

East Devon Waste Transfer Station

1.7 Fire Prevention Plan

April 2025

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Appendices

Appendix A Waste Storage Details

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No.	Drawing	Reference
1	Site Location Plan	Gnd-LOC-1024-01-A3
2	Permit Boundary Plan	Gnd-PER-1024-01-A3
3	Site Layout Plan	Gnd-LAY-0425-01-A3
4	Site Drainage Plan	Gnd-DRN-0425-01-A3
5	Receptor Plan	Gnd-REC-1024-01-A3
6	Emergency Access Route	Gnd-EAR-1024-01-A3



1 INTRODUCTION

- 1.1 This document details the Fire Prevention Plan (FPP) for East Devon Transfer Station (the site) located at Unit 42, Greendale Business Park, Woodbury Salterton, Exeter, Devon, EX5 1EW at National Grid Reference (NGR) SY 01768 89751. The site location and permit boundary are shown in Figures 1 & 2 Respectively.
- 1.2 This document is written to support an application to vary the environmental permit to operate a Transfer Station (TS) and Materials Recycling Facility (MRF) which accepts non-hazardous and hazardous wastes from household, industrial and commercial sources, with the site accepting a maximum of 75,000 tonnes per annum, with a maximum of 10 tonnes of hazardous waste per day.
- 1.3 Material is delivered to the site predominantly in skip / hook loader type vehicles and refuse collection vehicles (RCVs). Materials will either be tipped directly in the transfer station building or unloaded externally and stored in skips, bins or specialised containers.
- Mixed plastics and metals, paper, cardboard and food waste are stored in the transfer station building prior to sorting, treatment, baling or bulking out. Bales are stored in covered external storage bays. Glass, small WEEE, textiles, batteries and nappies are stored externally in an external bay, RORO (Roll-on-roll-off) bin, ISO container and specialised containers respectively.
- 1.5 An existing Fire Risk Assessment covering the site operation is already in place. It is reviewed at regular intervals not exceeding 12 months. The Fire Risk Assessment is included within the SUEZ electronic Risk Assessment database.
- 1.6 An appropriate person will review this Fire Prevention Plan at regular intervals and on at least an annual basis, following any of the events below:
 - testing of the plan to ensure the plan works and staff understand the procedures to be undertaken to prevent a fire occurring and the procedure to be undertaken in the event of a fire
 - an incident
 - change in legislation or formal guidance
 - prior to a change in activity on site
- 1.7 In addition, the requirements of the Fire Prevention Plan will be communicated to site operational staff on at least an annual basis via toolbox talks. Yearly refresher toolbox talks will ensure that the requirements of the Fire Prevention Plan are reinforced.



2 RISK OF FIRE

2.1 Assessing the Risk of Fire

- 2.1.1 The risk assessment to identify potential events or failures that may lead to an environmental impact as a result of a waste related fire at site is included in the Environmental Risk Assessment (document reference 1.3). The risk assessment provides details of the following: the hazard, the pathways and receptors, the probability of occurrence, the consequences or impacts and the measures that will be taken to manage the risk, and an evaluation of the mitigated risk.
- 2.1.2 Further detail on the hazard, in terms of the materials received stored and/or treated on the site, the volumes of materials received, and the potential causes of fires are discussed further in this section of the Fire Prevention Plan. The sensitive receptors and the consequence of a fire on those receptors are also discussed below.

2.2 Combustible Materials on Site

- 2.2.1 The combustible materials which may be received and stored at the site include:
 - Paper
 - Cardboard
 - Metals
 - Plastics
 - Textiles
 - Waste Electrical and Electronic Equipment (WEEE)
 - Batteries
 - Nappies

2.3 Waste Storage and Hazardous Materials Storage

- 2.3.1 Managing waste storage is a key factor, not only in preventing fires, but in mitigating the impact, should a fire break out.
- 2.3.2 Appendix A details the volume, storage time and storage method for each waste type at site.

Waste storage

- 2.3.3 Dedicated bays, areas and containers are provided for separate acceptance of various waste streams.
- 2.3.4 As detailed in Figure 3, the majority of combustible wastes received at the site will be stored inside bays or stockpiles located within the existing transfer station building, located in the centre of the site. Baled waste will be located in the external covered bays located to the north of the site. Other combustible materials such as textiles, WEEE, batteries and nappies will be stored in an ISO container, RORO bin, and specialised containers/bins respectively.



2.3.5 An indicative site layout plan showing the proposed location of the waste storage bays, areas and containers are shown in Figure 3.

Hazardous materials storage

- 2.3.6 There is no diesel fuel stored on site. Mobile plant is fuelled external to the permit boundary.
- 2.3.7 Orphaned gas cylinders extracted from incoming waste streams are quarantined and stored upright within a well-ventilated, lockable, roofed, storage area. The storage area is clearly marked with a "flammable gas" warning sign and will be kept locked when cylinders are not being inserted or removed.
- 2.3.8 Batteries will be stored in battery boxes that will contain any spillage of acid batteries.
- 2.3.9 WEEE is stored in a RORO skip to prevent the escape of any rainwater that could cause contaminated run-off.
- 2.3.10 Any hazardous waste delivered to the site that is not permitted by the permit will be segregated and consigned appropriately for disposal at a suitably permitted facility.
- 2.3.11 No additional hazardous materials will be stored within the site.

2.4 Cause of Fire

- 2.4.1 The potential causes of fire on the site have been considered and include the following:
 - arson or vandalism
 - ignition/explosion of pressurised gas canisters
 - · cooking appliance in welfare facilities
 - plant or equipment failure
 - electrical faults
 - naked lights
 - · discarded smoking materials
 - hot works, e.g. welding, cutting (will be included within contractor's risk assessments as this type
 of work is not undertaken by site staff)
 - hot exhausts
 - · fuel deliveries and refuelling plant
 - build up of dusts
 - damaged/exposed electrical cables
 - sparks from loading buckets
 - incompatible wastes
 - · ignited materials received at the site
 - heat generated by friction on mobile plant
 - neighbouring site activity



- 2.4.2 Any of the causes detailed above has the potential to ignite waste materials upon the site. The consequences of a fire are discussed below with mitigation measures detailed in a further section.
- 2.5 Impacts of a Fire
- 2.5.1 The effects of a fire may be both immediate and long term. The potential impacts of a fire have been considered and are summarized below:
 - thermal radiation harming nearby properties and residents leading to fire spread
 - creation of hazardous waste by the fire and impacts of firefighting
 - explosions and projectiles harming sensitive receptors and spreading the fire to unaffected areas
 - fire water run-off transporting pollutants to surface water and groundwater
 - transport disruption resulting from road and rail closures
 - nuisance from smoke, odour and particulates
 - threat to life and property
 - detriment of local amenity
- 2.5.2 The general management actions to mitigate the impact of a fire on sensitive receptors are detailed in Sections 3 and 4 of this Fire Prevention Plan.



2.6 Sensitive Receptors

2.6.1 Sensitive receptors within 1km of the site that may potentially be at risk from a fire have been identified within Table 1 and are shown in drawing in Figure 5.

Table 1 - Sensitive receptors

No.	Receptor	Category		Direction from site
0	Ground water	Water Body	0	Beneath site
1	Grindle Brook	Water Body	50	S
2	Greendale Fishing Lake	Water Body/ Commercial	450	W
3	Greendale Business Park	Industrial/ Commercial	<50	N, E, W
4	Raceworld Indoor Carting	Commercial/ Recreational	140	SE
5	Traditional Orchard	Priority Habitat	330	E
6	Deciduous Woodland	Priority Habitat	330	E
7	NHS Vaccination Centre	Amenity	330	NE
8	Deciduous Woodland	Priority Habitat	350	W - SW
9	Mill Park Industrial Estate	Industrial/ Commercial	350	SE
10	Brooklands Caravan Park	Residential	380	Е
11	Brooklands Farm	Residential/ Agricultural	430	E
12	Deciduous Woodland	Priority Habitat	440	Е
13	Little Greendale Farm	Residential/ Agricultural	480	E - NE
14	Greendale House	Residential	500	NW
15	Mud-Ventures	Amenity	560	NW
16	Residential Properties	Residential	590	NE
17	Greendale Farm Shop	Commercial	600	NW
18	White Cross Village	Residential	780	NE
19	Woodbury Salterton Village	Residential	790	SW
20	Allotments	Amenity	820	S - SW



21	Froginwell Vineyard	Agricultural/ Commercial	830	NE
22	The Diggers Rest Pub	Commercial	840	SW
23	Deciduous Woodland	Priority Habitat	850	SE
24	Woodbury Salterton Church of England Primary School	Educational	850	SW
25	The White Horse Inn	Commercial	870	NE
26	Hogsbrook Farm	Agricultural	900	SE
27	Upham Farm	Residential/ Agricultural	900	N - NE
28	Bridgoods Farm	Residential/ Agricultural	920	SW
29	Traditional Orchard	Priority Habitat	930	SW
30	Woodbury Salterton Play Area	Recreational	930	SW
31	Waldrons Farm	Agricultural	940	NW
32	Winkleigh Farm	Residential/ Agricultural	950	E
33	V-Brew (Shop)	Commercial	960	Е
34	Hogsbrook Wood	Ancient Woodland	960	SE
35	Downhams Farm	Agricultural	990	S - SW

2.7 Wind Direction

2.7.1 The data obtained for Greendale indicates that the prevailing wind direction is from the west. A compass rose from meteoblue.com with the prevailing wind direction is included in Figure 5.



3 PREVENTATIVE MEASURES

- 3.1 SUEZ Policies and Procedures
- 3.1.1 Section 3.8 of SUEZ Integrated Management System (IMS) relates to Emergency Preparedness and Response and will be followed in the event of a fire or explosion.
- 3.1.2 In addition to Section 3.8, the following policies and procedures, as detailed in the IMS, are also relevant:
 - Accident Investigation and Reporting
 - Site Inspection, Audit and Reporting
 - Managing Non-Conformance, Corrective & Preventive Action
 - Control of Records
 - Audits
 - Waste Acceptance
 - Rejection of Waste
 - Disposal of Site Waste
 - Surface Water Management
 - Oil and Fuel Storage
- 3.1.3 One of the principal objectives of the IMS is to ensure the efficient and safe operation of the site through the implementation of procedures that ensure defined staff roles and responsibilities supported by provision of appropriate training.
- 3.1.4 Key procedures that apply to all SUEZ sites include training all staff, contractors and visitors in correct health and safety and fire prevention procedures. The implementation of a regular maintenance and inspection programme for all areas of site and equipment to ensure good housekeeping and effective operation of machinery.
- 3.1.5 All site staff along with site contractors are required to wear appropriate Personal Protective Equipment.
- 3.2 Controls to Manage Common Causes of Fire

Arson

3.2.1 Site security to prevent arson includes security fencing and monitored CCTV. CCTV monitoring systems are installed in various strategic locations around the site. Out of hours security monitoring is undertaken through the use of the CCTV system. CCTV would also be utilised to detect any early signs of hot spots and/or fire detected by thermal cameras. The system will be linked to a monitoring station



operating 24hrs (including weekends and bank holiday) which will alert the relevant employee in order of priority. Three telephone numbers are supplied to the monitoring station.

Plant and equipment

- 3.2.2 Faults within a vehicle or item of plant have potential to cause fire so a regular plant and machinery preventative maintenance programme is in place to identify and remedy potential issues at an early stage.
- 3.2.3 All machinery/equipment is subject to routine cleaning, servicing in line with manufacturers guidance and daily checks/defect reporting. The daily check includes identification of leaks.
- 3.2.4 All site vehicles are fitted with fire extinguishers and dust filters. Vehicles will have high level exhausts fitted.
- 3.2.5 All vehicles and items of plant are stored at a safe distance (6m) from waste stockpiles when not in use.
- 3.2.6 The use of rubber strips on equipment featuring steel buckets, loading arms or grabs will be considered where appropriate to prevent sparks being generated when steel comes into contact with concrete.
- 3.2.7 Mobile plant will be maintained in accordance with the Mobile Plant procedures as outlined in SUEZ Policies and Procedures. This includes daily vehicle pre-use inspection checks, reporting of all defects to site management and regular clearing of detritus from around the machine. The machine will be subject to regular service inspections in accordance with manufacturer's recommendations which will include maintenance of the exhaust and cleaning if required. Daily inspections of the exhaust will check for blockages or excess build-up of material.
- 3.2.8 Plant and machinery will not be fitted with an infra-red detection system as it is not deemed as required due to the low risk. However, the mobile plant on site will conform to the SUEZ essential safety requirements as outlined in Policies and Procedures. This details loading shovels to have a fire suppression system using a twin agent with engine isolation and in cab fire extinguisher. The loading bucket will have a composite cutting edge to reduce the risk of sparks. In addition, the mobile plant will be parked away from the bays when not in use.
- 3.2.9 Fixed and mobile plant will be maintained in accordance with manufacturer's guidance and weekly cleaning will be undertaken by the operator. In addition, daily vehicle inspections will be carried out prior to using the equipment.

Electrical Equipment

- 3.2.10 All portable items of electrical equipment are listed in a register and tested by a competent person at least annually. Items must not be connected to the electrical supply that cannot be shown to have been tested within the previous 12 months.
- 3.2.11 Fixed electrical installations are installed, inspected, tested and maintained by suitably trained and qualified persons. Contractors undertaking the work must be enrolled on the National Inspection Council for Electrical Installation Contacting (NICEIC) register of Approved Contractors or similar



contractor from SUEZ Approved supplier list. Inspection and testing shall be carried out at minimum periods of three years, or following:

- any substantial alteration to the electrical installation,
- any incident that might have cause damage to the electrical installation
- At periods stipulated by an approved contactor issuing a test reports
- 3.2.12 Following every inspection and testing, defects should be rectified as soon as reasonably practicable.
- 3.2.13 In addition, fixed electrical equipment will only be installed if it is fit for purpose and compatible with the electrical installation and its capacity. All fixed electrical equipment will be used, inspected, tested and serviced in line with manufacturers' recommendations.
- 3.2.14 Electrical sockets must not be overloaded.

Discarded smoking materials

- 3.2.15 No wastes will be burned within the boundaries of the site.
- 3.2.16 Smoking on site is only permitted in the site designated smoking areas which are located external to the permit boundary, as shown on Figure 3.

Hot works

3.2.17 Contractors required to undertake hot works will be required to provide risk assessments and follow approved safe working procedures. Any hot works will be subject to the Permit to Work procedure and will be adequately supervised. In the event of hot works on site the initial fire watch will be undertaken two hours after hot works have been completed. Following the completion of hot works, the end of the day fire watch will pay particular attention to the area where hot works were undertaken.

Industrial heaters

3.2.18 No industrial heaters will be used on site.

Hot exhausts

3.2.19 A fire watch will be implemented at the end of the working day to reduce the risk of combustion as dust can settle onto hot exhaust and engine parts.

Ignition sources

3.2.20 Any sources of ignition including for example heating pipes, naked flames, light bulbs, spaces heaters etc. will be kept 6 metres away or will be separated by a fire wall from any combustible and flammable waste on site.

Leaks and spillages of oils and fuels

3.2.21 Faults within a vehicle or item of plant have potential to cause fire so a regular plant and machinery maintenance program is in place to identify and remedy potential issues at an early stage.



- 3.2.22 All machinery/equipment is subject to routine cleaning, servicing in line with manufacturers guidance and daily checks/defect reporting. The daily check includes identification of leaks, and where identified, is cleaned up according to spillage procedure as detailed in Section 3.8 of the SUEZ IMS.
 - Build up of loose combustible waste, dust and fluff
- 3.2.23 Regular cleaning will be undertaken by site staff to minimise the generation of dust and litter on site.
- 3.2.24 Daily check sheets include a requirement for site staff to undertake visual dust qualitative monitoring; if perceived to be excessive the action causing the emission will be halted and remedial measures implemented.
- 3.2.25 Site cleaning regimes in place to reduce dust and litter will be directed through Standard Operating Procedures detailing the duration and frequency of cleaning activities, the equipment required to clean and visual aids depicting how areas should look following cleaning activity. In general, ongoing inspection and cleaning is undertaken on site. The waste storage area is cleaned regularly.
 - Waste acceptance/reactions between wastes
- 3.2.26 Waste acceptance procedures will comply with the site permit and associated environmental legislation. Only waste types detailed in the permit will be accepted at the site.
- 3.2.27 The documentation accompanying the load shall be checked at the weighbridge, and shall include, but not be limited to the Carriers Certificate of Registration and Duty of Care Waste Transfer Note.
- 3.2.28 The information recorded in respect of each load as provided by the Waste Transfer Note will be:
 - Ticket Number
 - Vehicle Registration Number and Type
 - Time and date (or date range) of transfer
 - · Waste description and quantities including all EWC codes
 - Container type
 - Where the transfer(s) took place
 - Category of Transferor and Transferee (i.e. producer, WDA, registered carrier, permit holder, EPR etc)
 - Names and addresses of all parties involved in the transfer and their roles (i.e. producer, carrier, disposer)
 - Details of relevant permit/exemptions
 - Signatures of all parties involved
- 3.2.29 Staff will carry out ongoing visual inspections of the wastes at the weighbridge where possible. All loads will be visually inspected on site as the waste is discharged or unloaded from the delivering vehicle.
- 3.2.30 Waste deposition will generally be undertaken by those delivering the. Site staff will direct and assist drivers as necessary.



- 3.2.31 Should any load, either upon entry to the site, or upon tipping, be discovered to contain waste types not permitted at the site or contain incompatible wastes the load will be rejected and removed from site by the delivering vehicle. A load rejection form will be completed in all cases and a record kept in the site diary and the customer informed.
- 3.2.32 If wastes not permitted by the site permit are discovered amongst a load after deposit, the waste will be isolated to prevent the processing of this waste.

Deposited hot loads

- 3.2.33 A quarantine area is available in the event that a hot or burning load is received on site. This area may also be used in the event of a fire on site.
- 3.2.34 If a hot load is discovered during delivery or deposit of the load, the waste will be isolated and placed in the quarantine area. The waste will be dealt with accordingly (i.e. dampened etc.). The incident and time of discovery will be recorded in the site diary. The waste will be placed in a quarantine area until the fire is extinguished and then loaded into a suitable container. Arrangements will be made for the disposal of such wastes at a suitably permitted disposal facility as soon as practicably possible.

3.3 Controls to Prevent Self-Combustion of Waste

Waste storage procedures and waste piles sizes

- 3.3.1 As an existing TS, managing storage at the site is a key consideration in reducing the risk of fire. The waste types, storage detail, maximum volumes/stockpile size, storage duration and location on site are detailed in Appendix A.
- 3.3.2 All waste entering the site is logged in at the weighbridge, with weight, EWC codes, date and time recorded. The records enable the Site Manager to review the weighbridge reports to understand the materials that have been imported and exported from site.
- 3.3.3 Twice-daily checks are made of waste in storage to identify any potential issues that have potential to cause a fire.
- 3.3.4 Clear signage reinforces the safe storage of materials and use of ignition sources.
- 3.3.5 Storage of waste will be managed to minimise the volume of waste stored and limit the storage time as far as practicably possible.
- 3.3.6 Materials will be treated and removed from site in order of receipt so as to reduce the risk of self-combustion. This is implemented by our frequent turnover of material and the bays being emptied regularly.
- 3.3.7 Regular working practice includes the emptying of a bay when the product pile reaches a marked height. SUEZ seek to remove the material off site as soon as possible. Bays will be marked showing the maximum height of waste storage. A 1m freeboard will be implemented at the top of each bay wall to prevent fire spreading over the bays. Waste will not be stored above the maximum height ensuring



that the maximum stockpile sizes are not exceeded. In line with other similar facilities within the SUEZ portfolio, a visual "5S" system will be implemented on site using a marked priority system to aid stock management and ensure compliance with the maximum storage time on site identified within Appendix A.

- 3.3.8 Stock rotation can be demonstrated via continuous operation and the implementation of the "5S" system and is fully recorded via the use of weighbridge tickets.
- 3.3.9 Materials are normally stored for a maximum of weeks. Unless stated otherwise in the waste storage plan (Appendix A). This will reduce the potential risk associated with self-heating due to processes within the waste.
- 3.3.10 Combustible materials stored within containers are fully accessible to allow any fire inside the containers to be extinguished. Containers are accessible to enable rapid segregation, if necessary, of burning materials from non-burning materials and vice versa. Containers will be moved using the existing mobile plant at the site.
- 3.3.11 The majority of the waste storage is undertaken within the building. The remainder of the combustible materials are stored outside within the external covered bays or containers, with exception to WEEE which is stored in a RORO container. Therefore, the vast majority of materials on site are stored under covered area shaded from any direct sunlight reducing the risk of self-heating.
 - Monitoring and controlling of temperature
- 3.3.12 With exception of the use of thermal imaging cameras, waste temperature monitoring at site is not proposed due to the short maximum residence time of the majority of waste type at the site of around 2 weeks. A few waste types are stored on site between a month and 3 months due to the low volume received at any one time. Environment Agency guidance requires temperature monitoring to be in place if combustible waste is stored on site for longer than 3 months, which is not the case at this site.
 - Waste bale storage
- 3.3.13 Bales are either stored inside the transfer station building or in external covered bays. Bales are separated from fixed plant by a minimum of 6m or by a fire-resistant wall. The location of the recyclables within the site may change to provide operational flexibility but will always be stored within the pre constructed, covered bays. An indicative site layout plan is included in Figure 3.
 - Measures to prevent fire spread
- 3.3.14 All waste will be stored on an impermeable surface. The non-flammable nature of the impermeable surface will act as a firebreak, which should significantly reduce the risk of a fire spreading.
- 3.3.15 Wastes are stored within the Transfer Station building either in concrete bay walls to act as fire break and prevent fire from spreading to adjacent bays or will be separated by a 6m spacing to the nearest waste piles.
- 3.3.16 Bales of flammable materials are stored externally in canopy covered concrete storage bays. and are separated from other materials by fire resistant walls.



- 3.3.17 Waste stored in bays is not permitted to exceed the maximum pile height or exceed the footprint of the bay.
- 3.3.18 Waste storage arrangements are shown on Figure 3.
- 3.3.19 Access to any waste, should it ignite, is from the front of the storage bays or stockpiles.
- 3.3.20 Combustible materials stored within containers are fully accessible to allow any fire inside the containers to be extinguished. Containers are accessible to enable rapid segregation, if necessary, of burning materials from non-burning materials and vice versa. Containers will be moved using the existing mobile plant at the site following instruction by Site Manager.

Quarantine area

- 3.3.21 A quarantine area is retained at all times to allow burning material to be moved into this area (provided it is safe to do so) to extinguish and control fire spread. It is also used to move piles of non-burning material (adjacent to a fire) to prevent spread.
- 3.3.22 The indicative location and size of the quarantine areas are: north of the site between the glass and bale bays measuring 10m by 20m, and the West of the site in front of the TS building measuring 30m by 20m. These areas are subject to change due to the nature of the process and therefore the exact quarantine area need to remain flexible. Both quarantine areas will be available and utilised as required.
- 3.3.23 As set out in EA guidance, the size of the quarantine area should be sufficient to accommodate 50% of the volume of the largest waste pile and provide a minimum separation distance of 6m on all sides to the nearest pile, building or site boundary.
- 3.3.24 With reference to the pile size dimensions in Appendix A, it is considered that 288m³ will comprise the largest potentially flammable stockpile and therefore both of the quarantine areas as are sufficient in size to accommodate 50% of this.
- 3.3.25 In the event of a fire being detected on site, the material would be dealt with in the most appropriate manner, including either segregation of burning material into the quarantine area or the remaining non burning waste will be segregated to ensure the separation distance from the burning waste. The site has capability to move loose materials and containers quickly, with a number of the mobile plants operational at the site.
- 3.3.26 The quarantine areas are located inside the site permit boundary with at least a 6 metre separation distance with the site office, the site perimeter and any combustible waste piles. To avoid confusion the quarantine areas will not be marked upon the ground but will be identified to site operatives at the beginning of each shift and emphasise will be made to the need of a 6m fire break from the nearest combustible waste. Site manager will also ensure that no materials is stored within this area and this will be fully communicated at the start of each shift and will be reinforced during yearly toolbox talks on Fire Prevention Plan.



- 3.3.27 In the event of a fire being detected on site, the material would be dealt with in the most appropriate manner, including either segregation of burning material into the quarantine area or the remaining non burning waste will be segregated to ensure the separation distance from the burning waste. The site has capability to move loose materials, bales and containers quickly, with the mobile plant operational at the facility.
- 3.3.28 Should any waste in one of the waste storage areas contain burning waste material, then either that stockpile itself or the designated quarantine area, would form the quarantine area. Non-burning waste would also be removed from any burning waste storage area (and from adjacent stockpiles) where possible and moved to the designated quarantine area or any clear area on site.



4 DETECTION AND SUPPRESSION MEASURES

4.1 Fire Detection

Fire Alarm System

- 4.1.1 The site is equipped with a fire detection and alarm control panel system that has been designed in general accordance with BS 5839-1: 2013.
- 4.1.2 The fire alarm system will be regularly checked by the Technically Competent Manager (or other designated person) via a visual inspection of the control panel. Visual checks will be recorded on the site Daily Checklist. Any fault must be reported immediately.
- 4.1.3 The fire alarm system will be tested weekly from a different alarm point on the same day and time or at a frequency in line with the manufacturer's recommendations, by a designated person. This will be recorded in the Fire Logbook.
- 4.1.4 The fire alarm system will be inspected and maintained by a competent person every year in line with the service contract. Inspection and maintenance records will be kept in the Fire Logbook.
- 4.1.5 Fire alarm points must be kept clear, visible and correctly labelled at all times.
- 4.1.6 The results of the alarm testing and servicing will be held in the Fire Logbook.

Flame detection and thermal imaging

- 4.1.7 The site has a CCTV system which covers the TS building, outer yard and perimeter fencing, ensuring full coverage of areas containing flammable wastes.
- 4.1.8 In addition to CCTV, thermal imaging cameras are installed at strategic locations on site. The thermal imaging cameras are linked to a call centre which will automatically view live CCTV footage during out of hours. In the event of a fire during out of hours, the call centre will automatically contact the fire service and contact one of the sites relevant employees. For security purposes, the exact locations of the cameras will not be provided.

4.2 Fire Suppression

Extinguishers/ firefighting equipment

- 4.2.1 Firefighting equipment provided on site consists of fire extinguishers and standard hose reels.
- 4.2.2 Two fire hydrants are in close proximity outside the site boundary, one is located approximately 90m north of the site and the other is located approximately 280m southeast of the site. The Fire Service can also utilise the water within the nearby brook (Grindle Brook).
- 4.2.3 Site staff will be trained in fire safety awareness and in the use of site firefighting equipment.



Manual Suppression Systems

- 4.2.4 There are a number of portable extinguishers placed at key strategic locations around the site. A check of the fire extinguishers (discharged/full, service in date etc) is undertaken as part of the site weekly checks. All fire extinguishers are subject to annual testing by an approved accredited supplier.
- 4.2.5 All fire extinguishers conform to British Standard EN 3 and are located on wall brackets with the base of the extinguisher at a suitable height, or they are sited in permanent fire points. The extinguishers are of a suitable size and weight for use by site staff.
 - **Automatic Suppression Systems**
- 4.2.6 As an existing site, the TS building does not have any automatic suppression systems installed as the existing manual suppression systems are considered appropriate to control the risk of fire.
- 4.2.7 Alternative measures are used to prevent fire and ensure suppression, including:
 - Short residence time of stored material (maximum one month but under normal operating conditions this will be less (72 hours 2 weeks).
 - Staff presence during any loading or movement operation.
 - A daily fire watch system will be utilised on site and the use of CCTV monitored via the weighbridge to detect any early signs of hot spots and/or fire.
 - The provision of water hose reels on site. These will be used by SUEZ employees as a
 precautionary measure; staff are not trained to fight fires, but these hose reels can be used to
 cool wastes and for small-scale smoulder incidents.
 - The use of CCTV and thermal imaging for out of hours security monitoring and to detect any early signs of hot spots and/or fire. The system will be linked to a monitoring station operating 24hrs (including weekends and bank holiday).
 - The total volume of combustible waste stored within the shed at any one time will be less than 600m³, with stockpiles ranging from 119m³ to 288m³.
 - Waste stockpiles always maintained at a distance of at least 6m if not separated by a fire wall.
 - A two-hour fire watch will be implemented at the end of the working day to detect signs of fire early and reduce the risk of combustion.
 - The use of rubber strips on equipment featuring steel buckets, loading arms or grabs will be considered. A rubber blade is present on the loading shovel, which reduces the risk of sparks whilst moving waste.
 - The easy access to tackle a fire within the shed with the presence of three roller shutter doors.
 One on the north and two east side of the shed.



4.3 Fire Fighting Techniques

- 4.3.1 Managing waste storage is a key factor, not only in preventing fires, but in mitigating the impact, should a fire break out.
- 4.3.2 Providing access to the site in the event of a fire is a key consideration in containing a fire. Contact details in the event of an emergency are clearly displayed on site.
- 4.3.3 The emergency access routes to waste storage and quarantine area in the event of a fire are shown in Figure 6.
- 4.3.4 The fire fighting procedure detailed in Section 5 must be adhered to if a fire should break out on site.

4.4 Water Supply

- 4.4.1 The Environment Agency Fire Prevention Plan guidance indicates that a 300m³ of combustible material will require a water supply of at least 2000 litres a minute for a minimum of 3 hours. As the maximum total volume of combustible wastes stored within the largest bays at the site will be 288m³ it is calculated that we will need a water supply capable of providing 1920L/min.
- 4.4.2 Two fire hydrants are in close proximity outside the site boundary, one is located approximately 90m north of the site within the unit occupied by DHL and the other is located approximately 280m southeast of the site. The Fire Service can also utilise the water within the nearby brook (Grindle Brook) which is located 50m south of the site.
- 4.4.3 The water in Grindle Brook and the 2 fire hydrants are deemed to provide an adequate water supply for the purpose of firefighting.

4.5 Fire Water Management

Fire water volume

- 4.5.1 The Environment Agency Fire Prevention Plan guidance indicates that a 300m³ of combustible material will require a water supply of at least 2000 litres a minute for a minimum of 3 hours. The maximum total volume of combustible wastes stored within the largest bays at the site will be 288m³.
- 4.5.2 Based on the estimation above, the volume of water that would be required to manage the maximum total volume of materials contained within the largest bay would be 345,600L with a flow rate of 1920L/min.
- 4.5.3 In the event of a fire, in order to reduce the requirement for the calculated large volumes of both water supply and the resultant management of fire water, alternative measures are proposed. These measures include a priority action (where safe to do so) of the removal of a non-burning waste within any stockpile in order to provide a suitable firebreak to prevent fire spread via use of the quarantine area.



Fire water management

- 4.5.4 The site will benefit from an impermeable surface that will prevent the uncontrolled release of any spent fire water.
- 4.5.5 All areas of hardstanding, impermeable pavement, bays and containers are visually inspected at least monthly to ensure continuing integrity and fitness for purpose. The inspection and any necessary maintenance subsequently required will be recorded.
- 4.5.6 Fire water will be retained on site. With the use of booms and clay drain mats to cover drains. Using the minimum kerb heights of 100mm, the minimum amount of water the main yard area can hold is calculated to be 455,000L. The kerbing in place on site is deemed sufficient to hold a volume of fire water that exceeds the maximum water volume calculated to be required to manage a fire located in the largest waste pile. A service agreement will be in place for a tanker to pump fire water from the site and dispose of accordingly.
- 4.6 Contingency Plan in the Event of a Fire
- 4.6.1 In the event of a major fire, the emergency procedures will be followed which includes notifying the Fire Rescue Service (FRS) and Environment Agency. A business continuity plan (document reference 1.5) is in place which includes contingency planning in the event of a fire. In the event of a fire, the following contingency action plan will be implemented:
 - Remove all staff off site to a safe place.
 - Depending upon the scale of the fire, operations on site will be suspended whilst the fire is extinguished.
 - Close site and await further instruction from the authorities.
 - During this period, SUEZ haulage team will be notified.
 - Inform nearby residents and businesses. This will be done via SUEZ's communications team and in consultation with the local authority.
 - Direct waste deliveries/commercial customer to alternative facilities.
 - Any burnt waste or material will be segregated and contained on site, either directly on site or within containers. This will then be assessed and disposed of at a suitably permitted facility.
 - Any fire water produced as a result of fighting a fire would be contained on site. This would then
 be removed from site via tanker for subsequent processing at a suitably permitted facility.
 - The site will be cleaned, or areas cordoned off prior to operations recommencing.
 - Internal plant checks may also be required prior to recommencement of operations.
- 4.6.2 Fire damaged wastes will be disposed of at a suitable permitted disposal as soon as practicably possible.
- 4.6.2 Operations will only recommence once the Fire Service have advised that it is safe to do so and the Environment Agency will be notified of the restart of operation.



4.7 Out of hours Response

- 4.7.1 A fire pack will be located in a box at the entrance of the site clearly marked for the FRS to access in the event of attending site in the absence of personnel on site. The pack will contain:
 - Site drawings
 - Information relating to hazardous materials and their location
 - Drainage plans
 - Contact details for key holders
- 4.7.2 In the event of an out of hours fire when there was no SUEZ presence at site, the FRS would force their entry into the site and will gain access to the site via the normal site access. The FRS can attend site in less than 10 min, and following a callout, site personnel would attend site as early as possible but within 30 min of receipt and acknowledgment of notification.



5 FIRE FIGHTING PROCEDURE

The following procedure must be adhered to if a fire should break out on the site.

ALL FIRES ON SITE MUST BE TREATED AS SERIOUS AND MUST BE REPORTED TO THE SITE SUPERVISOR AND/OR MANAGER AS SOON AS POSSIBLE.

- 5.1 It is considered very unlikely that a fire will occur but if this should happen then any outbreak of fire will be regarded as an emergency and immediate action will be taken to extinguish the fire. No one should attempt to fight a fire unless they have received training in the use of fire extinguishers and then only if this can be done without risk.
- 5.2 If it is safe to do so, attempts should be made to extinguish a fire. This can be done by using site machinery to move any non-burnt material away from the smoulder or source of fire or using water, working from the edge of the fire inwards. Plant and machinery must never be driven into the centre of any fire; this will place both the driver and the machine in danger. If possible, extinguish the fire with a portable extinguisher or water.
- 5.3 Should the fire be successfully extinguished by this action, a check should be kept of the area to ensure that the fire does not re-ignite. The area should be vacated until it is obvious that there is no further danger of the fire restarting.
- 5.4 If the above action FAILS to extinguish the fire, prohibit all entry to the area, then summon emergency services immediately. Close the site to all members of the public. Any persons already on the site should leave. The Fire Service will be contacted to deal with major fire incidents. Site staff will not be deployed to deal with major fires.
- 5.5 Telephone the Fire and Rescue Service Dial **999.** Give the exact details including the site address and telephone number.
- 5.6 Before the Fire and Rescue Service arrives staff will:
 - ensure operators of appropriate machinery are standing by in a safe location to help create fire breaks, under the direction of the FRS when they arrive
 - Appoint a clearly identified person to liaise with the emergency services on site. They should identify themselves to the FRS as soon as they arrive
 - ensure access routes are clear
 - use pollution control equipment to block drains and/or divert fire water to a containment area and/or operate any pollution control facilities, such as drain closure valves/or penstocks where safe to do so
- 5.7 On arrival the FRS should be met by the identified responsible person who must provide them with a copy of your accident plan and update them with relevant information that will assist them in dealing with a fire more effectively.
- 5.8 The designated assembly point is located next to the visitors car park. All persons must wait at the assembly point for further instructions. A Fire Warden will ensure that unauthorised persons do not enter the premises and that no one re-enters the site until given permission by a Fire Warden.



- 5.9 Upon the outbreak of fire, the receipt of waste at the site is to be suspended and not resumed until authorised by the Site Manager.
- 5.10 The Site Manager should notify the Environment Agency immediately by telephone on the incident hotline, telephone number: 0800 807060. The Agency must also be informed in writing as soon as is practicable.
- 5.11 Communication with local businesses and residents identified in the sensitive receptor table above will be undertaken in the event of a fire to reduce any environmental damage and risks to human health associated with smoke and dust.
- 5.12 All incidents must be reported in the daybook and on the SUEZ Incident Reporting and Investigation System (IRIS). The SHEQ Manager/Advisor should be informed so that in turn, full details of the event can be reported to the Environment Agency.
- 5.13 Site operations will not be recommenced until deemed safe to do so by the Local Fire Authority.



Appendices



Appendix A – Waste Storage Details



East Devon Waste Transfer Station – Waste Storage Plan

APPENDIX A – WASTE STORAGE DETAILS

Waste type	Form	Location within site	Storage detail	Bay or Container Dimensions	Volume of waste (m3)	Maximum storage time on site
WEEE	Loose	External	20 Cubic yard RORO Container	2.4m (W) x 6.3m (L) x 1.3m (H)	*16 m ³ *Internal volume	3 Weeks
Glass (>10mm)	Loose	External storage bay	In a concrete storage bay	10m (W) x 12m (L) x 2.5m (H)	225 m³	72 hours
Mixed Cans and Plastic	Loose	Internal storage bay	In a concrete/ Legio Block storage bay	15m (W) x 12m (L) x 3.2m (H)	288 m³	72 hours
Paper	Loose	Internal storage bay	In a concrete/ Legio Block storage bay	8.25m (W) x 6m (L) x 3.2m (H)	119 m³	3 Weeks
Cardboard	Loose	Internal storage bay	In a concrete/ Legio Block storage bay	11.25m (W) x 6m (L) x 3.2m (H)	162 m³	72 hours
Food	Loose	Internal storage bay	In a concrete storage bay	6.75m (W) x 5.25m (L) x 3.2m (H)	56.7 m ³	72 hours
Cardboard	Baled	External storage bay	In a covered concrete storage bay	5m (W) x 15m (L) x 3.2m (H)	240 m³	2 Weeks
Cans	Baled	External storage bay	In a covered concrete storage bay	5m (W) x 15m (L) x 3.2m (H)	240 m ³	1 Month
Plastic	Baled	External storage bay	In a covered concrete storage bay	5m (W) x 15m (L) x 3.2m (H)	240 m³	2 Weeks
Textiles	Loose	External container storage	Within ISO container	2.5 m (W) x 6m (L) x 2.6m (H)	*19.5 m³ *50% Internal volume	1 week
Mixed Household Batteries	Loose	External container storage	Within specialised battery container	1m (W) x 1.2m (L) x 0.74m (H)	*0.64 m³ *Internal volume	1 week



Gas Cylinders	Loose	External Cage	Gas Cage	1m (W) x 1m (L) x 1m (H)	1 m³	3 months
Nappies	Loose	External container storage	Enclosed DOLAV container	1m (W) x 1.2m (L) x 0.74m (H)	*0.64 m³ *Internal volume	72 hours

Note: All loose material bay volume calculations allow for material slump at the front of the storage area and so equate to 75% of the total cubic volume for 3 sided bays and 50% of the total cubic volume for 2 side bays and food bay (due to nature of material).



Figures



Figure 1 – Site Location Plan

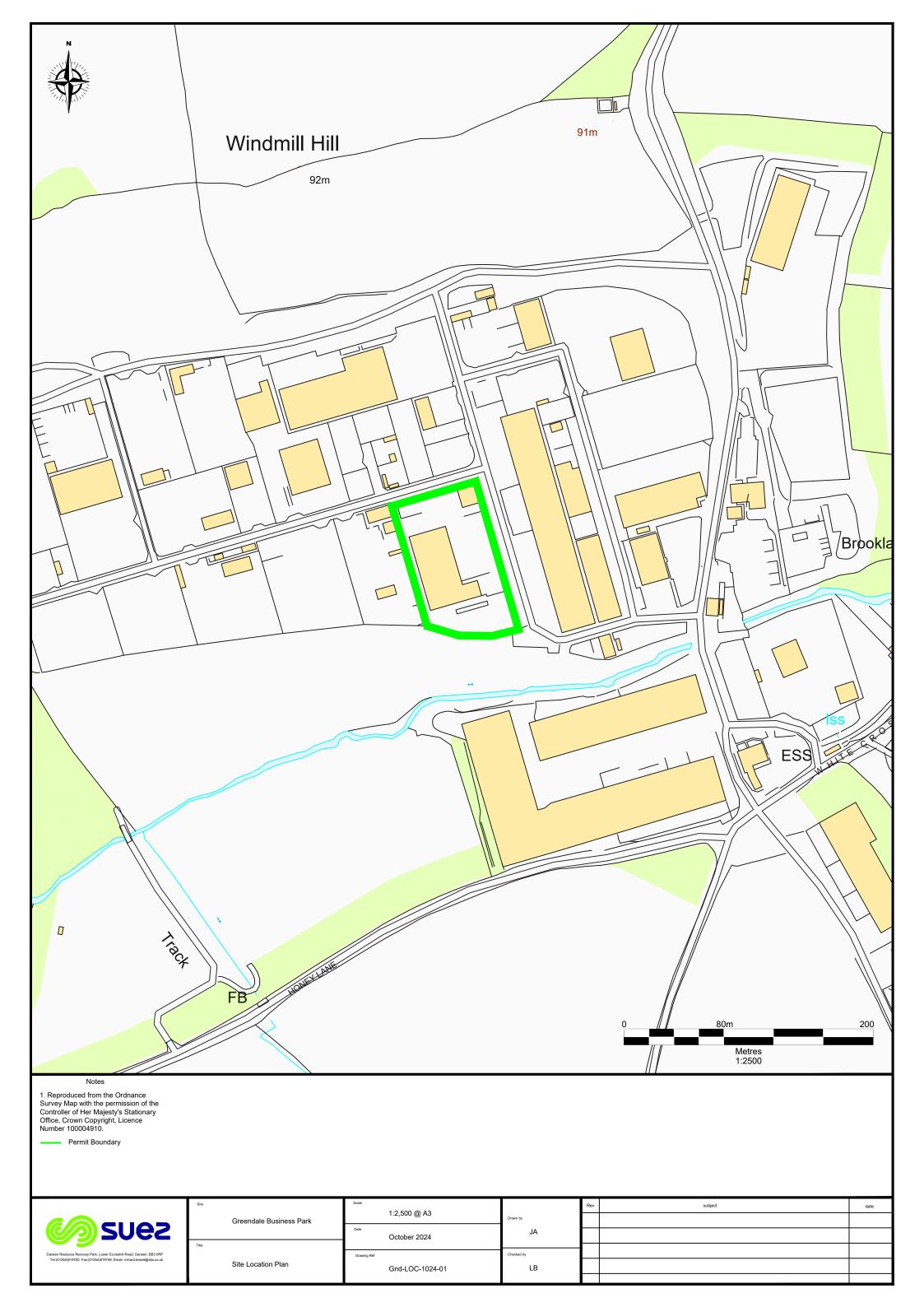




Figure 2 – Permit Boundary Plan

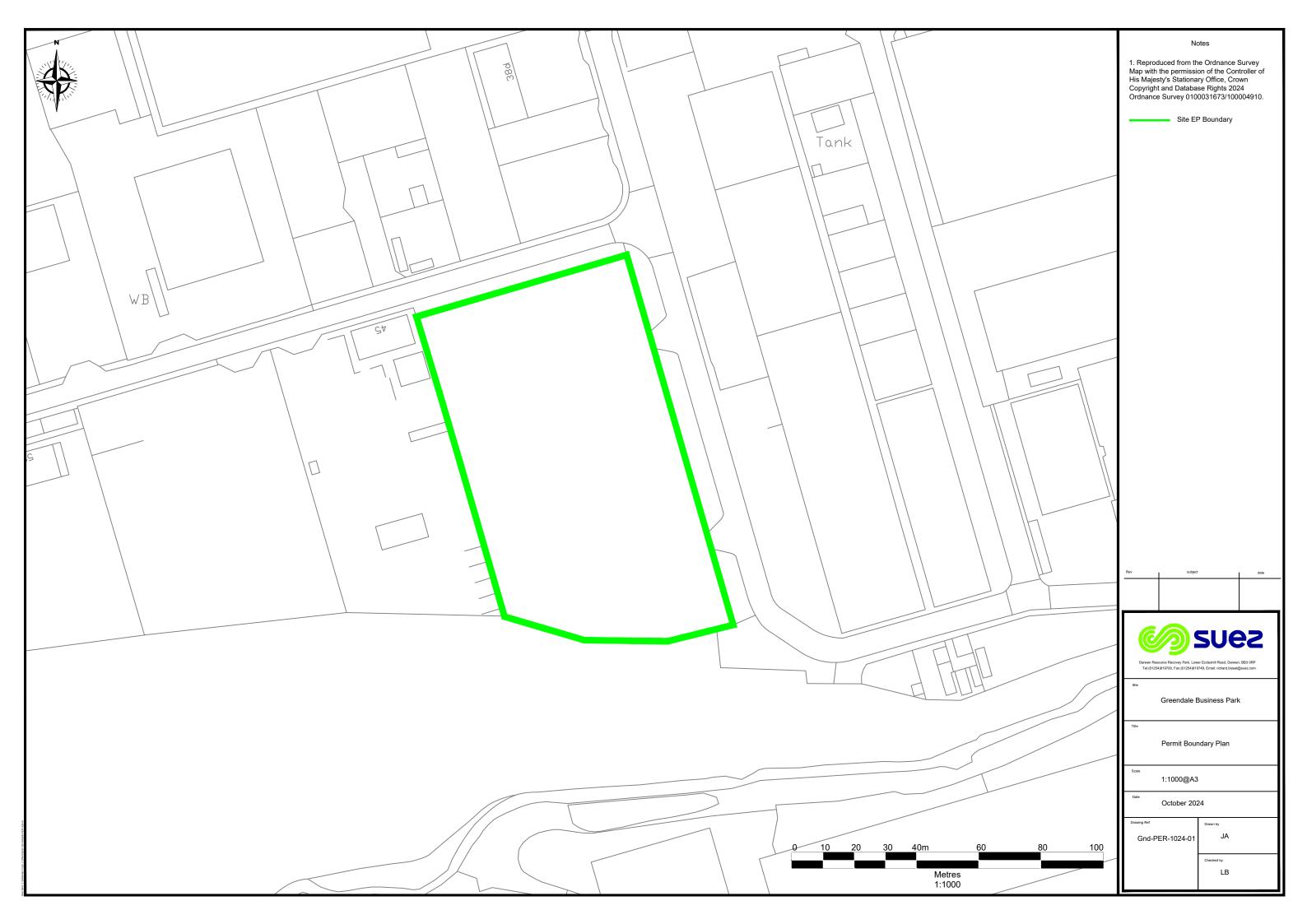




Figure 3 – Site Layout Plan





Figure 4 – Site Drainage Plan





Figure 5 – Receptor Plan

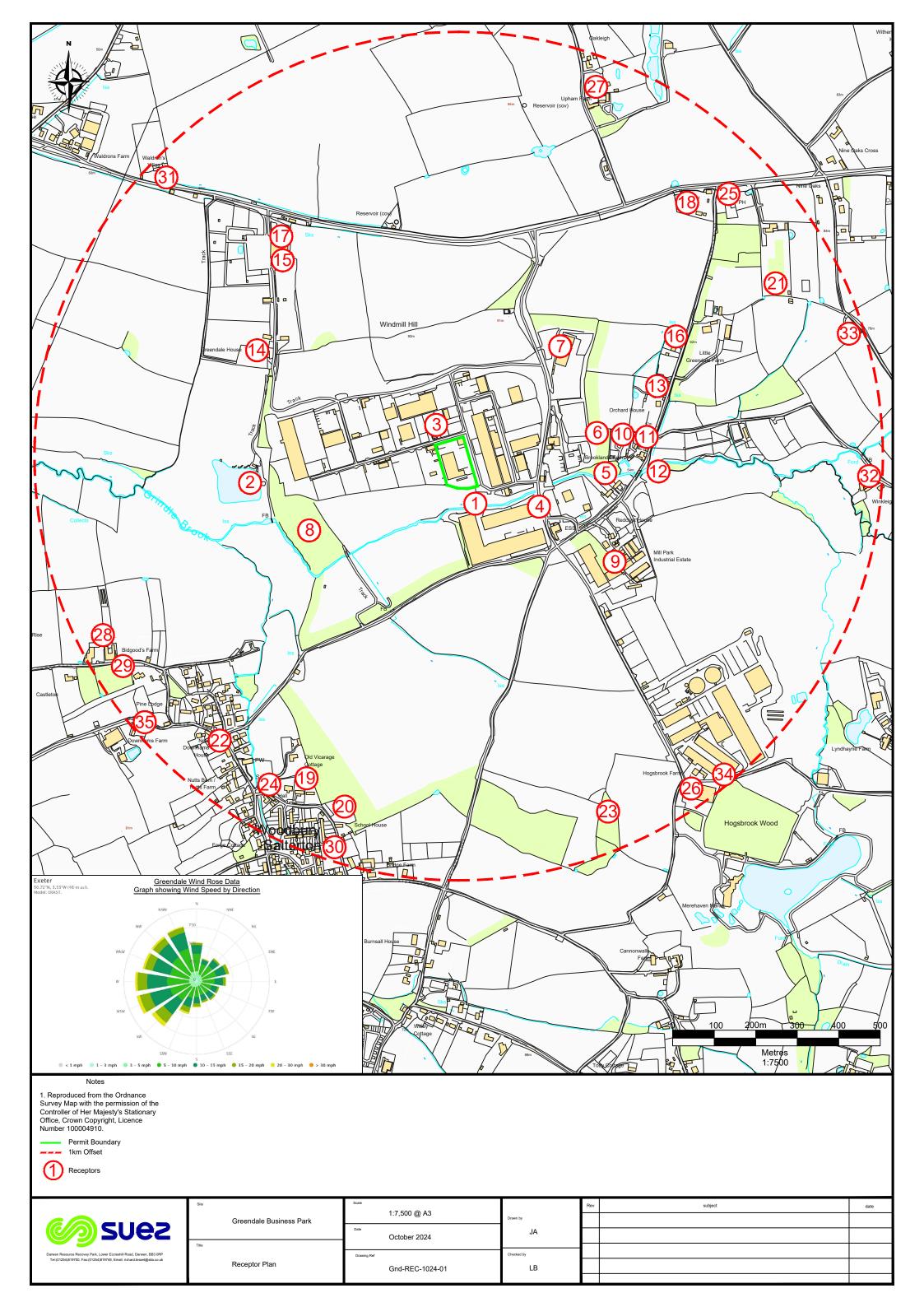




Figure 6 – Emergency Access Route

