminent risk of combustion. A fire watch will be carried out. The customer is to be contacted to arrange onward movement and the EA informed.
- If the waste complies, the vehicles is directed to the appropriate unloading area.

Prevent Self-Combustion

General Self-Combustion Measures

The First In, First Out (FIFO) stock rotation principles is applied throughout the site to ensure waste is not stored for longer than necessary and that older waste is moved before the newer, incoming waste. The fire watch procedures will be followed to identify if any waste is self-heating.

The maximum dimensions of the stockpile of the waste types is set out in Table 5. The stock rotation will be complied with to ensure that the stockpiles can be managed for any heat build-up and that the correct separation distances is maintained. Complying with the maximum stockpile dimensions ensures that there is the lowest possible risk of fire spreading between piles of waste.

If there is a plant failure, and it is necessary to store waste for longer than specified in the EMS, then a fire watch will be carried out more regularly.

There should be no risk of self-combustion at the site as no waste will be stored on site for longer than three months. Therefore, this section does not apply.

Manage Storage Time

Method Used to Record and Manage the Storage of All Waste on Site

The details of incoming waste will be recorded and the ‘duty of care’ documents will be checked by the operator to confirm the load is acceptable. The information in the quarterly returns is based on the details recorded on the site’s waste acceptance, and waste removal transfer note in the site recording system. The system records incoming and outgoing waste and products and to automatically update the volume of waste on site at any one time. The system is updated, at a minimum, daily. The quarterly waste returns will be produced from this data.

The maximum storage times for the waste held on site are shown in Table 4.

Table 4 Types of waste storage, timeframes and locations on site

Waste stream	Location (must match site plan)	How it is stored. For example this may include piles, bays, containers, skips, racks, bales	Maximum time it will be stored
Incoming waste artificial grass	Open storage area. Refer to Appendix I of the FPP.	Rolls	2 months
Treated and shredded waste artificial grass	Open storage, near the portacabin office.	Bags 1 tonne)	1 months

If the maximum storage capacity of the site is reached, then no further waste would be accepted until waste can be removed from site and taken to a suitably permitted facility.

If waste is stored for longer than the duration of Table 5 due to variations in supply and demand, plant failure or another emergency, then the stockpile will be specifically monitored during daily fire watches and the readings recorded in the site diary.

Stock Rotation Policy

The FIFO principle is applied to all waste types.

Monitor and Control Temperature

Reduce the Exposed Metal Content and Proportion of 'Fines'

The site does not receive any fines or metal waste.

Monitoring Temperature

The waste artificial grass has a low-risk of self-heating and therefore manual temperature monitoring is not required to be carried out. However, during hot weather more regular fire watches will be carried out.

Controlling Temperature

Waste stockpiles will be agitated during the loading/sorting and segregating process which prevents the build-up of heat. The processing of waste does not produce additional heat.

The site operates under a FIFO principle to ensure that older waste is processed before new waste, reducing standing times.

Dealing with Hot Weather and Heating from Sunlight

Waste is stored outdoors and is unlikely to combust due to heating from sunlight (waste artificial grass, sand and rubber). During hot weather (above 28°C), more regular fire watches will be carried out.

Waste Storage

Following the treatment and shredding of the artificial waste grass, the wet waste is stored in 1 tonne hessian bags outside for onward recovery at a permitted facility.

Manage Waste Piles

Storing Waste Materials in their Largest Form

Waste is stored in its largest form where this is possible. Waste arriving at the site in rolls and is processed at the earliest opportunity. Once processed, waste leaves the site at the earliest opportunity. Waste cannot be sorted in its largest possible form (for example, shredded waste), it is stored for the shortest possible time before being removed from the site.

The treated shredded artificial grass waste plastic is stored outside before being removed from the site for further processing.

Maximum Pile Sizes for the Waste on Your Site

Table 5 lists the waste steams on site, the location, and measurement of the stock pile, along with timeframes held on site.

Table 5 Waste streams measurements and timeframes of waste on site.

Waste stream	**Location** (must match site plan)	**How it is stored**	**Max. length / m**	**Max. width / m**	**Max. height / m**	**Volume / m^3**	**Max. time it will be stored**
Pre-treatment Waste Artificial grass	Outside 1	Rolls	10	1.8	2.5	45	2 months
Pre-treatment Waste Artificial grass	Outside 2	Rolls	10	1.8	2.5	45	2 months
Pre-treatment Waste Artificial grass	Outside 3	Rolls	10	1.8	2.5	45	2 months
Pre-treatment Waste Artificial grass	Outside 4	Rolls	10	1.8	2.5	45	2 months
Pre-treatment Waste Artificial grass	Outside 5	Rolls	10	1.8	2.5	45	2 months
Pre-treatment Waste Artificial grass	Outside 6	Rolls	10	1.8	2.5	45	2 months
Pre-treatment Waste Artificial grass	Outside 7	Rolls	10	1.8	2.5	45	2 months

Waste stream	Location (must match site plan)	How it is stored	Max. length / m	Max. width / m	Max. height / m	Volume / m^3	Max. time it will be stored
Treated (shredded) waste artificial grass	Outside	Bulk bag	1	1	1	1	1 month

Where Maximum Pile Sizes do not Apply

Waste Stored in Containers

Types of containers used

The site will use 1 tonne hessian bags for the storage of the treated, screened and shredded wet waste artificial grass. These will be removed from site for further processing at a permitted facility.

Accessibility of Containers

Each bag will be accessible from at least one side so a fire can be extinguished. Refer to Appendix i for the site location of post treated waste.

Moving Containers in a Fire

The 1 tonne hessian bags will be accessible and can be moved by the telehandler in the event of a fire to the quarantine area for extinguishing by sand.

Prevent Fire Spreading

Separation Distances

The six metre separation distance is applied for all open storage areas. The shredded wet artificial grass plastic waste is stored outside in 1 tonne hessian bags and is kept separate from incoming waste, refer to Appendix i site layout plan.

A separation distance of six metres applies to all incoming waste on to the site. A separation distance of six metres also applies to the treated shredded wet artificial grass plastic waste. Refer to Appendix i ‘Site Layout Plan’ within the FPP.

Fire Walls Construction Standards

The site does not have any fire walls.

Storing Waste in Bays

The waste artificial grass prior to treatment is stored outside in rolls, refer to Appendix i, 'Site Layout Plan' within the FPP.

The treated shredded wet waste artificial grass will be stored in 1 tonne hessian bag outside, ready to be transferred off site for further processing, under a waste transfer note to a permitted facility. Refer to Appendix i for the 'Site Layout Plan' for the storage location.

Quarantine Area

Quarantine Area Location and Size

There is a quarantine area at the site (refer to Appendix i 'Site Layout Plan' in the FPP). The quarantine area is within the permitted site and is large enough to have a separation distance of at least six metres around the quarantined waste, and hold 50% of the volume of the largest pile (50% of 45m³ = 22.5m³)

How to Use the Quarantine Area if there is a Fire

The aim of the quarantine area is:

- To enable any burning material to be spread out in the open area to aid extinguishing the material, or
- To move combustible materials away from burning material to prevent the fire spreading, or
- To enable containers of waste which are either on fire or at risk of catching fire to be moved to a safe place.

The quarantine area is a minimum of six metres separation distance from any combustible materials to prevent the spread on any fires. The location has also been considered to ensure that the FRS will be able to gain access easily and to allow site plant to move materials around the site as required.

In the event of a fire, members of staff and plant equipment on site will be available to move waste as soon as possible, so that burning waste can be moved to the quarantine area.

Procedure to Remove Material Stored Temporarily if there is a Fire

This quarantine area will be kept clear at all times unless it is being used in the event of a fire.

If waste is already in the quarantine area, and the area is needed for emergency use in the case of a fire, the already stored waste is to be moved to another concrete sealed/surface area of the site. Waste would only be moved to an area where ignition was unlikely, and it would not block emergency access.

During normal site operations it is used for the movement and circulation of waste artificial grass around the site.

Detecting Fires

Detection Systems in Use

The site has 24 hour security and patrols to check for breaches which could lead to a fire. The site is surrounded by an eight-foot-high security fence and gates will be locked during out of hours.

The office building will be provided with manual break glass fire alarms as well as smoke detection and heat detectors, which will be connected to a standalone fire alarm panel.

The site is to contact the FRS.

Certification for the Systems

The site doesn't currently have certification however once installed certificates will be obtained and recorded.

Suppressing Fires

Suppression Systems in Use

No specific fire suppression system is proposed at the site due to the low risk of fire and low tonnage on site.

Certification for the Systems

N/A

Firefighting Techniques

Active Firefighting

The site has been designed to allow for active firefighting. This will help allow a fire to be extinguished within four hours. The site has been designed to give safe and fast access for the FRS. There is an area for the FRS to park on the site.

Staff will be trained to know what to do in the event of a fire and will coordinate with the FRS and there will be plant operators who are available on site or will attend out of hours to assist the FRS to fight a fire during operating hours and when the site is closed.

The preferred method of fighting a fire that is self-contained and manageable, with no danger of spreading, is to attempt to extinguish with the resources LRAG have to active firefighting includes:

- Plant – LRAG can use to move waste around the site, for example, the plant on site will include telehandler. The telehandler will be kept in the workshop during non-working hours.
- Staff – staff will be trained in what they need to do should there be a fire on site.
- Sand – 14 full Intermediate Bulk Containers (IBC's) of sand will be located around the site. In addition, the site will have sand that has been washed and graded and ready for reuse on to new artificial grass. This can be used in addition to the 10 IBC's of sand.
- Finances – the permit holder has sufficient finances to provide the above resources and to ensure that the fire clean up take place after a fire.

LRAG may use a variety of firefighting techniques together or separately to extinguish a fire, depending upon the nature of the fire, the location of the fire, and depending upon the instructions of the FRS. These include:

- Applying sand and or water to cool unburned material and other hazards.
- Separating unburned material from the fire using heavy plant and move to quarantine area.
- Application of sand from IBC's will be located around the site to extinguish fires.
- Fire extinguishers.
- Inert material, tip sand on to the burning material to smother the fire out.

Water Supplies

Available Water Supply

Due to the location of the site and applying a worst-case scenario fire on the site the following actions have been taken to reduce the water supply requirements of the FRS:

- Early detection by daily checks of plant, equipment, and electricals.
- Actions such as creating fire breaks, which consists of waste storage piles with a separation distance of at least 6 metres between waste piles, the site permitter and any buildings.
- Ensure that IBCs used that contain sand for firefighting are kept topped up and are kept in position as per Appendix i of the 'site layout plan'.
- 14 IBC's containing sand will be kept on site. Altogether these will hold 17.5 tonnes of sand, which will be available to put a fire out at any one time. In addition, the site will have sand that has been washed and graded and ready for reuse on to new artificial grass. This can be used in addition to the 14 IBC's of sand. Additional sand will be available near to the site entrance.

Show the Calculation for your Required Water Supply

In Table 6 calculation for the use of sand for firefighting on site is set out. The amount of water that would be required would be 54,000 litres for three hours. However, due to the remote location of the site. Mainly sand will be used for firefighting. The site will have a hose that will be fitted and supplied with mains water to assist in firefighting.

Table 6 Sand calculations

Maximum pile volume in cubic metres	Sand supply needed in tonnes	Overall sand supply needed over 3 hours in tonnes	Total sand available on site in tonnes
45m3	12.5 tonnes	12.5 tonnes	12.5 tonnes

Managing Fire Water

Containing the run-off from fire water

The site is not within a Source Protection Zone (SPZ). The groundwater vulnerability of the site is high.

In order to protect groundwater from the site, the site will be constructed so that there will be an impermeable surface on the storage and treatment areas with a sealed drainage system.

The majority of treatment operations will take place on an impermeable surface. Unprocessed waste artificial grass will be stored on the impermeable surface. The washed and separated rubber and sand will be stored in the building with the workshop.

If a fire were to occur, sand will be deposited over the fire to smother the fire out.

Contaminated Sand

The sand used for firefighting will be removed by a specialist waste disposal company who holds a waste carriers licence, and the fire contaminated sand will be moved to a suitable permitted facility for disposal.

During and After an Incident

Dealing with Issues During a Fire

In the event of a minor fire that can be dealt with, there will be eight dry powder fire extinguishers on site. The extinguishers will be located on the vehicles and in the site office. This will be undertaken by site staff, but only if considered to be safe to do so. After the fire has been extinguished, the site manager will investigate the causes of the fire and issue instructions to prevent a recurrence. If the fire is not brought under control within 5 minutes or it is spreading, staff will call 999 immediately.

If possible, the burning or smouldering material will be moved to the quarantine area and spread out to aid firefighting. Whilst ensuring that the FRS will still be able to access the fire.

For a larger fire the FRS and EA will be called immediately, whilst site staff attempt to extinguish the fire and move the material on fire to the quarantine area. The key action in this scenario is to prevent the spreading of fire, whilst maintain the safety of site operatives.

The site manager will close the site to incoming waste, and LRAG will inform its waste clients, and customers to divert to waste to other permitted facilities.

Notifying Residents and Businesses

In the event of smoke being generated by a fire, the wind direction will be assessed and contact made with any potentially affected sensitive receptors downwind to advise them to keep doors and windows closed.

Nearby businesses will be called or visited by staff. Local residential properties will be visited by staff.

In Table 7 is a list of emergency contacts.

Table 7 Emergency Contact List

Receptor	Telephone Number	Website
Environment Agency	**General** 03708 506 506 **Incident** 0800 80 70 60	Environment Agency - GOV.UK (www.gov.uk)
Fire and Rescue Services	**999**	
South west		
Belvoir Farming Company	01476 870286	Contact Us - Belvoir 2020 (belvoirfarm.co.uk)
Within Belvoir Business Park		
World Decor Supplies Ltd	07474 118686	World Decor Supplies LTD - Google Maps
The Place	01949 836631	The Place - Google Maps
South east		
Belvoir Castle	01476 871001	Belvoir Castle | Plan Your Visit

The Engine Yard at Belvoir Castle Shopping Centre	01476 247059	The Engine Yard at Belvoir Castle - Google Maps
Vale House Belvoir	01476 879365	Vale House | Belvoir Estate (belvoirestateholidays.com)
The Grange at Belvoir Castle	01664 496060	The Grange At Belvoir Castle - Google Maps
Residential properties		
Attend in person	-	-

When the FRS arrives, they will take control and direct staff to use plant as required.

Staff will assist wherever possible, but must maintain a safe distance from the fire, and only work under the instruction of the FRS.

A fire box will be located at the main gates to the site. The fire box will contain the FPP along with contact details for the site management and the drainage plans for the site The nominated manager will attend the scene and assist the FRS where possible and ensure that the above list of receptors is contacted as required.

Clearing and Decontamination After a Fire

In order to clear and decontaminate the site after a fire, the FRS would advise when the residues would be safe to be removed off site.

An assessment will be made, by the site manager, of the effects of the fire on infrastructure and the pollution risks from the site. If water or foam has been used to fight the fire, the site manager will arrange for the removal of contaminated water/foam/sand to a suitably permitted facility.

Arrangements will be made for solid wastes that need to be moved for off-site disposal.

All damaged waste and waste from the decontaminating process would be sent to a suitably permitted landfill, if the waste is unlikely to be hazardous this would sent to a non-hazardous landfill with prior permission.

The site would have a full deep clean after a fire following the removal of burnt waste to a suitably permitted facility.

Making the Site Operational After a Fire

If there is no damage to the site infrastructure the site will re-open in consultation with the EA.

Where works are needed to make repairs, the site will remain closed until the pollution control measures are all repaired.

A thorough investigation shall be conducted as to the cause for the fire and appropriate measures put in place to ensure that the risk of further fires is reduced. The incident report will include the following as a minimum:

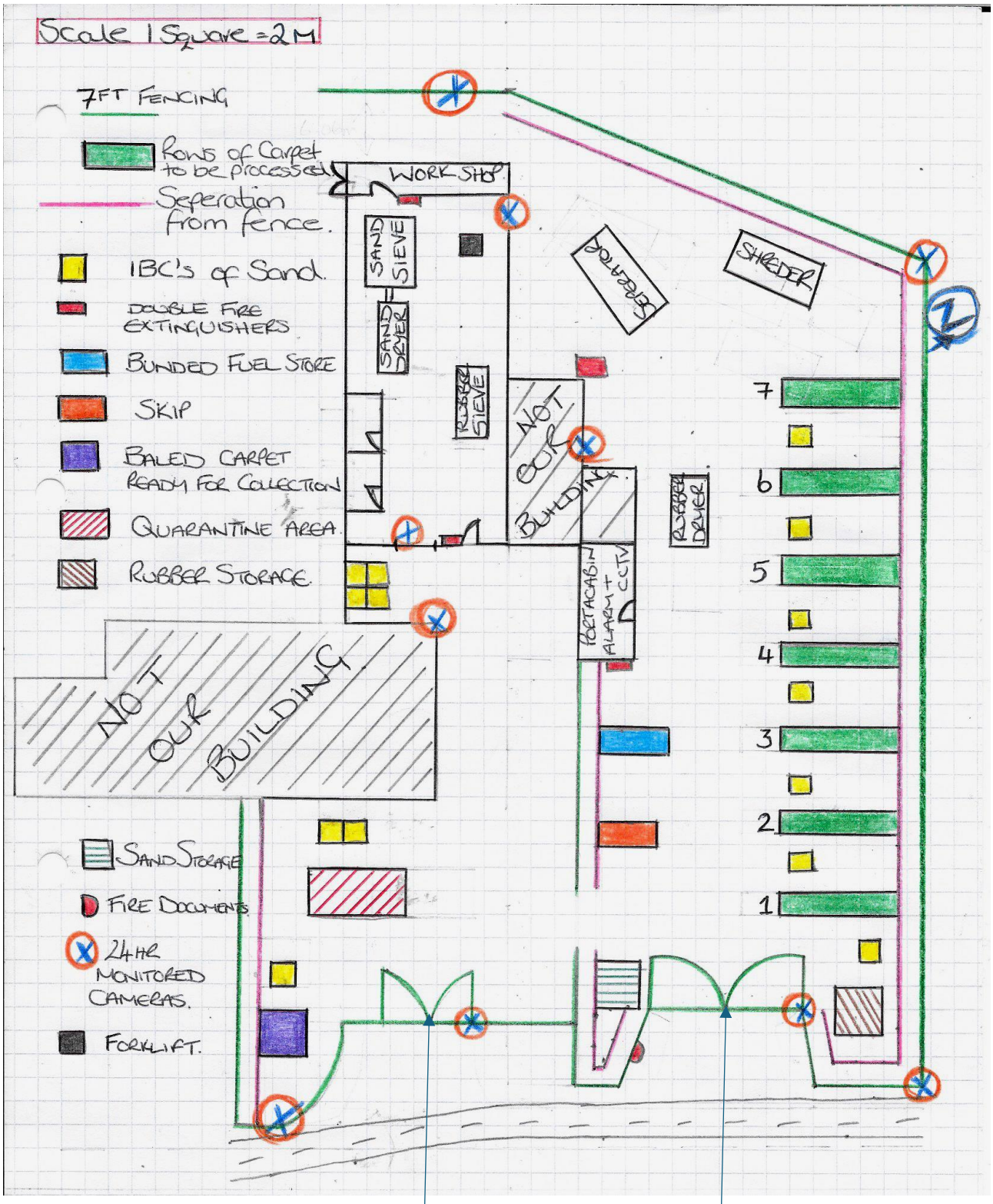
- Causes of the fire.
- Assessment of damage caused by the fire.
- Details of fire related waste disposal including transfer/consignment notes.
- Assessment of any potential contamination.
- Details of the removal and disposal of contaminated firewater/foam/sand, including transfer/consignment notes.
- Lessons learned and improvements to reduce the risk of any future fires at the site and to reduce the impact of any fires in the future.
- Proposed amendments to the FPP.
- Completion of site condition report if needed.

Any fire damaged waste shall be removed from site to a suitably permitted facility at the earliest opportunity. Damaged plant and equipment will be assessed and repaired / replaced as necessary. Damage to buildings will be inspected by a competent engineer (where appropriate) and repaired.

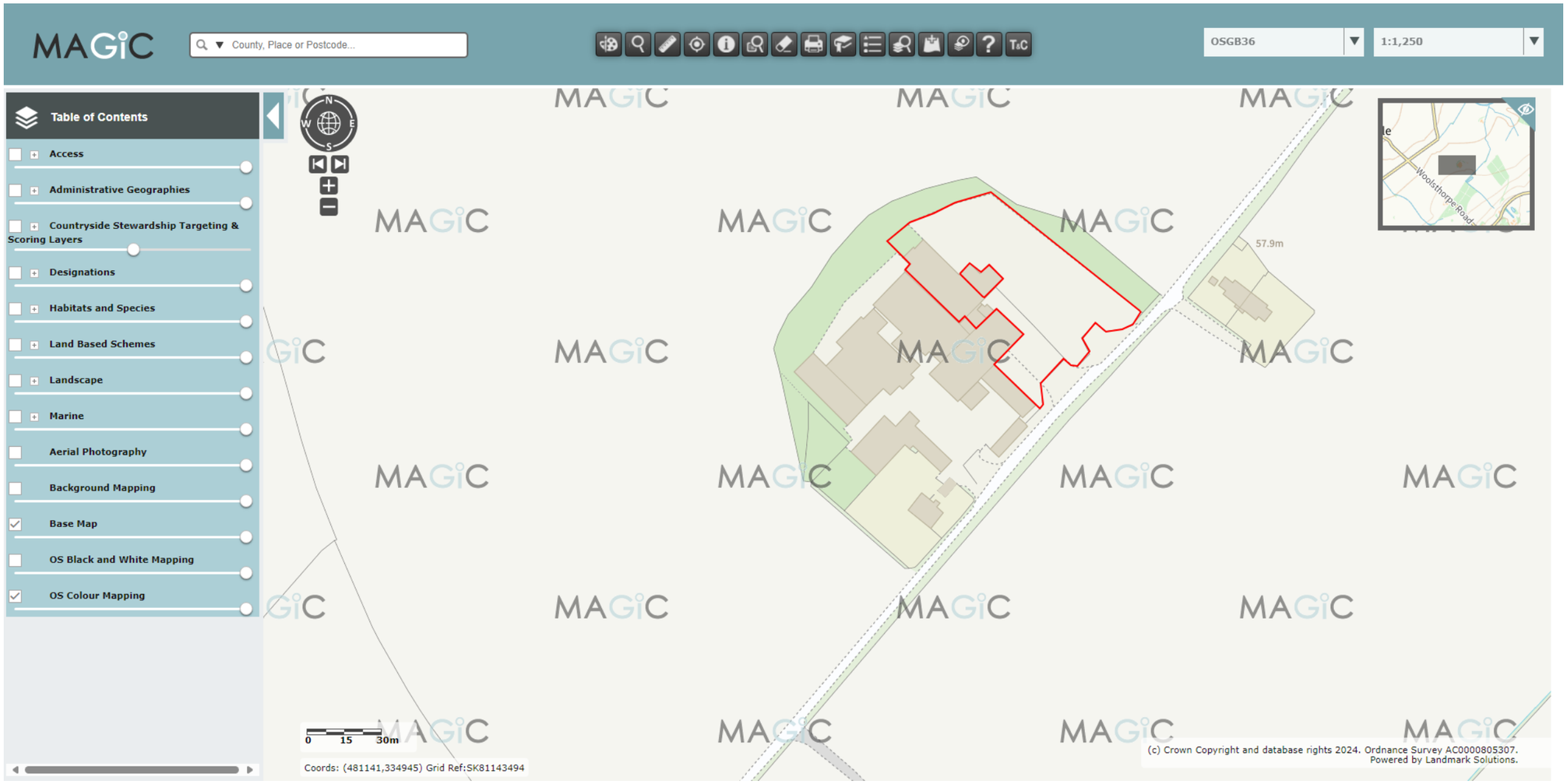
The site will be required to be fully functional and able to meet the requirements of the EMS prior to waste operations recommencing.

The FPP will be reviewed and updated, where appropriate, following an incident.

Appendix i - Site Layout Plan



Appendix ii - Site Boundary



Appendix iii - Sensitive Receptors

Map 1 within 1km of the site (site boundary outlined in red).

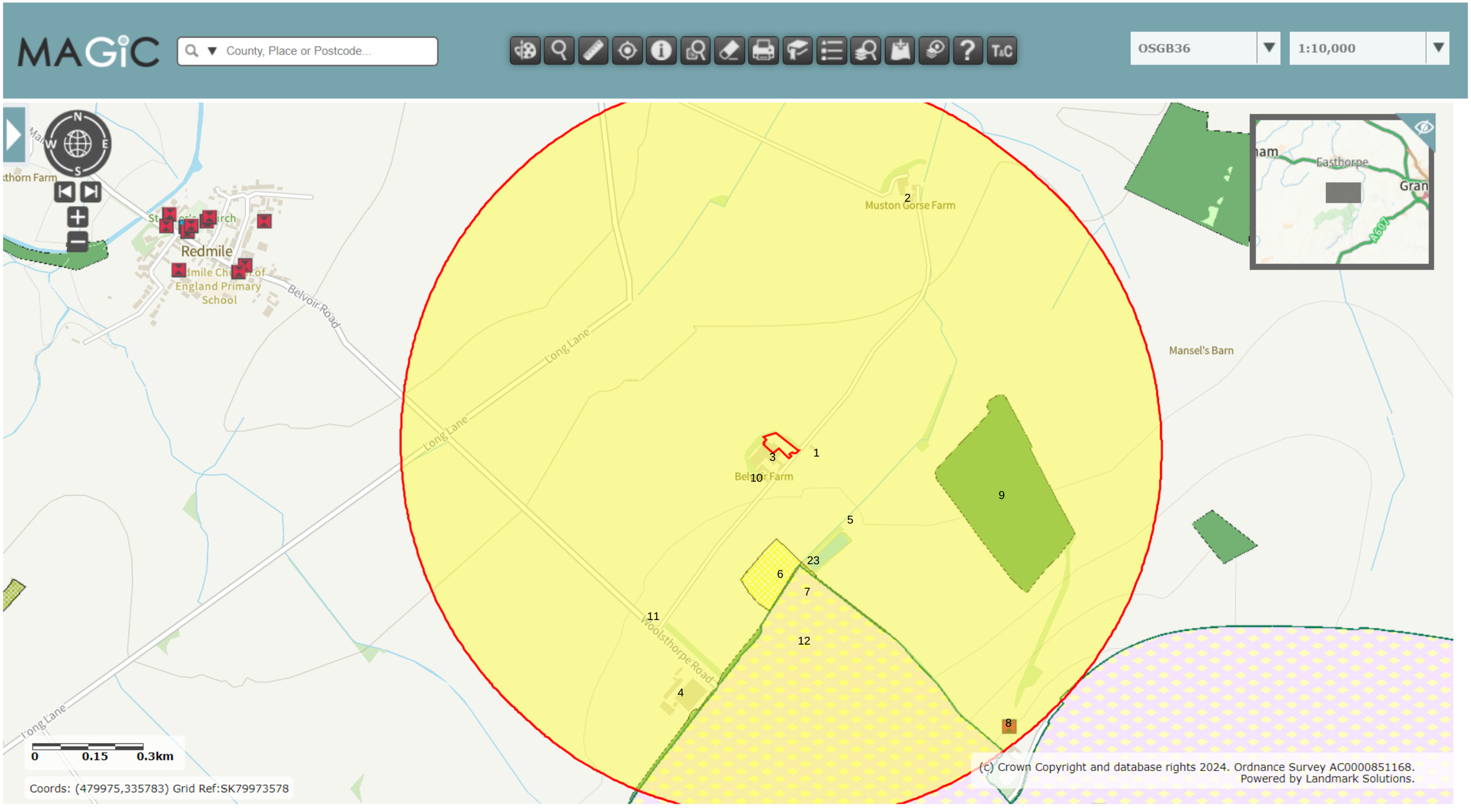


Table a - Receptors within 1km as identified in Map 1

Receptor reference (Map 1)	Land use e.g. houses, school, hospital, commercial	Direction from site (North, South, East, West)	Approximate distance from the site boundary (m)	Map Reference
1	Residential properties	South east	21.8	Map 1
2	Residential property – Muston Corse Farm	North east	714.8	Map 1
3	Commercial - World Decor Supplies Ltd	West	0	Map 1
4	Commercial - Belvoir Farming Company Ltd	South west	886.6	Map 1
5	Field drain which feeds into Winter Beck then the River Devon	South east	227.7	Map 1
6	National Forest Inventory - Woodland – young trees	South	223.3	Map 1
7	National Forest Inventory – Woodland – Mixed mainly conifer And Woodland – Young trees	South	298.7	Map 1
8	Listed Buildings - The Court House – Grade II	South east	948.4	Map 1
9	Priority Habitat Inventory – Deciduous Woodland - Saltbeck National Forest Inventory – Woodland - Broadleaved	South east	383.2	Map 1
10	Commercial - The Place	South west	69.8	Map 1
11	Woolsthorpe Road	South west	576.5	Map 1
12	Registered Parks and Gardens - Belvoir Castle – Grade II National Forest Inventory – Woodland (mixed mainly conifer) Wood pasture and Parkland BAP Priority Habitat	South east	301.8	Map 1
23	Groundwater abstraction point	South	250	Map 1

Map 2 – Receptors beyond 2.5km of the site (site boundary outlined in red).

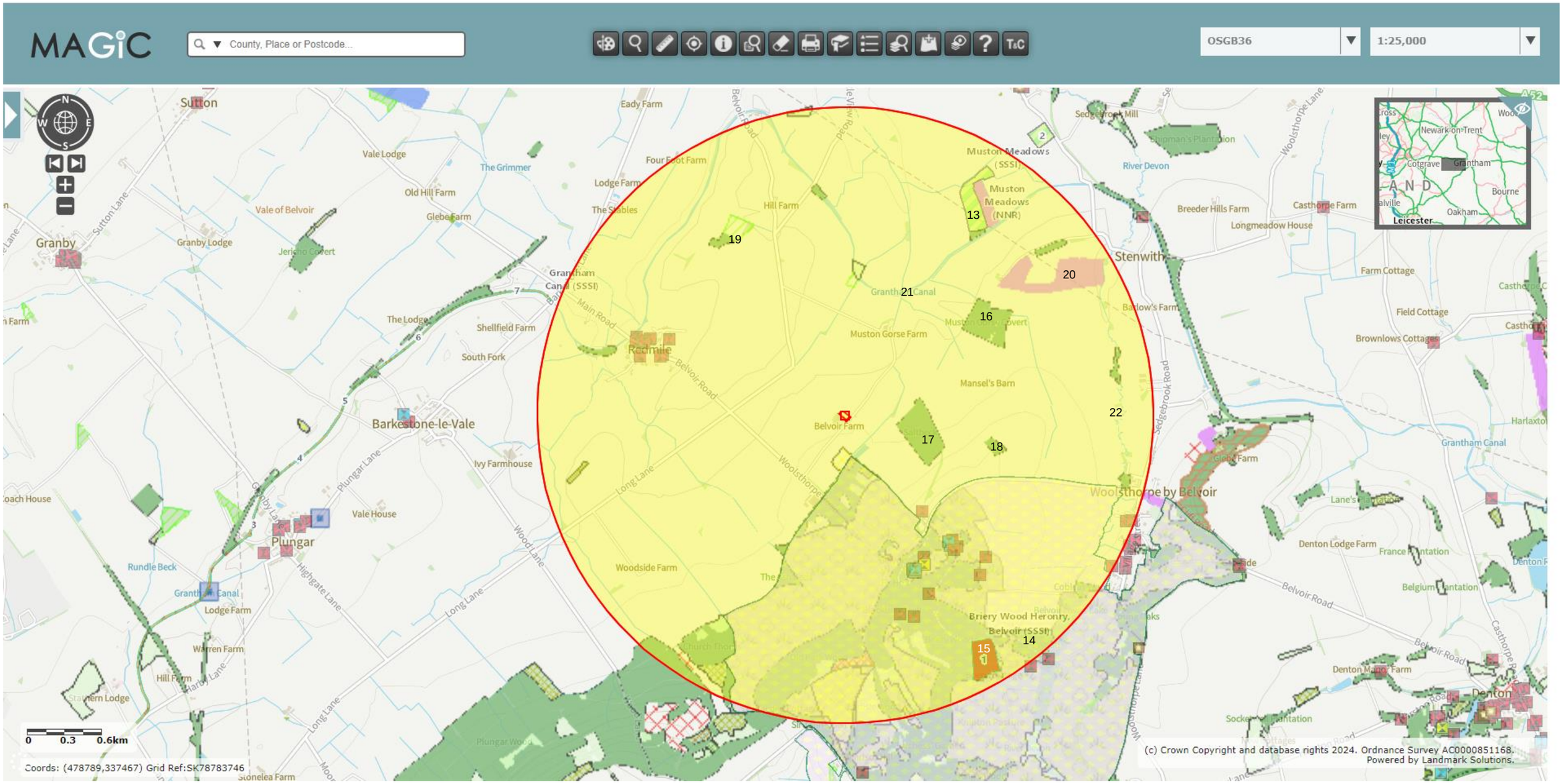


Table b - Receptors within 2.5km as identified in Map 2

Receptor reference (Map 2)	Land use e.g. houses, school, hospital, commercial	Direction from site (North, South, East, West)	Approximate distance from the site boundary (m)	Map Reference
13	SSSI and NNR Muston Meadows – Clay grasslands http://designatedsites.naturalengland.org.uk/SiteDetail.aspx?SiteCode=s1003316	North, north east	1791.2	Map 2
14	Site of Scientific Significant I – Briery Wood Heronry, Belvoir – Oak, Ash, bracken and dog's mercury - SSSI http://designatedsites.naturalengland.org.uk/UnitDetail.aspx?UnitId=1000556	South, south east	2099.1	Map 2
15	Historic Non-statutory - Belvoir Castle – Grade II - https://historicengland.org.uk/listing/the-list/list-entry/1360870	South, south east	1271.2	Map 2
16	Priority Habitat Inventory – Deciduous Woodland – Muston Gorse Covert National Forest Inventory – Woodland	North east	1155.5	Map 2
17	Ancient Woodland – Ancient Replanted Woodland Priority Habitat Inventory – Deciduous Woodland	East, south east	2800.4	Map 2
18	National Forest Inventory – Woodland	North, north east	1014.1	Map 2
19	National Forest Inventory – Woodland	North west	1641.8	Map 2
20	Priority Habitat Inventory – Good quality semi-improved grassland (non-priority)	North east	1598	Map 2
21	Grantham Canal	North east	1016.4	Map 2
22	River Devon	East	2178.8	Map 2