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Fire Prevention Plan

Version 1

Roadstone Limited

Unit 5 Invicta Park,
New Hythe Lane,
Larkfield
Aylesford,
Kent,
ME20 7FG

Client: Roadstone Limited

Reference: EPR/LP3428LU/P001
Issued by: Ravenswood Environmental Services Ltd
Prepared by: Millie Coleman
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DOCUMENT CONTROL SHEET

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1	04/2025	Permit application	M Coleman	Ravenswood Environmental Services

Who this plan is for

Roadstone Limited ('the Site') is located on an industrial estate at Unit 5 Invicta Park, New Hythe Lane, Larkfield, Aylesford, Kent, ME20 7FG. (Grid Reference TQ 71565 59431). Roadstone will be a household, commercial and industrial waste transfer station with an associated treatment plant. The facility will accept a variety of non-hazardous waste streams produced from industrial, commercial, construction and demolition sources. The waste is processed mechanically and manually to recover recyclable materials that are then stored in segregated bays prior to onward transportation to various recycling operations. The residual wastes are transferred off-site for disposal or further recovery by others. The facility will also adhere to the procedures and protocols as stated in the EMS (Environmental Management System).

All management and staff at the facility will be made aware of the conditions of this FPP (Fire Prevention Plan) and records of training in this regard will be maintained on site and internally reviewed no less than twice yearly to ensure members of staff are conversant with the document.

This Fire Prevention Plan should be read in conjunction with the EMS and Site Permit to ensure a comprehensive understanding of the requirements of the facility and its safe operation are attained by management and individuals who have an association with the day-to-day running of the facility.

A technically competent manager (TCM) holding the relevant qualification to manage a medium risk waste treatment and transfer facility will be in attendance as required by the Environment Agency guidelines and shall maintain continued competence and accreditation by the Waste Management Training & Advisory Board (WAMITAB).

The site will be open Monday to Saturday, 7am to 6pm with plant operations starting at 8am. These opening hours will be strictly adhered to however in the event of an incident of a vehicle being delayed or work is required on site as a matter of urgency for safety or environmental reasons, the Enforcement Section of Kent County Council AND the Environment Agency must be advised of the event and the reason provided for exceeding the permitted operating hours.

The site supervisor will be in attendance during the working week but also attend the site at weekends should the manager be absent.

The site will not open on Sundays or bank holidays.

Fire Prevention

To minimise the risk of fire during the working day and most importantly outside of working hours, adherence to the preventative measures outlined in this plan are critical and must be maintained. Internal auditing of active and passive systems should ensue monthly and feature in staff briefings such as H&S Meetings and any subsequent Toolbox-Talks or safety memos.

Control of the waste piles to within the quantities stated on the FPP is essential as the mechanisms outlined for prevention and control become ineffectual if exceeded. By controlling waste stockpile sizes ensures the objectives of this plan are achieved.

Contents

1. Types of combustible materials

1.1 Combustible waste

- Paper or cardboard
- Plastics and rubber
- Textiles
- Scrap metals contaminated or mixed with other waste such as oils or plastics.
- Mixed waste containing any combustible wastes.
- Wood
- Ferrous and non-ferrous metals

If non-combustible waste is contaminated with combustible waste, we will generally regard the whole pile of waste as combustible.

1.2 Persistent organic pollutants

Testing for Persistent organic pollutants (POPs) is required on wastes known to be associated with WEEE waste. Roadstone Limited is not permitted to accept POPs on site. Thus, POPs fall outside the intended scope of this document.

1.3 Other combustible materials

- static tank holding 5,000 litres
- Engine oils and grease for mobile plant and machinery
- Hydraulic oil for site plant
- Cleaning fluids
- Diesel fuel for site plant
- Aerosols
- Batteries
- Upholstered furniture is not accepted on site.
- Smoking and discarding cigarettes

2. Using this fire prevention plan

2.1 Where the plan is kept and how staff know how to use it

A copy of the Fire Prevention Plan will be kept on display in the main office readily available to staff to refer to in times of need. The plan will be reinforced by regular Toolbox-Talks and enactment of the relevant fire drill procedures. The company policy is to engage all site staff in the purpose and use of the Fire Management Plan and to ensure familiarisation is achieved at all levels, to nurture a positive attitude and endorsement of the company's commitment to its legal responsibilities as a responsible employer.

This fire prevention plan will form parts of the site induction programme for new employees and contractors.

For this plan to work as designed, commitment from directors and the site management team is essential to demonstrate that at every level endorsement and commitment is obvious.

2.2 Testing the plan and staff training

It is crucial that all permanent and temporary members of site staff are familiar with this Fire Prevention Plan and to achieve this the following procedures are in place:

- Prominent or pertinent points arising from internal audits relating to FPP awareness.
- Management to ensure all staff are aware of information communicated and site staff sign for acknowledgement to affirm their understanding.
- The FPP is Management reviewed quarterly to ensure it remains effective and relevant to activities.
- FPP procedures form part of the site induction process for new/temporary staff.
- This training should encompass **understanding the nature of fires, the importance of quick response, and the correct use of fire safety equipment**. Additionally, they should be made familiar with the layout of the workplace, especially pinpointing the emergency exits and identifying the nearest exit from their specific workstations.
- Monthly emergency drills are enacted to create familiarity in the event of a fire and recorded with remedial actions undertaken for continual improvement.

  A scenario for the fire drill will be decided using the following prompts:

  - *Create a realistic scenario that reflects site operations and what could occur if a fire was to start.*

- *Choose a location within the storage or processing area where a fire may occur.*
- *Gather the fire response team, those who are designated and trained to tackle a fire in the incipient stages*
- *Sound the alarm, employ mobile equipment that would be used in the event of a fire*
- *Observe the response time, organisational process and adherence to the emergency drill and FPP procedures.*
- *Identify bottlenecks, indecision and lack of knowledge concerning the location of firefighting equipment.*

Fire drills enacted have clear objectives with common goals including:

- Ensuring everyone evacuates quickly and safely.
- Testing the effectiveness of the fire alarm system.
- Checking the functionality of emergency exits and escape routes.
- Evaluating the response of designated fire wardens or safety officers
- Activating the Fire Alarm
- Hose reel layout and testing
- Water boom layout and check

Taking notes from the observations made of the enactment including time of evacuation:

- Monitor the evacuation process closely.
- The time taken to evacuate.
- Any issues with the alarm, hose reel, water boom or evacuation routes.
- Behaviour of individuals and adherence to evacuation protocols.
- Ensure managers are guiding people and assisting anyone with mobility issues. Ensure everyone heads to the designated assembly point in a calm and orderly manner.

- Training records will be maintained by the site manager.
- Annual independent Health & Safety advisor/consultant will review Fire Risk Assessment and integrate points with site manager in the FPP review.
- The training needs of individuals must consider the procedures and actions set out in this plan and must be refreshed frequently to ensure that in the event of a fire, they know what must be done.
- Site walk arounds will take place to discuss FPP compliance in practice on site.
- The likelihood that non-English speaking foreign nationals work at the site or will work there at some point is considered and measures are in place to ensure that emergency procedures are fully understood by these people who may be vulnerable during an emergency. Site rules will be available in several languages and those workers who speak little or no English work alongside English-speaking nationals who are able to communicate the basics as necessary.

3. Fire prevention plan contents

3.1 Activities at the site

The wastes which will be accepted at Roadstone Limited are presented in the table under **Appendix C.**

Waste material is brought to site Monday to Saturday between the hours of 7.00 to 18:00, however, the waste transfer plant operates 8:00 to 18:00. Waste is transported to site by pre-approved contractors who comply with the conditions of Duty of Care.

The facility will accept 200,000 tonnes per annum and no more than 50 tonnes of physical treatment including manual and mechanical sorting, separation and screening of non-hazardous waste a day for disposal or recovery.

It is proposed to treat waste to segregate items for recovery which will be in the following form:

➢ Wood

➢ Plastic

➢ Non-ferrous metal

➢ Ferrous metal

➢ Hardcore

➢ Refuse derived fuel

➢ Soil

In order to achieve this, a combination of manual and mechanical treatment equipment will be in operation and generally follow these procedures: Manual pre-treatment sortation intended to detect non-conforming items, such as batteries, aerosols, chemicals, plasterboard, asbestos and gas bottles. Easy to remove single items suitable for recovery will also be set aside at this stage. The second stage of treatment will commence as waste enters the screener to segregate various waste types, such as fine particles, hardcore, glass, ceramics and small items of brick. From the screener waste is fed to a shredder to reduce items to a manageable size to facilitate further handling, storage and transport. The heavy fraction hardcore is separated into large and small items as each has a future potential for reuse. Metals are also removed via the screener but often require passing through the screener a second time to remove remaining small metal items.

This processing strategy ensures reception bays are emptied almost daily and there is ample time for essential maintenance/cleaning to be undertaken. This also allows for additional processing time in case of any plant breakdowns.

The nature of a facility's operations means there will be no storage of waste beyond one month, and any putrescible wastes received at site will be segregated, stored in the designated bay and removed within 48 hours of receipt.

Stock rotation is achieved by their own vehicles and employment of various third-party haulage contractors utilising articulated vehicles with a volume capacity of 110m^3 to either remove processed materials to further waste facilities or incineration.

Regular shipments of waste enable continuous stock rotation and ensure no waste remains in storage longer than one month in any case.

Pile locations have been designed to provide the minimum storage necessary whilst maintaining operational effectiveness.

The pile locations and general layout of the site has been considered to facilitate efficient movement of waste through the facility. Starting with deliveries, processing and final storage pending removal from site.

3.2 Fire prevention signs

The site is not accessible to members of the public, so all advisory signs are for approved contractors who work in the industry and have adequate training provided as well as permit to work and a hot work permit where necessary. However, clear concise signage is essential and is evident at Roadstone Limited by placement in prominent locations and made clearly visible and unobstructed. Fire warning signs are kept clean and inspected by the site manager who issues instruction for appropriate action when required.

3.3 Visitor procedures

All visitors must sign in on entry by reporting to the site office where a senior member of staff will be informed of their presence. All visitors must be accompanied around the site and not enter restricted areas. Company policy regarding the NO SMOKING rule explained when site induction is being carried out.

Contractors arriving with the intention of carrying out works will undergo a full site induction.

3.4 Site plan

Refer to **appendix F– H** for site plans.

3.5 Plan of sensitive receptors near the site

The receptors shown in figure 1 are within 1km of the site.

The site is located approximately 580m due north of the M20 motorway in Aylesford, Maidstone Kent, ME20 7FG (NGR TQ 71565 59431) . Sited between the Strood and Maidstone railway to the east and river Medway immediately to the west, both points almost converging at the southern boundary and in effect isolating the site from access other than from a road bridge (New Hythe Lane) providing access to the site from the north. Roadstone Limited is located to the extreme east of the wider industrial estate that boasts a variety of industries. Adjoining the site to the north is a large waste treatment facility operated by London Mining Associates. The exact nature of their business is not known but thought not to involve combustible waste.

The site is bordered to the immediate east by the river Medway classed as a marine conservation zone due to fish migration, this SSSI is considered throughout the entirety of this document. Adjoining the river Medway to the east is a large sewer treatment facility. The distance between the proposed Roadstone Limited eastern boundary and the sewer treatment plant is approximately 700m. To the northeast, at approximately135m lies a large solar electricity generation farm. A number of freshwater lakes are located to the east, north and northwest of the site. The nearest being over 400m distant. Domestic properties are located immediately south of the M20 motorway, to the west and northwest. There are no domestic properties to the east within 1,000m.
The general area to the east of the site is predominantly farmland interposed with farm buildings and extinct quarry workings. Within the 1km radius search area for sensitive receptors it should be noted that the region forms part of a large-scale mixed industrial and commercial area. There are no care homes, hospitals, or similar sensitive receptors within 1km of the site. Aylesford School lies just outside of the 1km safeguard zone.

The closest Fire Station is approximately 2.5km away at New Hythe Lane, Larkfield. The closest hospital is Approx. 3.8 miles, Maidstone and Tunbridge Wells NHS Trust.

These are identified in figure 1 below.

Figure 1: Sensitive receptors within 1km of the site.

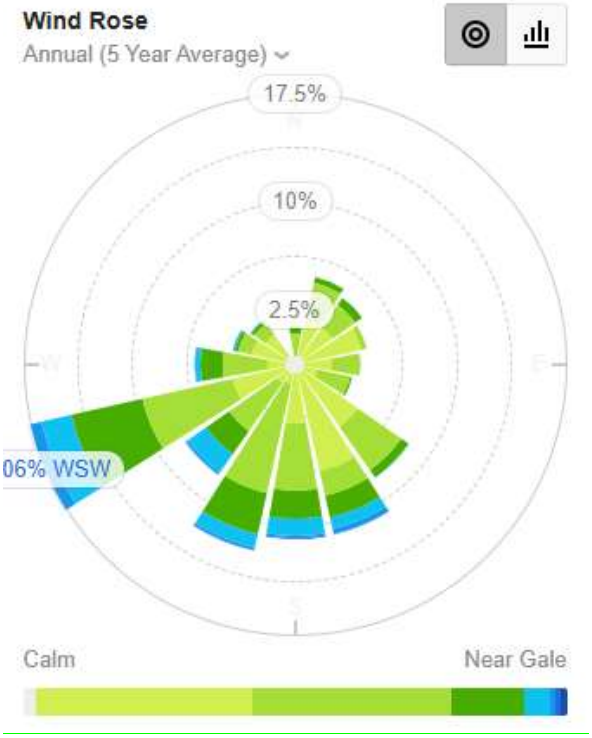


Figure 2: Roadstone Limited wind rose.

Refer to **Appendix J** for sensitive receptor screening report.

4. Manage common causes of fire

4.1 Arson

Arson is predominantly carried out by intruders but also potentially a 'grudge' attack by disaffected ex-employees. To this end, Roadstone Limited is located within an industrial area away from busy public areas. Vehicles and visitors must report to the site office before being permitted access to the site. A visitors' book is maintained in the office to record the name, date, time and reason for the visit.

The perimeter of the site is formed of concrete panels emplaced to a height of 4m and located on a raise concrete plinth. The outward facing surface of the perimeter wall is lined with solid metal panels. There is a single ingress and egress point provided with lockable 4-metre-high gates. The site is bordered to the east by the river Medway and immediately to the west is the southeast rail line, both providing an additional level of security.

CCTV systems are installed covering aspects of the site and remote monitoring is possible by smart phone or similar equipment which allows the site manager and Director to view at their discretion. Refer to **Appendix F-H** for location of security cameras presented on the site plan.

4.2 Plant and equipment

Maintenance regime and active cleaning programme coupled with regular inspections serves to negate the potential of a fire starting from plant and equipment.

Parking plant away from combustible waste when not in use is an essential procedure. All mobile plant operators are instructed to ensure there is no waste material left near exhaust pipes after mobile plant is parked up immediately after use. Regular cleaning and washing of internal compartments are carried out to ensure no trapped debris is present. All mobile plant is removed from the operational area and returned to the designated plant parking location Please refer to Appendix F-H.

All mobile plant is fitted with fire extinguishers as standard and are serviced by the equipment supplier at the same frequency as the larger static models.

Any presence of used oily rags will be collected and disposed of accordingly by the third-party company designated to carry out plant maintenance.

Refer to **Appendix E** for full maintenance program.

4.3 Electrical faults including damaged or exposed electrical cables

Electrical certification

Electrical circuitry testing is carried out annually for portable appliances (PAT) and static equipment. Testing will form part of a predictive maintenance program (PMP) to monitor the operation of equipment and plan repair schedules.

Electrical Faults

Daily inspections will be undertaken by the site supervisor and manager. Electrical equipment is kept away from waste where possible and when power to static equipment is required, a physical barrier will be in place separating the two.

As a rule, power cables will be located at high points and secured to the perimeter fence.

Staff are encouraged to report any, and all faults or damage noted to electrical equipment.

Repairs to electrical components and equipment will only be undertaken by a qualified electrician.

All electrical circuits will be subject to an annual inspection and routine maintenance by qualified contractors. Portable appliance testing (PAT) will be undertaken annually, and any items found intrinsically unsafe will be immediately replaced. Testing will be carried out by a qualified electrician who will also check the condition of the electrics against the UK standard for the safety of electrical installations - BS 7671 IET Wiring Regulations, supporting statutory regulations such as the Electricity at Work Regulations 1989 and the Provision and Use of Work Equipment Regulations 1998.

Reports of all inspections and testing shall be retained on site and any recommendations / requirements shall be acted upon without delay.

All members of staff shall be made aware of the importance of protecting electrical components and cabling and report damage without delay. Electrical equipment shall not be tampered with in any way and no attempts by untrained or professionally uncertified members of staff will be made to rectify problems. Reports will be made direct to the site supervisor or manager who shall record the matter in the site diary and note arrangements and close out comments as appropriate.

Electrical equipment maintenance arrangements

The PMP program will include static (offline) and dynamic (online) testing. Completion reports will be passed to the site manager to implement / arrange any noted actions.

Testing will be conducted annually as a minimum or as a when required.

A reputable and certified electrician will be engaged to carryout electrical appliance and equipment testing and arrangements will be made with the same to respond to emergency call out when required.

All electrical circuits are subject to an annual inspection and quarterly routine maintenance inspection by qualified contractors. All staff are aware of the need to immediately report any damage to electrical cable or appliances.

Electrical equipment is kept away from waste where possible and when power to static equipment is required, a physical barrier is in place separating the two. No Mains electrical components are located within 6 metres of combustible waste, with the exception of the static plant. Mains electricity cables are kept in dedicated cable corridors which are located away from combustible waste. Electrical components on static waste handling equipment are intentionally sited away from waste processing compartments.

4.4 Discarded smoking materials

Smoking on site policies

Roadstone Limited operates a NO SMOKING policy within waste storage and operational areas. Designated smoking areas are sign posted with appropriate cigarette waste bins/sand buckets. The No Smoking policy also applies to electronic cigarettes.

Any transgression of this policy will lead to immediate expulsion from site for visitors and disciplinary action taken against site staff. A second offence by site staff will lead to a possible termination of employment on grounds of alleged gross misconduct. Smoking is not permitted within vehicle cabs.

4.5 Hot works safe working practices

No 'Hot Works' are allowed to commence without the appropriate forms being processed, personnel involved in the activity will be fully briefed and their area of work explained.

Hot works permits can only be issued by senior members of staff who have undergone the relevant training, and their names appear on the authorised personnel register.

Hot works are carried out away from waste piles in areas that are clean and prepared for the activity.

During the operational day, hot works will be supervised by a member of staff who has previously been made aware of the conditions under which the work can commence.

All hot works are conducted under a permit scheme, which is initiated from the site office. All staff who control hot work activities must be authorised to do so by senior management.

ABSOLUTELY NO HOT WORKS WILL BE CARRIED OUT WITHOUT A SIGNED PERMIT.

Before a hot works permit is issued, the site procedure detailing what control measures must be in place before works begin should be discussed with the people associated to the works, after which the permit can be completed.

If any work takes place in or around waste material an additional person will be at the scene to monitor for any potential fires.

If possible, all hot works including grinding and cutting using abrasive wheels will be undertaken at a location away from combustible waste. The location will be designated by the site supervisor who will appoint a responsible member of staff to be in attendance whilst the works progress and will also ensure appropriate fire suppression equipment is within easy reach.

The member of staff will satisfy himself that adequate time has elapsed following completion of the works and where possible the area and items subject to heat will be doused with water. Items of equipment that cannot be treated in this manner will be kept attended until such time has passed to satisfy those involved that items have sufficiently cooled, and further attendance is not necessary.

4.6 Industrial heaters

Industrial heaters are not used on the site. Site offices have a heating system which is similar to domestic heaters.

4.7 Hot exhausts and engine parts

Fire watch procedures

All mobile plant is subject to a routine maintenance program by the manufacturer or approved contractors to help minimise ignition/combustion from failing parts. However, as there is always potential for failure, all machine operators are qualified for their specific machine and undergo fire awareness training to identify potential hazards and report them accordingly.

Initial pre-start checks are carried out by site staff at commencement of the working day, these include oils, water and lubricants. Clearing of potential trapped debris is undertaken at the end of the working day. Confirmation of these checks are recorded in the individual Daily Mobile Plant Check. Any faults or repairs are noted on a Defect Note and actioned by the site manager using appropriate qualified contractors.

Mobile plant is stopped every 4 hours and the engine compartments blown out with compressed air. Water is seldom used as the wet surface, encourages fine debris to adhere to surface. Air filters are removed and cleaned daily, and confirmation of the event is recorded on individual plant maintenance check sheets.

4.8 Ignition sources

The following list is the most probable cause of fire but is not considered exhaustive:

- ➢ Smoking and discarding cigarettes.
- ➢ Sparks from machinery coming into contact with hard abrasive surfaces.
- ➢ Electrical faults.
- ➢ Self-combustion.
- ➢ Arson.
- ➢ Hot exhaust from mobile plant.
- ➢ Deposited hot loads.
- ➢ Lithium batteries

To reduce the risk of fire starting, any ignition source within the vicinity of the combustible waste is restricted to essential components only and kept at a minimum of 6m away. Any ignition source such as electrical cables and lighting is installed and maintained by a competent person. Any ignition source is subject to a risk assessment before being sited in or around the waste material. Refer to **Appendix F-H** for ignition sources highlighted on the site plan.

4.9 Batteries

Batteries left for storage or found in in-coming waste streams must be stored in appropriate lockable containers, located away from waste piles, until removed from site by competent licenced waste carriers.

Lithium Ion and Lithium batteries are extremely dangerous and damaging to the environment and as such should never be placed in general waste or sent to normal recycling avenues.

The vehicle driver must be asked precisely whether "to the best of their knowledge" the load does not contain batteries and more specific questions regarding the source of the waste and the industry from which it derives. Multi-collection rounds pose a particular problem due to the heterogeneity of the waste and therefore have the potential to contain non-conforming items, such as batteries. Extra vigilance is required when dealing with this type of waste load. In such circumstances the weighbridge operator must inform the site supervisor, this is usually made by using site radios, of the presence of mixed loads. The supervisor can then ensure that pre-sorting is undertaken thoroughly by close visual inspection and breaking of the load to expose its full contents prior to entry into the treatment process.

The waste handling machine operator will also be made aware that the load may contain batteries or other non-conforming items. Should batteries of any type be found in waste; they will be removed to a lockable battery box that is located greater than 6 metres from combustible items.

4.10 Leaks and spillages of oils and fuels

Flammable materials used for the operation of the facility will be returned to lockable containers when finished with, or when required for several vehicles for example, at the end of the working day. Housekeeping activities will include visual inspection of the impermeable surface for oil patches which if found will be cleared using spill kits. Used materials will be kept in a wheelie type bin and located in the workshop well away from other flammable materials.

The operations manager shall ensure adequate time is provided during the working day for operators to inspect their machinery for build-up of debris within enclosed compartments and conduct a visual walk round searching for leaks and potential failings. All electrical points will be clean and free of debris and a visual inspection undertaken to ascertain the integrity of cables and ensure these are in dedicated secured runs. Electrical boxes and circuits shall be kept free of debris and dust and kept closed at all times. No attempt will be made by site personnel to clean the inside of electrical components regardless of the good intention.

Cleaning of the impermeable surface and perimeter fencing shall be conducted throughout the day, as and when required, but as a minimum midmorning and mid-afternoon. Sufficient resources shall be available to maintain the site in a clean and tidy condition for safety and ascetic reasons. The workshop shall be maintained in a tidy condition and the principals associated to management of the site shall also apply to the workshop and site offices.

A daily inspection of the flammable storage areas shall be carried out by the supervisor or manager and shall include the lockable cage storing gas bottles.

In the instance of an oil spill being noticed the following procedure shall be adopted:

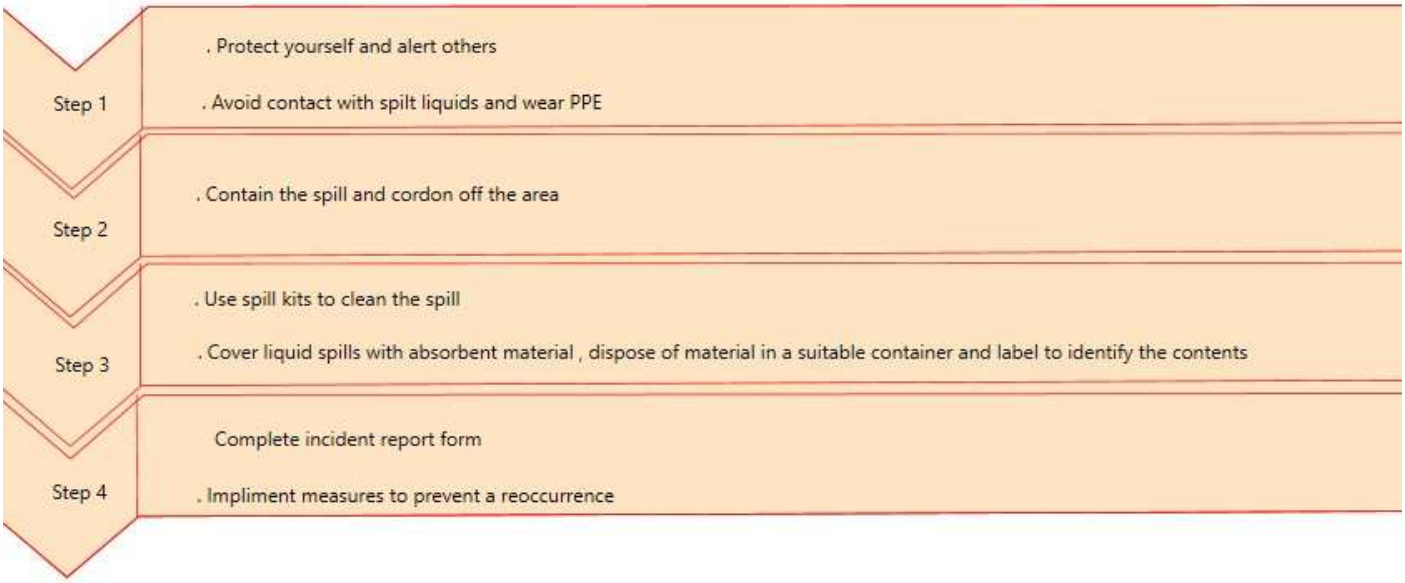
All hazardous liquids that are stored in containers with a capacity that exceeds 5lts will be held in an area that is engineered to prevent leaks or spillage which may cause damage to the environment.

All oils, fuels and lubricants will either be stored in containers that are bunded, double skinned, held on trays or held within an area that has an impermeable surface and sealed drainage. All containers will be free of leaks and maintained in good condition, dispensing equipment such as funnels, nozzles and jugs will be kept fit for purpose.

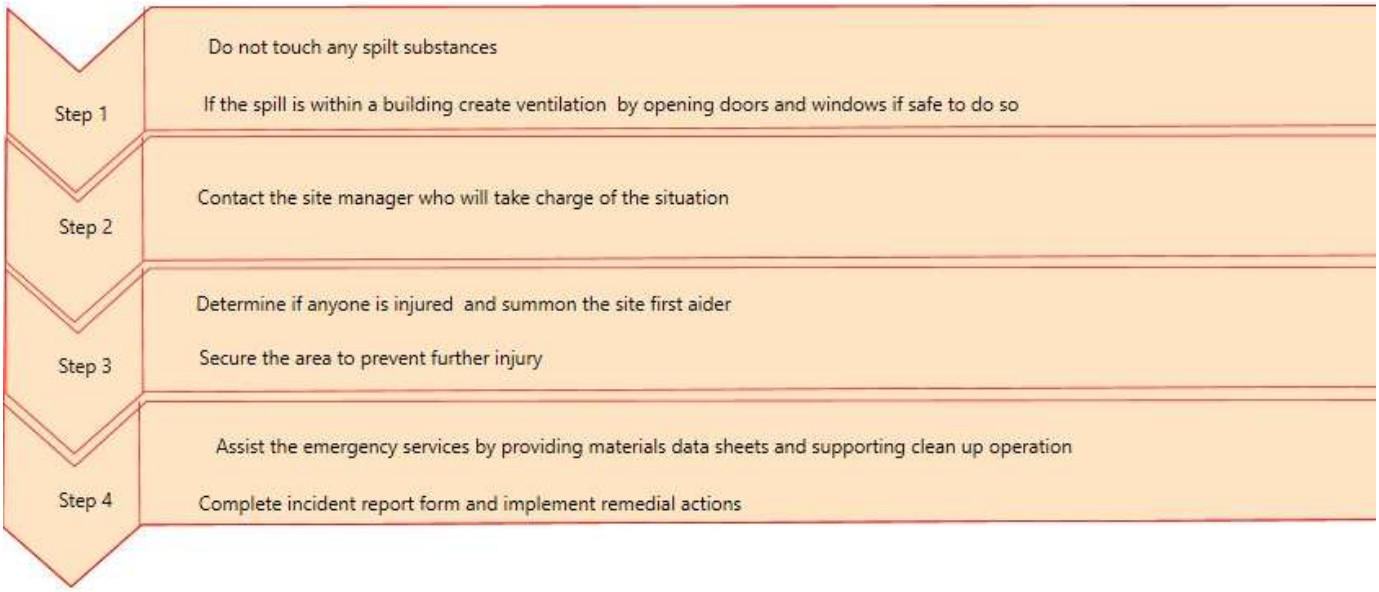
Refuelling and maintenance of plant and machinery will only take place in designated areas.

In the event of spillage, the activity that caused the spill will cease immediately and will only recommence once the spillage has been cleared.

Minor spills



Major Spills (A major spill is one that cannot be contained with the materials on site and threatens safety to life.



Refer to **Appendix F-H** for location of Spill kits around site.

4.11 Build-up of loose combustible waste, dust and fluff

Regular housekeeping is essential for health and safety compliance and averting a potential fire from accumulated waste, dust and fluff. To reduce potential fire spread and ignition of loose material all staff are aware of the importance of good housekeeping to ensure waste material is kept in the appropriate areas. Consumable materials are returned to lockable containers at the end of the working day and checking of the operational area ensues throughout the day.

The operations manager shall ensure adequate time is provided during the working day for operators to inspect their machinery for build-up of debris within enclosed compartments and conduct a visual walk around searching for leaks and potential failings.

At the end of the working day when waste inputs cease, the main processing area is cleaned. Cleaning of the working areas are routinely carried out as the site operates 6 days a week.

This cleaning routine shall be above the normal daily procedure which comprises of maintaining waste piles in the correct manner and size, ensuring the floor of the site is cleaned of loose materials throughout the day. This activity is tasked to site operatives by the supervisor and manager.

The supervisor shall, to the satisfaction of the operations manager, arrange for a thorough inspection and clean of the site at the end of each week.

Housekeeping is required not just for general cleaning and upkeep of all aspects of the operation and yard but also as a method of monitoring such areas as drainage, sewage treatment plant that require periodic attention by specialist firms together with early notification of damage or faulty equipment. It is intended for those carrying out the housekeeping to make note and report any areas of concern.

Table 1: Housekeeping Duties

Housekeeping	Daily	Weekly
YARD FRONTAGE - The car park, yard entrance and road area should be inspected and cleaned when necessary. On windy days checks should be made to ensure no litter has 'blown' out onto the shared entrance or road area.	X	
OFFICE AREA - The external pathways and surrounding area to be cleaned at the start of each day	X	
GENERAL YARD AREA - All areas not cleaned by machine, including the '*hidden*' away areas, to be kept clear of rubbish and junk at all times and maintained generally clean	X	
YARD DRAINAGE - Lift drain grates and clean catchpots (following a spillage the residue silt to be bagged and kept for removal by certified controlled waste collection company)		X
DRAINAGE SEALED TANKS - Lift cover and check levels using the tank dip stick. REPORT to the Operations Manager if levels high • NOTE: DURING PERIODS OF HEAVY RAINFALL DRAIN TANKS MUST BE CHECKED DAILY	X	X
INTERCEPTOR - Lift cover and visually inspect for high levels or build-up of silt. Report to the Operations Manager if levels high		X
Housekeeping	**Daily**	**Weekly**
Walkways and stairways to be cleaned and cleared of debris	X	
SIGNAGE - All site signage to be checked cleaned	X	
SITE SECURITY - The site perimeter, fencing, gates & locks to be checked for damage/operation. Any damage/faults to be reported to the Operations Manager		X

4.12 Reactions between wastes

There is a potential for fire risk when mixing incompatible waste streams and to mitigate the possibility of this occurring strict adherence to waste acceptance procedures is essential. The site EMS details measures associated to waste acceptance protocols and associated actions.

Plant operators and banksmen will be vigilant for non-conforming waste items that have the potential to cause a fire when in contact with other waste types. These may not be visually apparent; however, unidentified objects should always be deemed as suspicious and brought to the attention of the supervisor and isolated in the quarantine area until identification is confirmed. Disposal of the item will depend on the outcome of the investigation which may result in off-site disposal and contact with the regulating authority.

Although Gas bottles and aerosols are not accepted onto site, in the instance of such waste entering site, the potentially explosive waste should be removed from the operational area to a safe lockable cage. Lithium batteries within waste piles are a prime source of ignition and as mentioned above in "*4.9 Batteries"* operators should be especially vigilant of these items and report their presence immediately to prevent damage occurring during treatment activities.

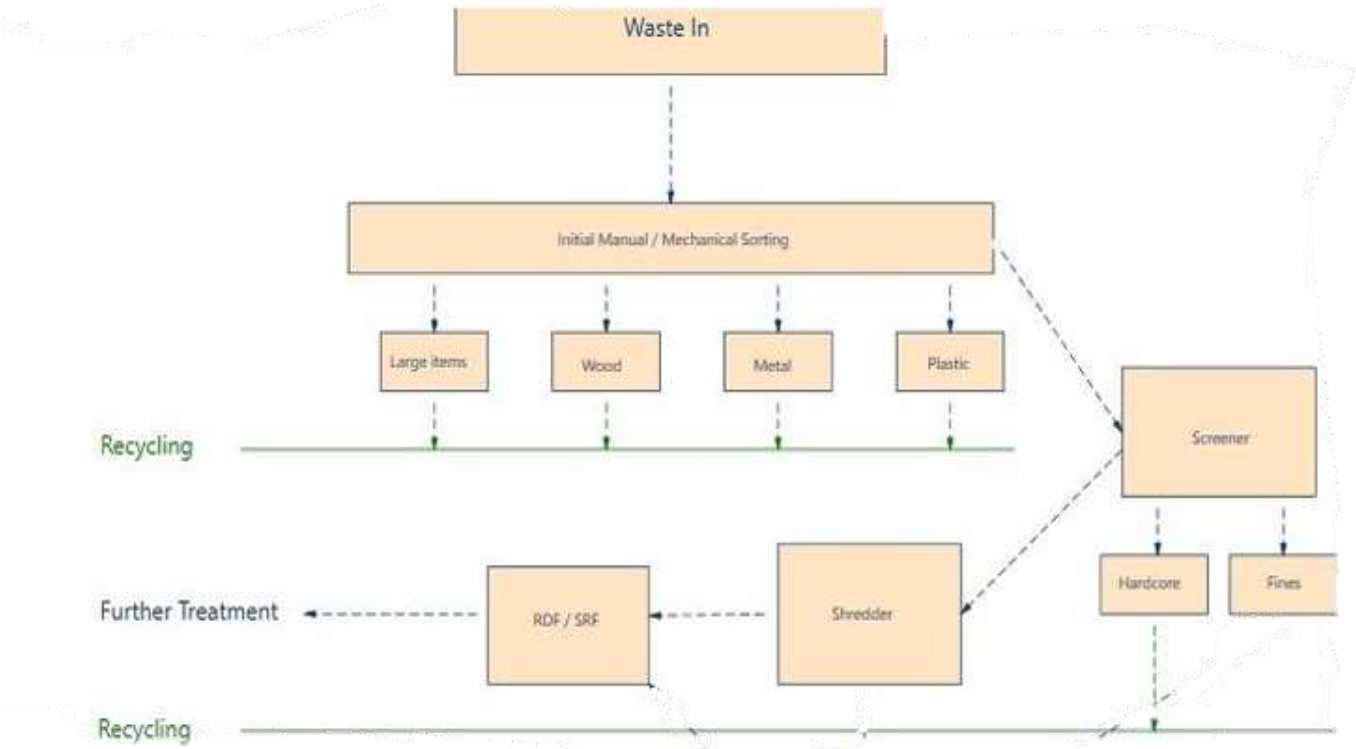
Loads that cannot be visually inspected at the weighbridge and before the point of disposal shall be brought to the reception/treatment area and unloaded under the supervision of the waste grab operator. Their position directly over the tipping vehicle provides an ideal advantage point of the waste being deposited and is able at this time to communicate the presence of suspicious items to the supervisor and halt the unloading process.

Waste stored in bays must have a minimum freeboard of 1.0m from the top of the bay wall to ensure a fire cannot pass between bays, therefore reducing the risk of fire spreading between bays.

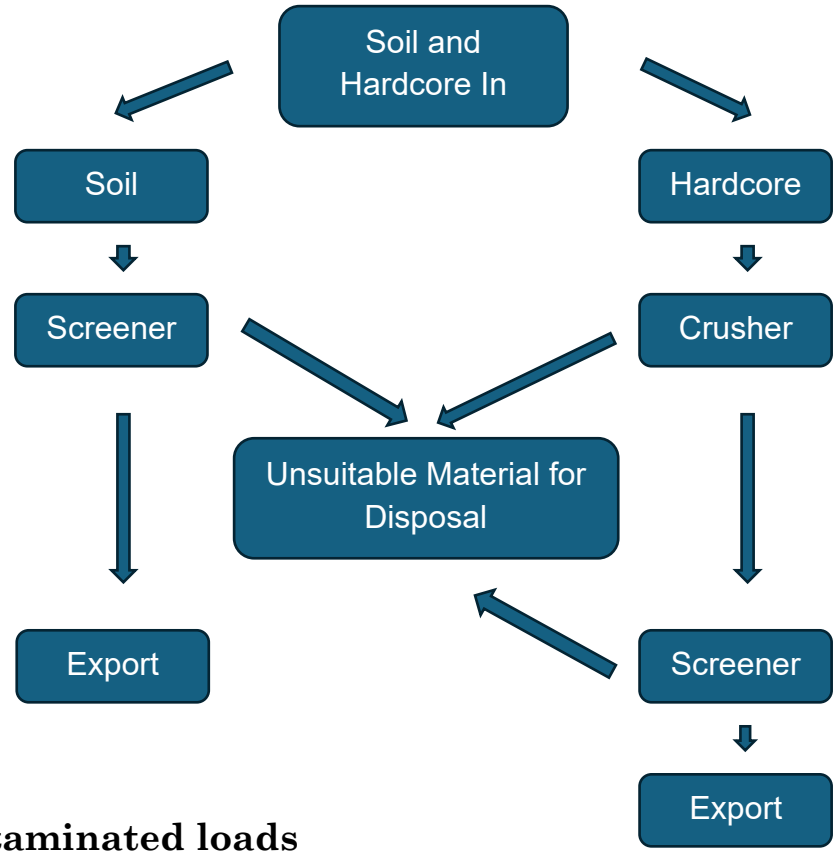
Waste must be processed into individual components at the earliest opportunity as a measure to prevent reactions between different waste types.

The treatment process in place at Roadstone Limited separates each fraction of waste into induvial components for further treatment / recycling. It is this process that precipitates the ability to keep materials compatible with one another thus avoiding the potential of adverse reactions.

Waste Treatment flowchart



Soils and hardcore flowchart



4.13 Contaminated loads

All hazardous waste is to be collected as a segregated waste stream along with the necessary controlled documentation.

THE OPERATIONS MANAGER IS TO BE IMMEDIATELY NOTIFIED OF ANY INCOMING LOAD CONTAINING HAZARDOUS MATERIALS

All incidents incurring a breach in non-hazardous waste collections will be subject to the following procedures.

- The Compliance Manager of the customer or client is to be immediately notified of any breach via telephone and email. Pictures to be taken for evidence of the contamination. Liaison with the customer in dealing with the incident throughout is of the utmost importance.
- Any waste on site that found to be contaminated with asbestos/hazardous/clinical wastes will not be exchanged or collected and remain the responsibility of the site/customer.
- Should asbestos/hazardous/clinical wastes be found within a load that arrives back at our recycling facility the load will be reloaded and returned to site. If this is not feasible it will be kept within our quarantine area where it can be collected by the producer/customer.

- Should an asbestos/hazardous/clinical waste contaminated load be delivered that is not noticed immediately but can be traced to its source then this will be contained, stored in the relevant quarantine/secure storage area until collection takes place in accordance with Environment Agency legislation and the producer/customer notified.
- Please note that any asbestos/hazardous/clinical wastes are the responsibility of the site from where it was produced.
- Part of the source site's duty of care is to keep hazardous wastes separated in the waste stream to avoid contamination
- Any additional costs incurred in the handling and control of asbestos/hazardous/clinical waste contamination will be passed on to the customer/producer.
- Our aim is to deal with any breach of waste streams that are not acceptable under our licence in a professional and environmentally ethical manner.

4.14 Waste acceptance and deposited hot loads

All customers using the site are made aware of the regulations that are in force. In the event of new customers wishing to use the facility a copy of the site rules and permit listing acceptable wastes is exchanged beforehand.

Roadstone Limited operates a manned weighbridge system that exists primarily to meet the duty of care requirements along with control of waste deliveries and record keeping. For new customers arriving unannounced a series of questions are asked regarding the source of the waste and type of waste being carried. All waste deliveries are visually checked upon arrival, where possible if the load is not fully contained and the necessary documents processed before entry into the site is gained. The vehicle driver is required at this point to describe the waste they are carrying and confirm that no prohibited items are contained within the load, e.g. WEEE waste, gas bottles, lithium batteries, and asbestos. The vehicle is prevented from leaving the site until the load is fully inspected and is cleared, if all checks are returned positive, then the vehicle is directed to the appropriate point on site to await direction from a member of staff. During the tipping process the load will be broken to inspect for any non-conforming items such as lithium batteries, this is a pre-sorting procedure to prevent non-conforming items that have a potential to start a fire entering the treatment process. If any load is found to contain any non-conforming items, these would be isolated and removed to the quarantine area is appropriate. It also affords the opportunity to discuss the matter with the vehicle driver and make contact with the waste producer/ holder while the vehicle and driver are still on site.

As the majority of vehicles delivering waste to site are fully contained, it is not possible to determine on the weighbridge if a hot load is present. As the usual means of olfactory or visual detection are not possible for example.

- Signs of heating; Smoke, steam
- Smell of burning
- Heat from the vehicle

It is most unlikely that loads will arrive hot and no history of this event has been documented in the past at this facility, however, hot loads entering site is clearly a significant hazard in the waste industry and the following procedures detail actions taken to prevent acceptance of hot loads and methods employed should a hot load not be identified before it is tipped.

- Any fires within a load will be treated as an emergency and the vehicle directed to the safe area of the site as shown on the site plan (Appendix F-H) and the vehicle and/or container cordoned off.
- CCTV operation monitoring by the site weighbridge operator could also alert staff to the possibility of a hot load arriving at the weighbridge.
- Should a load pass the weighbridge and be deposited on the concrete base of the waste reception area and during routine visual inspection found to be hot; then the fire alarm is to be activated and only the sights trained fire marshals and the operations manager are to attend the fire/potential fire- all other stuff are to be evacuated to the fire assembly point while the situation is assessed.
- Any delivery of waste, during or after deposit, that shows signs of fire will be segregated to the safe area away from other potentially combustible materials by the loading shovel or tracked excavator and covered with inert material such as soil and/or hardcore to starve the fire of oxygen and prevent it spreading.
- In addition, fire extinguishers will always be available at the site office and at specific points on site as shown on the site plan (Appendix F-H) and site fire marshals will be instructed in their use and to take the following action in such an event.
- Only the sites trained fire marshals and the Operations Manager to assess the situation and notify the Fire Brigade and EA immediately if required.
- The site drainage infrastructure is designed as a sealed system thereby preventing the escape of potentially contaminated water resulting from dowsing the fire.
- All machinery not involved in dealing with the incident to be moved to a safe area.
- No vehicles to be allowed on site for tipping. Operators own vehicles will be instructed to park up and await further instruction. If it becomes clear the site will not be operating by the end of the day the Operators vehicles will be instructed to tip at alternative authorised sites.

4.14 Hot and dry weather

Hot and dry weather can lead to self-combustion within many waste types. However, the waste is not stored on site for any length of time that would require a specific self-combustion procedure. It is generally accepted that all customers arriving with waste are fully conscious of the hazards and risks associated with the transport and storage of waste material. To prevent the potential of self-combustion, waste material will be processed and removed from site at the earliest opportunity, especially during periods of elevated temperatures.

The site manager will use a thermal digital temperature gauge during hot weather conditions *(over 30°C)* to ascertain the relative temperature of the waste piles to provide an early warning of potential problems.

A record of such inspections will be maintained in the site diary. During hot conditions temperature sampling will be undertaken twice a day, *midday and at the end of the normal working day*. The waste facility is operational in some capacity 24 hours a day with on-site presence.

A note of the sampling will be made in the site diary to include the person undertaking the sampling, time and temperature and any action required. Should the occasion arise when the trigger level is approached or exceeded *(Roadstone Limited considers 58°C as a reasonable medium action risk trigger level)* the following action will be taken:

Sampling personnel will inform the site management who will instigate the following.

- Any stockpile which reaches the medium risk action trigger level will be divided and turned to decrease the risk of internal combustion by means of surface area heat loss.
- The amount of waste in the affected area will be reduced by relocating part or all of it utilising the quarantine area.
- Ensure area is unobstructed.
- Continue waste pile temperature inspections and documenting the results until temperatures return to normal or material is processed for subsequent removal from site.

5. Prevent self-combustion

5.1 General self-combustion measures

Hot spot identification is undertaken daily to minimise the risk of self-combustion. All relevant staff are trained on the use of detection equipment and actions to take upon identifying a potential hot spot. The site operates a turn-around of waste within 29 days, as the material is not stored on site for any length of time a specific self-combustion procedure is not necessary.

Due to the nature of the storage bays, the area is well ventilated and the use of the water supply on site provides operators with a means to dampen the working area and if necessary, the waste piles during hot, dusty weather.

There are no naked flames, heating pipes, space heaters, furnaces, or incinerators at the site. Burning is also not permitted on the site.

Refer to "*4.14 hot and dry weather"* for further procedures on preventing self-combustion.

5.2 Manage storage time

Method used to record and manage the storage of all waste on site

Roadstone Limited operates a manned weighbridge system that exists primarily to meet the duty of care requirements along with control of waste deliveries and record keeping, allowing the staff the knowledge of length of time of waste on site. The equipment and recourses in operation at the site expedite treatment and export of wastes ensuring waste does not remain on site for longer than 3 months. Operational procedures at the site strive to ensure that waste, either segregated or prepared for onward treatment or disposal, is removed within 29 days of delivery. The types of vehicles typically delivering waste will be bulker and tipper vehicles.

Stock rotation policy

As mentioned at the beginning of the Fire Prevention Plan "*Site Activities"* the nature of a facility's operations means there is no storage of waste beyond one month.

Stock rotation will be expedited by employment of large articulated vehicles with a carrying capacity of 110m3 to either remove waste to disposal or further treatment. Regular shipments of waste will enable continuous stock rotation and ensure no waste remains in storage for more than a week on average. Waste will be sorted and processed into the following categories:

- RDF / SRF
- Hardcore
- Fines residue
- Wood
- Mixed metals
- Plastic
- non-recyclable items

RDF / SRF type waste will be removed from site by articulated vehicles for onward treatment at third party facilities. This will usually be completed when sufficient waste is on site to warrant the carrying capacity of an articulated vehicle and under normal circumstances this will be a daily occurrence.

Mixed metals and wood will be stored externally in bays. It is proposed to alternate this storage by interposing metal storage between other combustible waste in order to create an additional fire break.

It is proposed to increase the recovery of these wastes as part of the future development model within a week of receipt. Combustible materials of all categories that approach 3 months storage time will be considered for removal regardless of the quantity.

Recyclates that have reached this period because the quantity is too small to warrant transport will be re-introduced into the general waste stream and removed for disposal.

Table 2: Stock rotation

Waste Type	Storage Location	Storage Duration
Industrial and commercial waste	Segregated bays	1 week
Construction and demolition	Segregated bays	1 week
Soils and stone	Segregated bays	3 months

5.3 Monitor and control temperature

The treatment process at Roadstone Limited is intended to separate each fraction of waste into individual components for further treatment/ recycling. It is this process that participates the ability to keep materials compatible with one another thus avoiding the potential for adverse reactions.

This is achieved by sorting of the waste to remove individual waste types, however, there are fractions that are inevitably missed during the process, consequently the system allows for this by including suspended electromagnets and Eddie currents with the screening process.

Monitoring temperature

As mentioned in section "*4.14 Hot and Dry weather"* The site manager will use a digital thermometer to monitor the temperature twice a day when the temperature exceeds 30°C, this process will be performed twice daily, midday and end of the working day. Once inspections have been taken, a record in the site diary will be made with information of the date, time, temperature, and person undertaking the sampling.

Controlling temperature

The follow procedures will be adopted to control and prevent the temperature of waste reaching critical level where self-combustion is inevitable:

- Maintain continuous rotation of waste stockpiles to aerate and prevent overheating.
- When segregated waste is added to a stockpile the machine drive will mix the fresh waste into the existing pile helping to cool the entire pile.
- Adhere to the waste flow organogram shown within this document.
- Maintain frequent throughput of waste to ensure piles are not on site for prolonged periods. A target period should be less than a week in continually hot weather.

Dealing with hot weather and heating from sunlight

As mentioned in "*4.14 Hot and dry weather*" temperature within waste is measured on a consistent basis, and a temperature log is kept.

5.4 Waste bale storage

Balers do not operate at Roadstone limited; therefore, waste bales are not held on site.

6. Manage waste piles

6.1 Storing waste materials in their largest form

Consideration has been applied to material pile sizes and method of separation as stated in the Environment Agency Guidance for Fire Prevention Plans: Environmental Permits. As a result of this, a conscious effort to mitigate the consequences should a fire occur forms the basis of this management plan either by sufficient management of pile sizes and their separation or with proficient fire dividing walls. Waste stored in bays must have a minimum freeboard of 1.0m from the top of the bay wall to ensure a fire cannot pass between bays, therefore reducing the risk of fire spreading between bays.

Pile size calculations have considered the storage nature of loose material and therefore cater for the slump in material on all non-contained sides.

The operations manager and supervisor shall monitor the size of the waste pile to ensure the conditions for this fire prevention pan are not exceeded and shall take all necessary measures to maintain waste piles to within the dimensions stated below. Necessary measures may include the following as a minimum:

- Arrange additional transport to remove waste before pile sizes reach the maximum allowed by this management plan.
- Reduce waste inputs commensurate with treatment throughput.

- Cease recovery of the particular waste type until normal operating conditions resume and,
- Divert waste to third party facilities until normal operating conditions resume.

6.2 Maximum pile sizes for the waste on the site

Table 3: Waste pile dimensions

Waste stream	**How it is stored** For example this may include piles, bays, containers, skips, racks, bales	**Max. Width / m**	**Max. Length / m**	**Max. height / m**	**Volume / m³**	**Max. time it will be stored**
Mixed RDF	Bay	5.4	12.5	4	270	1 week
wood	Bay	5.4	12.5	4	270	1 week
Fines	Bay	5.4	12.5	4	270	1 week
Large plastic items	Bay	5.4	12.5	4	270	1 week
Hardcore	Bay	12.5	18	4	900	3 months
Non-ferrous metals	Bay	5.6	5.6	4	125	3 months
Ferrous metals	Bay	5.6	5.6	4	125	3 months
Soils	Bay	12.5	18.6	4	930	3 months

6.3 Where maximum pile size does not apply.

Whole ELVs
End of life vehicles (ELV's) are not accepted to site.

Waste stored in containers
Waste is not stored in containers but in dedicated bays as described within this document.

7. Prevent fire spreading

7.1 Separation distances

The means of separation at Roadstone Limited other than 6m fire breaks is by designated placement of concrete panels/plinths between waste piles which have fire retardant sealing where necessary.

All piles on site have in excess of the appropriate separation distances or concrete panels/plinths as segregation barriers between piles. Where needed, and to assist the plant operators during their duties, the layout has been designed to limit the possibility of encroachment on the separation areas from loose waste material being processed.

The plinths are designed to butt up to one another creating a tight joint. The use of concrete plinths is ideal as a separation barrier material as concrete does not burn and cannot be set on fire and does no emit toxic fumes when exposed to heat. Concrete is proven to have a high degree of fire resistance, and in the majority of circumstances can be considered as virtually fireproof.

7.2 Fire walls construction standards

Concrete is essentially inert, and more importantly for this intended use has poor typical thermal conductivity. Concrete has a typical thermal conductivity of 1.5 to 2.5 W/mK. It is the slow rate of thermal conductivity that enables concrete to act as an effective fire shield but also enables it to protect itself from fire damage.

The concrete used in the construction of the plinths meets EN1992-1-2 (2003) Normal Weight Concrete (NWC) with siliceous or calcareous aggregates. The known concrete strength classes range from C12/15 to C50/60. The strength classification of C12/15 refers to a concrete grade with characteristic cylinder and cube strength of 12 N/mm^2 respectfully.

A plinth constructed of NWC using either of the following concrete types has a fire resistance rating of:

- Siliceous aggregate @ 7" thickness. 4 hrs fire resistance
- Carbonate aggregate @ 6.6" thickness. 4 hrs fire resistance
- Sand-lightweight @ 5.4" thickness. 4 hrs fire resistance
- Lightweight @ 5.1" thickness. 4 hrs fire resistance

Vertical joints.

All vertical joints will be sealed using a fire retardant B1 Grade Fire Foam where the gap is no greater than 25mm. These joints will also be plastered using a compliant plaster which also offers a similar low thermal conductivity and protection.

All joints greater than 25mm will be concreted or plastered to ensure full fire protection is achieved as required.

Horizontal Joints.

The 6m horizontal concrete panels have the benefit of tongue and groove fittings which when placed on top of each other create a fireproof seal between them. Where this tight placement is not achievable the joints will be sealed in a similar fashion as the vertical joints.

All bays will be sealed on all sides where needed, either on one side of the wall or the other in order to ensure that full fireproofing is achieved to mitigate the risk of fire spreading between bays.

Regular inspections of the joints will be undertaken and documented. Any repairs needed will be undertaken within 24 hours of being identified. Site will maintain a stock of compliant plaster to reduce the repair time needed and subsequent risk.

Thermal conductivity is measured in W/mK, *(Watts per meter Kelvin).* The thermal conductivity of the fire foam and plaster is 0.004 W/mK. Typical concrete has an average thermal conductivity of 2.0 W/mK; meaning the fire foam and plaster resistance to thermal conductivity is 50 times greater thus creating a more than sufficient fire seal between concrete plinths.

External storage bays shall be constructed of concrete "Lego" block type configuration that interlock for stability and stacking. The blocks are made to the following specification:

- Length 1500mm
- Width 600mm
- Height 600mm
- Weight 1270kg

The figure below is typical concrete block configuration (stock photo).

7.3 Storing waste in bays

Waste is stored within segregated bays; these dimensions has been covered in "Table 2 Pile size dimensions".

All operating procedures are managed to ensure these limits are not exceeded; however, should these limits be approached due to measures outside our control (*e.g. plant failure during the day*) then we will initiate an emergency plan which will include temporary closure of the facility until such time as conditions have returned to normal.

Waste stored in bays must have a minimum freeboard of 1.0m from the top of the bay wall to ensure a fire cannot pass between bays, therefore reducing the risk of fire spreading between bays.

Waste bays must be kept accessible to site plant to ensure that during the instance of fire burning waste can be removed to the quarantine area.

Refer back to the beginning of the FPP to *"Activities on site"* for amount of waste accepted on site per annum.

8. Quarantine area

8.1 Quarantine area location and size

Refer to **Appendix F-H** for site plan and location of quarantine area.

The quarantine area is located within the centre of the site on an impermeable concrete surface. The waste handling plant can be used to bring material on fire (initial stages) into the quarantine area. This area will then be closed for access and monitored over the next hour post extinguishing to ensure the fire has been fully extinguished. Any material will be treated as contaminated waste and will therefore be disposed of in the correct manner.

The quarantine area is designed to accommodate at least 50% capacity of the largest combustible waste pile -therefore the quarantine area can hold 135m^3 of waste.

Maintaining the combustible waste piles to within their maximum pile size as stated in this Fire Prevention Plan is a crucial component in mitigating the risk and consequences of fire at the site.

Waste types ready for further treatment are usually reduced into smaller piles during pre-processing which negates the potential spread of fire and makes potential fires more manageable should they occur.

8.2 How to use the quarantine area if there is a fire

It is common practice on waste facilities in the event of a fire out breaking, for mobile plant to be used to separate un-ignited waste beyond the separation gaps to further reduce the risk of fire spread between any stockpiles. All staff and plant intended for use within the fire precaution measures shall undergo regular drills which will be enacted and recorded in site training records and site diary.

It is envisaged that plant operators removing ignited material to the quarantine area will do so in the very initial stages only.

All activities associated to separation and fire control are conducted under the direct supervision of the site management or emergency services.

Whilst the operation to remove burning waste takes place, water will be sprayed over the area and the mobile plant and the waste as it is removed to the quarantine area.

Regular drills and enactment of the fire emergency procedures are important. Consideration must also be given to the turnover of staff, holiday and sickness cover.

8.3 Procedure to remove material stored temporarily if there is fire

The quarantine area is located within the centre of site, on an impermeable concrete surface and separated by over 6m from any combustible or flammable materials. The area set aside for quarantined waste is required for vehicle manoeuvring and general on-site thoroughfare, therefore waste will not be stored in this area temporarily or otherwise.

9. Detecting fires

9.1 Detection systems in use

The first stage of waste acceptance involves the waste delivery vehicle entering onto site which is in full view of the site office.

At this point a visual inspection will be undertaken along with gathering of details relating to the source of the waste which will provide the site supervisor with an indication of the type of waste carried and likely components.

Upon arrival the load will be tipped in the reception area to allow initial inspection and manual sorting before processing begins.

Recyclates recovered from each load will be placed in a position for the waste garb to transport it to the correct storage area. Any items that have the potential to ignite will be removed at this stage and placed in a secure container located away from other wastes.

On hearing the alarm all customers will make their way to the assembly point, whilst staff will make their way to the weighbridge office to await further instructions from the site manager.

The site manager will co-ordinate both the evacuation and the initial fire-fighting response.

A comprehensive CCTV system is in operation at the site providing individual views of the operation. Monitors are installed in the manager's office and accessible view via smart phone by all key personnel.

The site supervisor will maintain a watchful eye on all activities whether manual sorting or by use of the waste grab machine.

Regular checks (AM and PM) will be carried out on storage piles and sorting activities and a general walk round of the site will be included in these checks. The supervisor shall be personally responsible to ensure fire breaks are maintained between waste piles, and a fire watch is conducted after any hot works, and that machinery is switched off 30 minutes before the end of the day and before the site is vacated.

Refer to **Appendix F-H** for security camera coverage.

9.2 certification for the systems

Due to the use of manual detection (CCTV) certifications for detection systems cannot be supplied for Roadstone Limited.

10. Suppressing fires

10.1 Suppression systems in use

The sealed drainage water tank holds 120,000ltrs of water in readiness for an emergency. In such instances, water will be drawn from the tank for use in fire suppression by an electric motorised pump. The system pump is a Lowara SM90RB14/315 that has a minimum output of 1,000 litres per minute. Also, there are two fire hose reels installed to the east and west perimeter walls.

A water canon shall be in use at the site primarily for dust suppression purposes, however, in an emergency the canon can be put to good use by deploying it to fight a fire in waste piles.

Resource	Capacity, litres	Location	Flow rate (lt/m)
Water Cannon (Mains connection)	9,720	Mobile	54
Fire hose (Mains connection)	163,620	East and West perimeter walls	909
Motorised Pump	120,000	Associated to the Drainage water tank.	1,000

In extreme emergencies and to replenish the drainage water tank, water from the nearby river may be used.

10.2 Certification for the systems

There is no certification for the firefighting equipment other than maintenance records and purchase documentation.

11. Firefighting techniques

11.1 Active firefighting

FIRE FIGHTING – STAFF

Initial firefighting/containment will be conducted by trained staff utilising the appropriate fire extinguishers and fire hoses.

In addition to all types of fire extinguishers, fire hoses are available for supressing small fires. The hoses are fed from the water storage tank which has a working head of water in addition to an electric twin pump to pressurise the system.

Whilst the alarm is sounding, staff with dedicated roles will undertake initial fire activities using extinguishers or fire hoses on the material on fire as well as utilising a plant operator to separate any easily removeable material which may be on fire to ensure immediate segregation to negate spreading.

All staff have been trained on the use of extinguishers and their limitations. No staff member is expected to put themselves at risk at any time.

There are extinguishers strategically located around the site as per the fire equipment location plan. Fire extinguishers are also located in the mobile plant machines.

All Fire extinguishers are subject to an annual inspection and certificated by an appropriately compliant contractor. Certificates are retained on site for inspection.

FIRE FIGHTING – FIRE & RESCUE

If a fire occurs out of hours or is initially considered to be beyond the abilities of the trained staff, the Fire & Rescue Services will take control.

Any decision for a controlled burn will be taken by the F&RS and or Environment Agency as the site does not employ a Fire Safety Officer with suitable knowledge to make this decision. It is company policy for staff not to put themselves or others at any undue risk.

The site is accessed from the main industrial site road. Once on the site, access to the piles is open with multiple points of access. These access points are kept unobstructed during daily operations.

Key members of staff, the site manager and shift supervisor, will assist the fire emergency services by appraising them of the prevailing situation and providing specific details such as location of fire hydrants, on-site water sources, site layout and construction and confirmation that staff have been evacuated and all personnel accounted for.

12. Water supplies

12.1 Available water supply

Water requirements are based on the worst-case scenario of a fire in the largest stockpile of 300m³. This would require 6.67 litres per minute per m³. Totalling 361,800 litres for a 180-minute duration.

The site has access to the mains water supply for the industrial estate in addition to the drainage water storage tank and in extreme cases, the nearby River Medway and the supply is interminable

Drainage Water tank	**120,000 (minimum 50,000)**	**Northern quadrant of the compound**	**N/A**
Water main (6")	360,000	Site entrance	2,000 (minimum)
Total water availability to fight a fire for 3 hours	480,000		

12.2 Show the calculation for your required water supply

Table 5: Water supply needed in an emergency for Roadstone Limited

Maximum pile volume in cubic metres	Water supply needed in litres per minute	Overall water supply needed over 3 hours in litres	Total water available on site in litres
300 m³	**Required: 2,010 lpm** **Available: 2,666 lpm.**	**361,800 litres**	**Minimum 480,000 for 180 minutes up to an unlimited amount.** *Consisting of*: *6" Water main delivering an average 2,000 litres p/ m.* *1,000 lpm Lowara SM90RB14/315 pump on site drainage water tank with 120,000lts capacity.* *Unlimited Water supply from @ 30m distance.*

13. Managing fire water

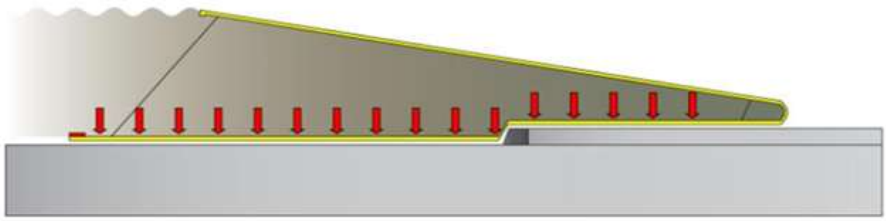
13.1 Containing the run-off from fire water

Fire water emanating from a fire within any of the waste bays will be contained within the curtilage of the site by the raised concrete plinth positioned along the northern perimeter and extending part way along the eastern and western boundaries. The concrete impermeable surface has been constructed with a fall biased to the north in order to direct surface water into the drainage system.

The concrete plinth does not pass across the entrance gates but is replaced here by an open gully which must be sealed using a deployable boom as depicted below.

Drain mats will also be placed over open gulleys to prevent ingress of water.

The plans presented below show how the deployable booms are used in emergencies.



The automatic shutoff valve located in the interceptor sump will be closed to prevent fire water being discharged from site.

The site drainage system consists of a series of open gullies placed at intervals at low points of the concrete formation. Each gully is designed to accumulate silt particles and allow the free passage of water through the connecting system via varying diameter pipes that increase in size as the water approaches the storage tank. The purpose of the silt interceptor is to prevent silt build-up within the tank and facilitate cleaning.

The tank itself has a capacity of 120,000lts and is fitted with inline filters and cleaning tubes. The filters are cleaned between 3 and 6 months according to the time of year at which time the tank is emptied by a third-party contractor. In the event of a fire and to prevent fire water entering the drainage system drain mats will be placed over road gullies to form a physical seal over the gully, similar to that shown above. Sufficient mats will be kept on site to cover all open gullies and will be stored securely in readiness for emergencies.

It should be considered that not 100 percent water used to extinguish a fire will remain as contaminated water because the absorptive capacity of the waste and evaporation occurring in the fire will affect to reduce the residual water.

The surface area of the site is, 2,843 square metres and when the deplorable booms are in place, provides sufficient capacity to contain 568,600lts of contaminated water.

The table below illustrates the potential storage capacity for contaminated water:

Area 2,843m²
Deployable boom height 0.2m - potential water storage capacity 568,600lts

The above capacity is more than sufficient to contain water generated from extinguishing the largest waste pile over a minimum period of 180 minutes which equates to 361,800 litres requirement.

14. During and after an incident

14.1 Dealing with issues during a fire

Customer details are retained on site for use in the event of an incident that requires the site to close unexpectedly. It is the responsibility of the site manager or manager who will co-ordinate emergency procedures to instruct the weighbridge clerk to contact customers informing them of the prevailing situation and the necessity to divert to another waste facility.

It is not the responsibility of Roadstone Limited to provide alternative disposal points for customers, however, advice can be given if requested at the time when the customer is informed that the treatment facility is closed.

14.2 Notifying residents and businesses

Residents

The nearest residential properties are located 550 metres NW of the site. To the East of the site is the river Medway. In the event of a fire, it is not considered necessary to inform residents of the situation unless directed to do so by the emergency services.

Any smoke emanating from a fire, considering the prevailing wind direction is from the south-westerly direction and therefore any smoke arising from a fire would typically pass over the estuary of the river Medway in a north-easterly direction. In almost all incidences smoke would rise above the navigable areas of the river and elevate to a considerable height before reaching land.

However, should a fire take hold of the site and not be extinguished there is residential areas which will require notification to shut windows due to smoke, no fire should spread beyond the site to put people directly in danger.

Businesses

Any local businesses likely to be directly affected by a fire would be informed at the earliest opportunity as directed by the site management. Liaison would be maintained as the situation develops and until the fire is extinguished. Further contact would be made at the advice of the emergency services.

14.3 Clearing and decontamination after a fire

Clearing of the site following a fire shall fall to the site manager and supervisor to coordinate following agreement with the area Environmental Agency office.

A combination of site resources and third- party contractors will be used to return the site to a satisfactory condition as agreed with the agency before the site re-opens to waste acceptance.

The list below should not be considered exhaustive as on-site conditions will dictate to a large degree the extent and scope of the clean-up operation:

- Hose down of any part of the infrastructure affected by fire or smoke.
- Removing to disposal any item of plant or equipment damaged beyond reasonable repair.
- Collect waste and remove to suitably permitted disposal facility.
- Clean out site drainage system and dispose of waste at a suitable facility.
- Hose down impermeable concrete base.

Burnt material will be assessed by the emergency services engaged in managing the fire, once it is clear that no potential for a fire restarting exists. This material will be disposed of at a suitably license landfill site if it is not suitable for future processing. This will be agreed with the Environmental Agency prior to removal from site.

Fire water contained on the site will be removed to suitable permitted facility following consultation with the Environment Agency. The work to remove the water will commence immediately after the fire has been fully extinguished, the emergency services have confirmed that there is no further threat of a fire reigniting, the Environment Agency have been informed, and a suitable permitted third-party contractor has been appointed to take the work.

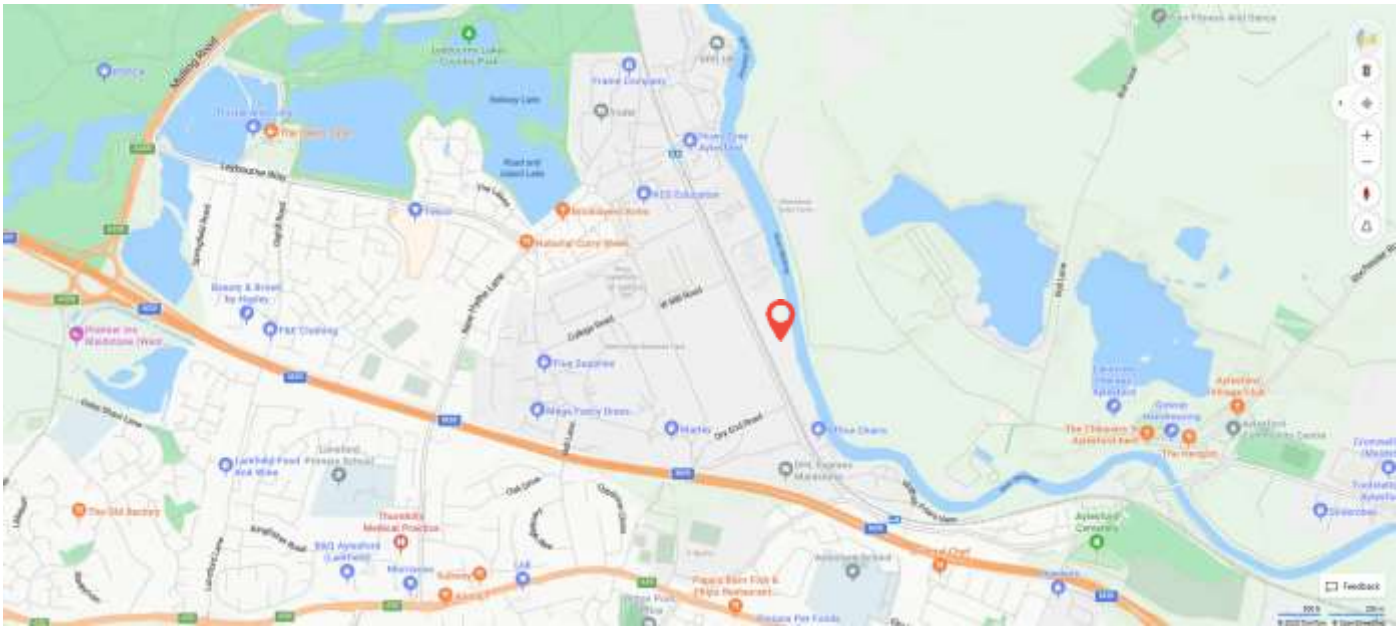
14.4 Making the site operational after a fire

To prepare the treatment facility for further operation the following steps would ensue:

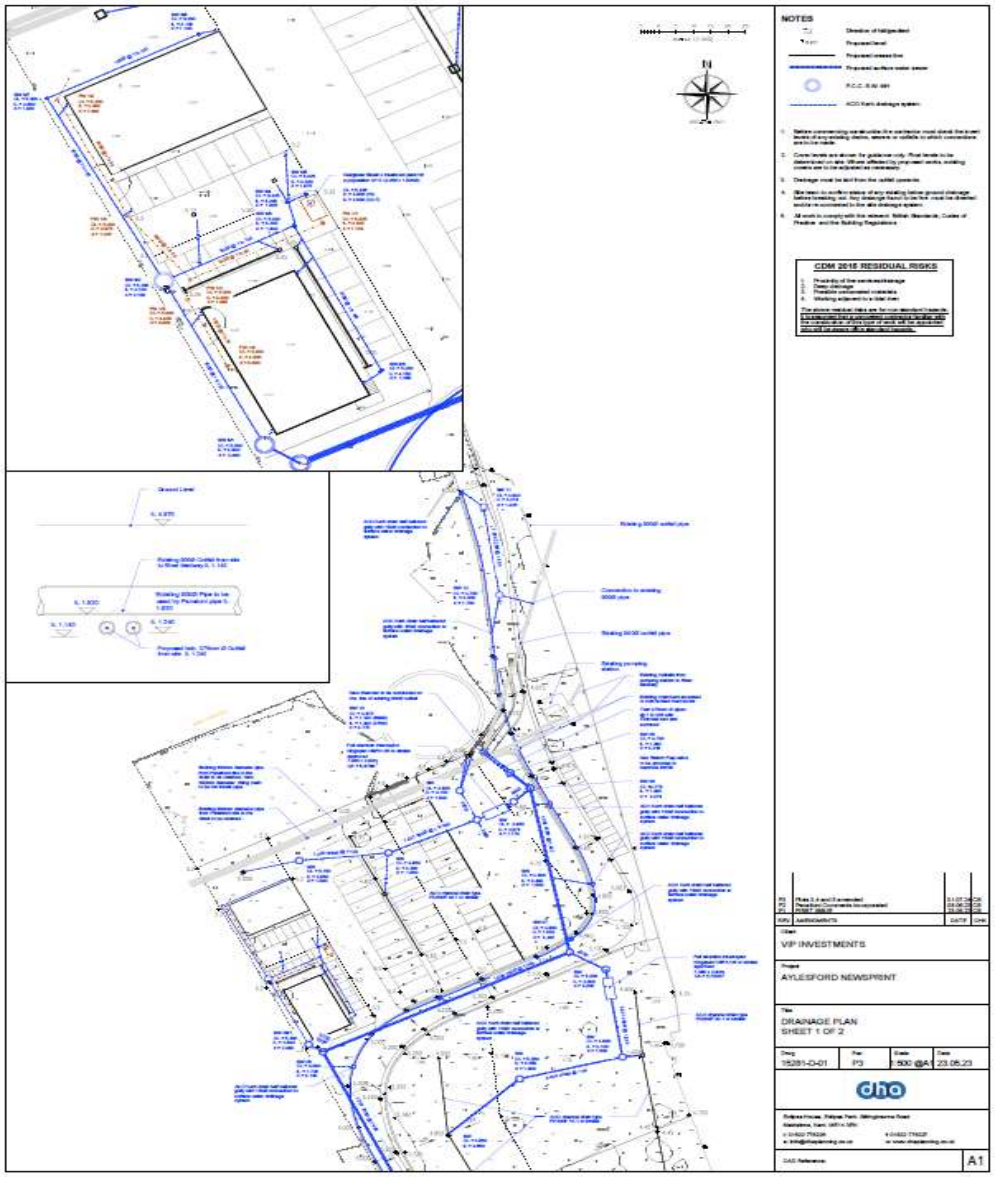
- Site plant would be checked for cleanliness and washed down as required.
- Replace any plant and equipment as required.
- Under direct supervision of the site supervisor, burnt waste would be loaded onto bulk waste vehicles and removed from site following pre-agreed protocols with the local Environmental Agency.
- Once all burnt waste is removed the concrete surfaces will be cleaned and inspected to ensure integrity remained and whether repairs are necessary, these will be carried out prior to the facility re-opening.
- Arrange for third party to clean drainage systems.
- Arrange for electrical contractor to inspect systems.
- Investigate cause of fire and instigate measures to prevent a reoccurrence.
- Invite regulator to site to inspect clean-up operation and review records pertaining to investigation and acquire authorisation to recommence waste treatment operations.
- A pictorial record would be made of actions taken and special mention made in the site diary of noteworthy events.
- The local Environmental Agency office will be kept appraised of activities associated with the incident.

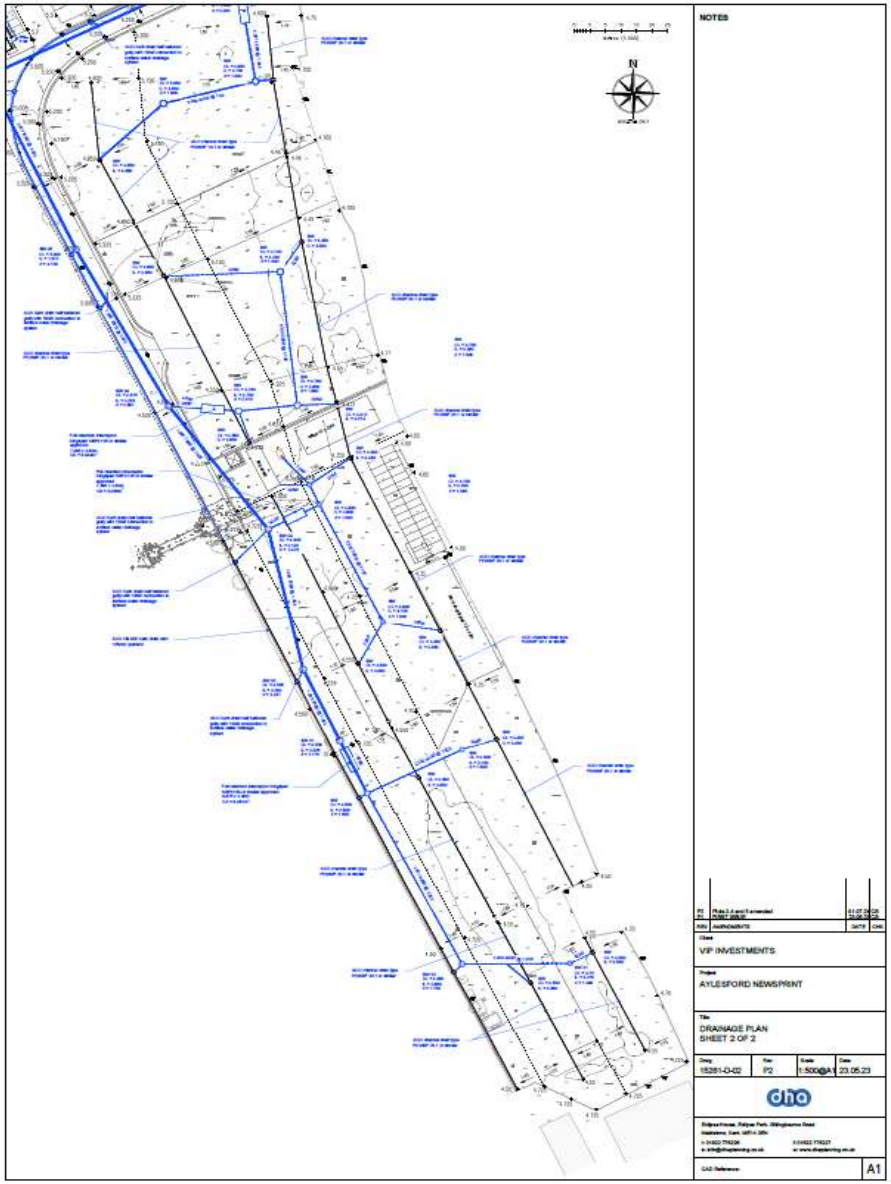
Appendices:

Appendix A: Site location



Appendix B: Drainage plan





Appendix C: Waste Categories

Table S2.1 Permitted waste types and quantities for household, commercial and industrial waste transfer station	
Maximum quantity	The total quantity of waste accepted at the site for the above activity shall be less than 200,000 tonnes a year.
Exclusions	wastes having any of the following characteristics shall not be accepted: • Consisting solely or mainly of dusts, powders or loose fibres • Wastes that are in a form which is either sludge or liquid.
Waste code	Description
15	Waste packaging, absorbents, wiping cloths, filter materials and protective clothing not otherwise specified
15 01	packaging (including separately collected municipal packaging waste)
15 01 01	paper and cardboard packaging
15 01 02	plastic packaging
15 01 03	wooden packaging
15 01 04	metallic packaging
15 01 05	composite packaging
15 01 06	mixed packaging
15 01 07	glass packaging
15 01 09	textile packaging
17	construction and demolition wastes (including excavated soil from contaminated sites)
17 01	concrete, bricks, tiles and ceramics
17 01 01	concrete
17 01 02	bricks
17 01 03	tiles and ceramics
17 01 07	mixtures of concrete, bricks, tiles and ceramics other than those mentioned in 17 01 06
17 02	wood, glass and plastic
17 02 01	wood
17 02 02	glass
17 02 03	plastic
17 03	bituminous mixtures, coal tar and tarred products

17 03 02	bituminous mixtures other than those mentioned in 17 03 01
17 04	metals (including their alloys)
17 04 01	copper, bronze, brass
17 04 02	aluminium
17 04 03	lead
17 04 04	zinc
17 04 05	iron and steel
17 04 06	tin
17 04 07	mixed metals
17 04 11	cables other than those mentioned in 17 04 10
17 05	soil (including excavated soil from contaminated sites), stones and dredging spoil
17 05 04	soil and stones other than those mentioned in 17 05 03
17 05 08	track ballast other than those mentioned in 17 05 07
17 06	Insulation materials and asbestos – containing construction materials
17 06 04	insulation materials other than those mentioned in 17 06 01 and 17 06 03
17 08	gypsum-based construction material
17 08 02	gypsum-based construction materials other than those mentioned in 17 08 01
17 09	other construction and demolition wastes
17 09 04	mixed construction and demolition wastes other than those mentioned in 17 09 01, 17 0902 and 17 09 03
19	Wastes from waste management facilities, off-Site waste water treatment plants and the preparation of water intended for human consumption and waster for industrial use.
19 12	wastes from the mechanical treatment of waste (for example sorting, crushing, compacting, pelletising) not otherwise specified
19 12 12	other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12 11
20	municipal wastes (household waste and similar commercial, industrial and institutional wastes) including separately collected fractions
20 01	separately collected fractions (except 15 01)
20 01 01	paper and cardboard

20 01 02	glass
20 01 10	clothes
20 01 11	textiles
20 01 38	wood other than that mentioned in 20 01 37
20 01 39	plastics
20 01 40	metals
20 02	garden and park wastes (including cemetery waste)
20 02 01	biodegradable waste
20 02 02	Soil and stone
20 02 03	other non-biodegradable wastes
20 03	Other municipal waste
20 03 01	mixed municipal waste

Table S2.1 Permitted waste types and quantities for Physical treatment of non-hazardous waste- General household, commercial and industrial waste	
Exclusions	wastes having any of the following characteristics shall not be accepted: • Consisting solely or mainly of dusts, powders or loose fibres • Wastes that are in a form which is either sludge or liquid
Waste code	Description
15	Waste packaging, absorbents, wiping cloths, filter materials and protective clothing not otherwise specified
15 01	packaging (including separately collected municipal packaging waste)
15 01 01	paper and cardboard packaging
15 01 02	plastic packaging
15 01 03	wooden packaging
15 01 04	metallic packaging
15 01 05	composite packaging
15 01 06	mixed packaging
15 01 07	glass packaging
15 01 09	textile packaging
17	construction and demolition wastes (including excavated soil from contaminated sites)
17 02	wood, glass and plastic
17 02 01	wood
17 02 03	plastic
17 04	metals (including their alloys)
17 04 01	copper, bronze, brass
17 04 02	aluminium
17 04 03	lead

17 04 04	zinc
17 04 05	iron and steel
17 04 06	tin
17 04 07	mixed metals
17 04 11	cables other than those mentioned in 17 04 10
17 06	Insulation materials and asbestos – containing construction materials
17 06 04	insulation materials other than those mentioned in 17 06 01 and 17 06 03
19	WASTES FROM WASTE MANAGEMENT FACILITIES, OFF-SITE WASTEWATER TREATMENT PLANTS AND THE PREPARATION OF WATER INTENDED FOR HUMAN CONSUMPTION AND WATER FOR INDUSTRIAL USE
19 12	wastes from the mechanical treatment of waste (for example sorting, crushing, compacting, pelletising) not otherwise specified
19 12 12	other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12 11
20	municipal wastes (household waste and similar commercial, industrial and institutional wastes) including separately collected fractions
20 01	separately collected fractions (except 15 01)
20 01 01	paper and cardboard
20 01 02	glass
20 01 10	clothes
20 01 11	textiles
20 01 38	wood other than that mentioned in 20 01 37
20 01 39	plastics
20 01 40	metals
20 02	garden and park wastes (including cemetery waste)
20 02 01	biodegradable waste
20 02 02	Soil and stone
20 02 03	other non-biodegradable wastes
20 03	Other municipal waste
20 03 01	mixed municipal waste

It is proposed to include EWC 19 12 12 within the list of wastes accepted at the site in recognition of waste emanating from waste transfer stations with minimal treatment capabilities.

19 12 12	other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12 11*

Table S2.1 Permitted waste types and quantities for Physical treatment of non-hazardous waste- inert soil and hardcore waste	
Exclusions	wastes having any of the following characteristics shall not be accepted: • Consisting solely or mainly of dusts, powders or loose fibres • Wastes that are in a form which is either sludge or liquid
Waste code	Description
17	construction and demolition wastes (including excavated soil from contaminated sites)
17 01	concrete, bricks, tiles and ceramics
17 01 01	concrete
17 01 02	bricks
17 01 03	tiles and ceramics
17 01 07	mixtures of concrete, bricks, tiles and ceramics other than those mentioned in 17 01 06
17 02	wood, glass and plastic
17 02 02	glass
17 03	bituminous mixtures, coal tar and tarred products
17 03 02	bituminous mixtures other than those mentioned in 17 03 01
17 05	soil (including excavated soil from contaminated sites), stones and dredging spoil
17 05 04	soil and stones other than those mentioned in 17 05 03
17 09	other construction and demolition wastes
17 09 04	mixed construction and demolition wastes other than those mentioned in 17 09 01, 17 0902 and 17 09 03
20 02	garden and park wastes (including cemetery waste)
20 02 02	Soil and stone

It is proposed by the operator to add EWC 20 03 01 to the list of wastes because this waste type is known to be recyclate rich and widely available.

EWC 20 03 01 consists if the following items:

Paper and cardboard
Wood
Plastic
Film
Mixed metal
Occasional brick pieces and soil

This waste type shall be accepted pursuant to existing Waste Acceptance Procedures which is stated in this document and other supporting documents and segregated in the manner described throughout the supporting management plans. But for the purpose of completeness, a brief description is given here:

Following conformity of the waste and documentation at the weighbridge the vehicle will be directed to the tipping point which is in the location of the waste handling grab. This allows the waste load to be broken for visual inspection and large recyclates to be removed mechanically and the remainder manually sorted into individual waste types.

The treatment consists of:

Manual pre-sorting to remove waste types such as cardboard, paper, wood and metal. Then the waste will pass through a screener to segregate hardcore type material and soil leaving the smaller fractions of wood, metal and those items that have no further use.

The potential for odour release from this waste type has been identified and controls established in the Odour Management Plan submitted in support of the permit application.

Once segregated, individual waste types recovered from EWC 20 03 01 are stored locally in bays awaiting transport from site. The manner in which the waste is stored, location and duration on site in mentioned in the Fire Prevention Plan

Appendix D: Emergency contact list

Site Details			
Name	Roadstone solutions Limited		
Location	Unit 5 Invicta Park, New Hythe Lane, Larkfield, Aylesford, Kent,		
Post Code	ME20 7FG		
NGR	TQ 71565 59431		
Site Contact	Name	Office hours Mobile	Out of Hours Mobile
Director	TBC		
Site Manager	TBC		
Site Supervisor	TBC		
Security	TBC		
Emergency Services		Office hours	Out of Hours
Emergency (Fire, Police and Ambulance)		999	999
Maidstone and Tunbridge Wells NHS Trust Hospital, Hermitage Lane, Maidstone, Kent, ME16 9QQ		01622729000	01622729000
Maidstone Police station: Palace Ave, Maidstone, Kent, ME15 6NF.		01622 690690	01622 690690
Regulators			
Health and Safety Authority (HSE)		0151 922 9235	0151 922 9235
Environment Agency		020 8474 6767	03708 506 506

Local Authority (Maidstone Borough Council)	01622 602000	01622 602000
Environment Agency (emergency)	0800 80 70 60	0800 80 70 60
Maintenance Services	Provider	Contact number
Fuel supplier	Multiple providers	Multiple providers
Electrician	TBC	TBC
Drainage contractor	TBC	TBC
Liquid Waste Removal	TBC	TBC
Utilities	TBC	TBC

Appendix G: Plant maintenance schedule

This site procedure is intended for plant operators and general operatives who use mobile plant during their duties at Roadstone Limited. It is intended to provide a guide for the minimum frequency of maintenance required and should not be considered exhaustive or replace the manufacturers recommendations for the maintenance of specific plant.

It is the operator's responsibility to ensure that daily checks are carried out in accordance with the plant manual specific to the plant being used. The site supervisor or manager will ensure checks are undertaken as specified by the manufacturer's instruction and company procedures. Records of weekly checks will be kept in the site office for review if required.

Pre-start-up check (mobile plant)

Before using the waste handling equipment for the day, the following pre-start checks must be undertaken before work commences in addition to the plant maintenance check sheet requirements.

- All fluid levels
- Fan belt
- Loose components
- Trapped debris
- Battery is secure and free of waste build-up and compartment is clean

Should you suspect a fault with the equipment report the matter to the site supervisor or director immediately before using the equipment.

You must be aware that waste handling equipment can get hot, especially during hot weather and the risk of fire is greater under these conditions. Allow equipment to cool during break times or during periods of inactivity.

Checks throughout the day

During hot dusty conditions waste handling equipment will require regular checks for trapped debris and clogging of the ventilated areas of the engine compartment. These need only be visual and brief to determine whether the equipment requires cleaning.

REMEMBER; HYDRAULIC COMPONENTS SUCH AS RAMS WILL BECOME HOT UNDER OPERATING CONDITIONS.

Equipment should be checked at least every four hours when operated constantly and less if conditions are hotter or dustier than normal.

- Dust suppression hoses should be in use if the above is prevalent.

Waste handling equipment should be stopped mid-morning and mid-afternoon if worked continuously and sensitive areas cleaned by compressed air to remove build-up of fine particles and debris. Radiators are particularly susceptible to clogging during dusty conditions.

Washing down of equipment should only be considered at the end of the working day or should concern over the safety of the equipment take precedence. *Reason being that wet components can attract fine particles and encourage clogging if not allowed to dry thoroughly before re-use.*

Maintenance and repair programme

In addition to pre-start up checks and routine maintenance as described previously, more detailed,

and formal maintenance programme will be in effect and implemented at 500-hour intervals or on the expiration of 3 months whichever is sooner.

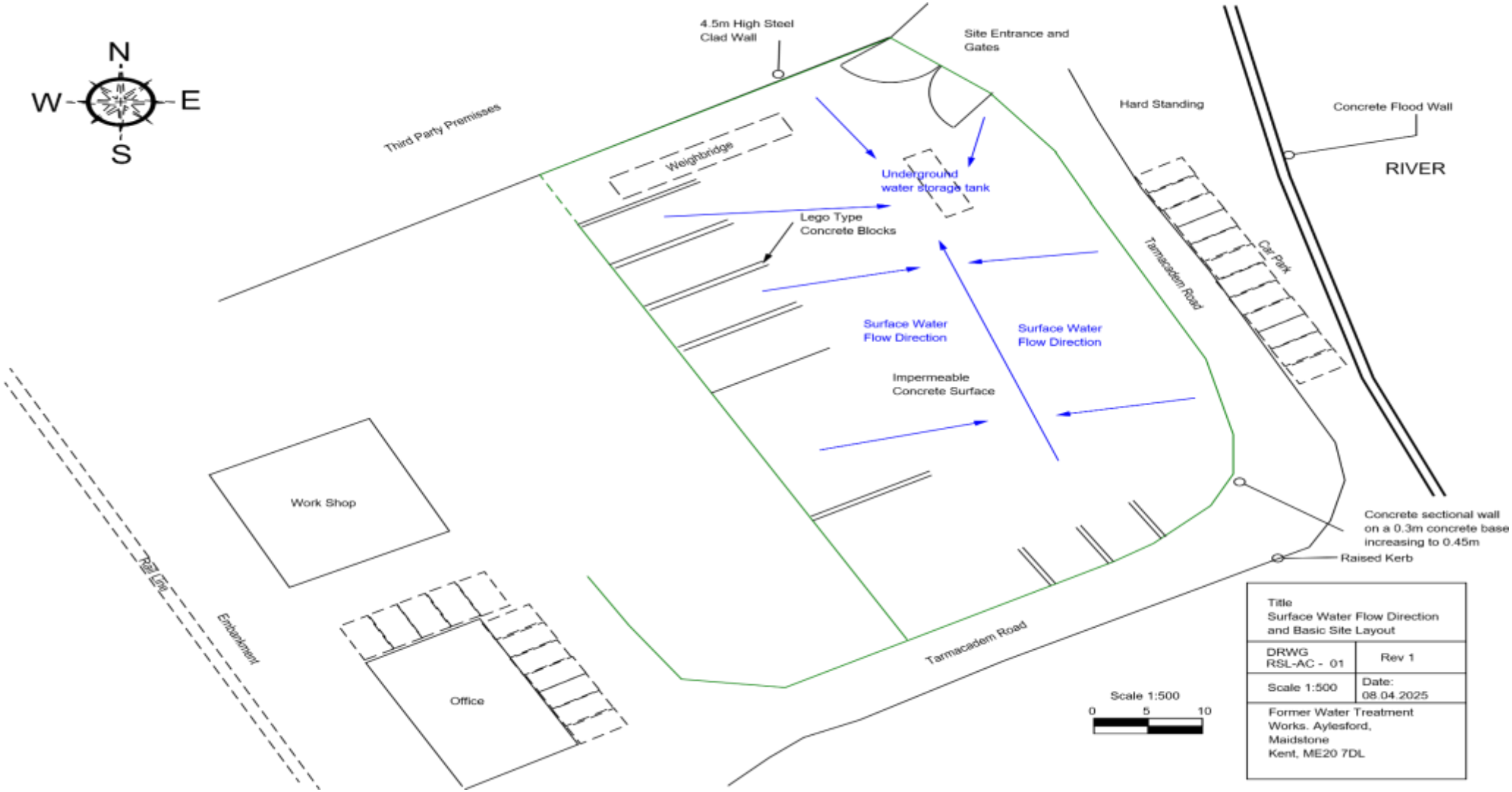
Maintenance activities will conform to manufacturers recommendations which as a minimum shall include the following checks or replacement:

- Oil and filter change
- Fuel filter
- Air filter cleaning or change as required by the mechanic.
- Inspection for oil leaks, engine and hydraulic
- Inspection for damaged and potentially failing items

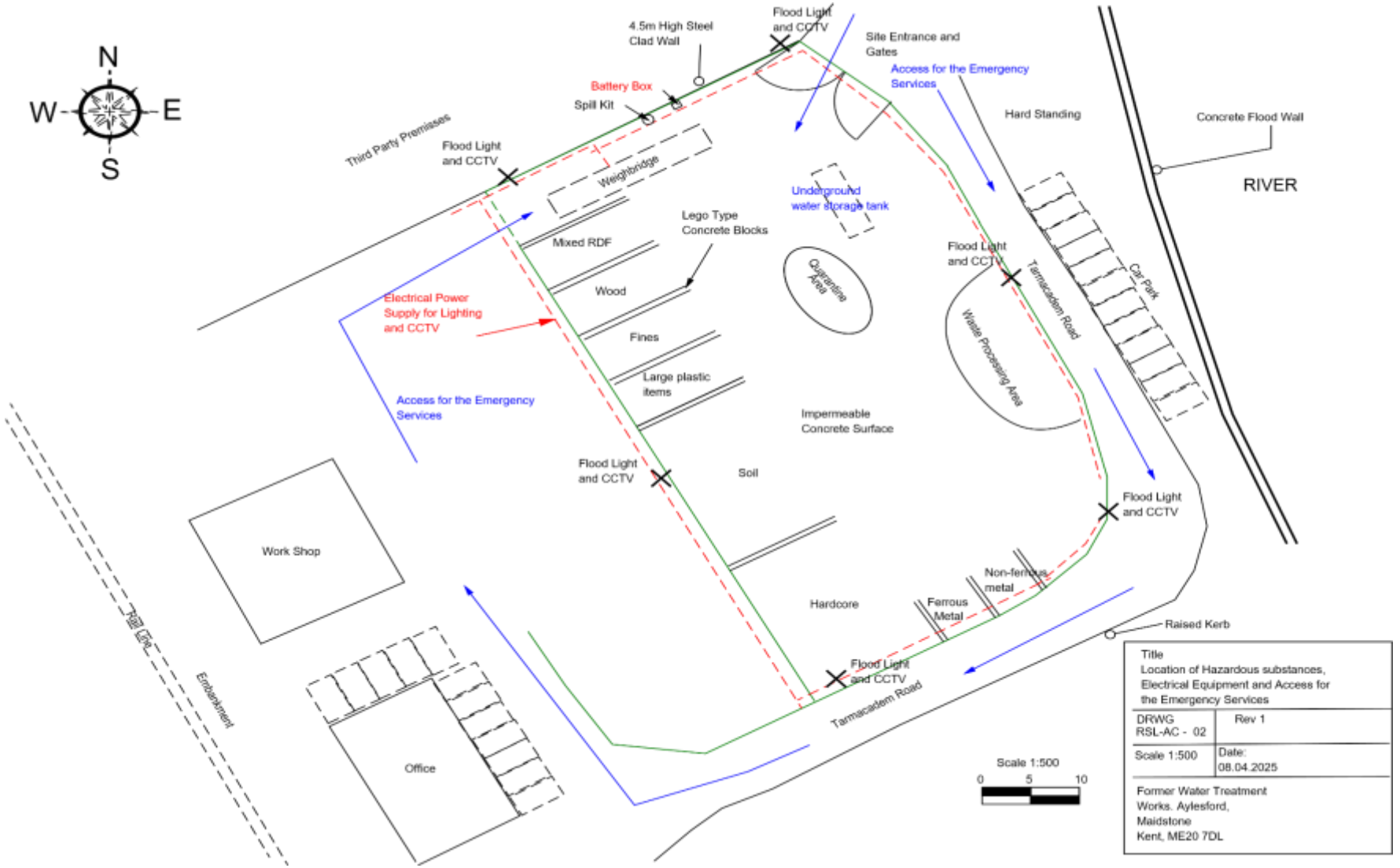
Reporting and records

Daily check sheets will be completed by the plant / equipment operator, and it shall be the site supervisor or manager who shall ensure these are rigidly completed. Any and all items noted indicating a potential failure will be acted upon by the supervisor / director and arrangement details noted and signed for on the relevant maintenance sheet. Repairs completed will be closed out by the person responsible for conducting the work, whether this is internal or third-party contractor. A selection of parts shall be maintained on site that derive from a common list of items that routinely fail, such as hydraulic hoses.

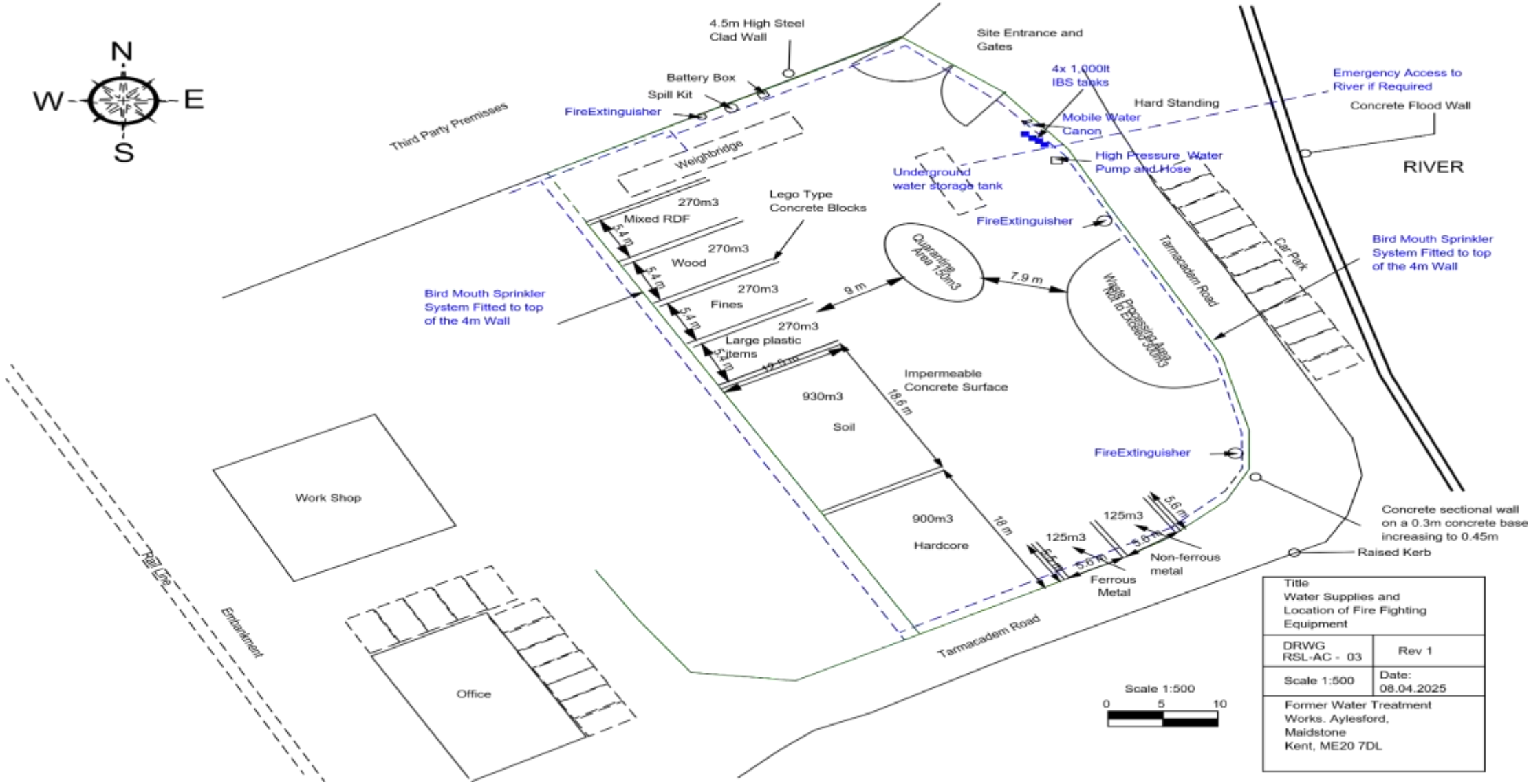
Appendix H: Site plan



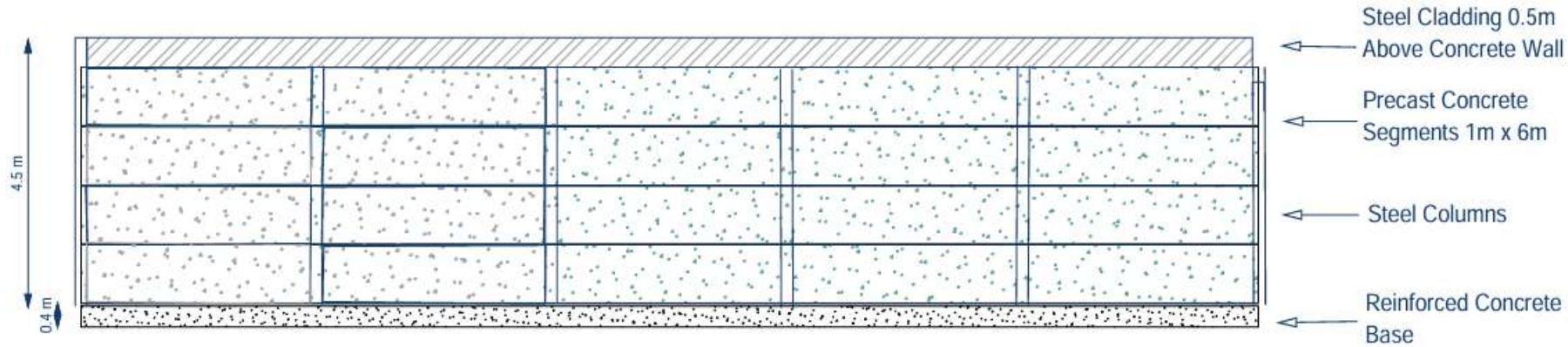
Appendix G: Location of hazardous substances



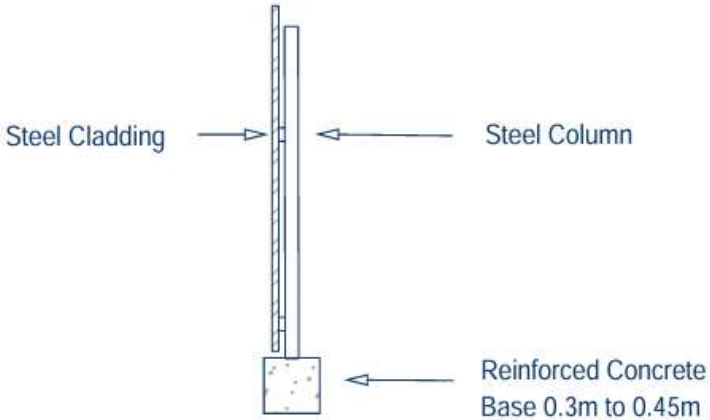
Appendix H: Fire-fighting equipment



Appendix I: Perimeter wall



Side View of Perimeter Wall



End View of Perimeter Wall

KEY

Drawing Title: Perimeter Wall Construction

Date: July 2024

Drawing Reference RSL-AC-05-2024

Scale: NTS

Roadstone Limited,
Former Water Treatment and Effluent Works,
Aylesford, Maidstone,
Kent,
ME20 7DL

Appendix J: Sensitive Receptor screening report

Nature and Heritage Conservation

Screening Report: Bespoke Waste

Reference	EPR/LP3428LU/P001
NGR	TQ 71565 59431
Buffer (m)	20
Date report produced	23/04/2025
Number of maps enclosed	1

This nature and heritage conservation report

The nature and heritage conservation sites, protected species and habitats, and other features identified in the table below **must be considered in your application**.

In the further information column, there are links which give more information about the site or feature type and indicate where you are able to self-serve to get the most accurate site boundaries or feature locations.

Most designated site boundaries are available on Magic map. Using Magic map allows you to zoom in and see the site boundary or feature location in detail, Magic map also allows you to measure the distance from these sites and features to your proposed boundary. Help videos are available on Magic map to guide you through.

Where information is not publicly available, or is only available to those with GIS access, we have provided a map at the end of this report.

Sites and Features within screening distance	Screening distance (m)	Further Information
Marine Conservation Zone (MCZ)	1000	Joint Nature Conservation Committee and Magic map
Medway Estuary - Zone 2		
Sites of Special Scientific Interest (SSSI)	1000	Natural England and Magic map
Holborough to Burham Marshes (SSSI)		

Protected Species within screening distance	Screening distance (m)	Further Information
Protected Species - Allis Shad migratory route	up to 500m	Natural England Appropriate Local Record Centre (LRC) National Biological Network (NBN) Environment Agency. Dial 03708 506 506 for your local Fisheries and Biodiversity team
Protected Species - European Eel migratory route		
Protected Species - River Lamprey migratory route		
Protected Species - Sea Lamprey migratory route		
Protected Species - Smelt migratory route		

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

The following nature and heritage conservation sites, protected species and habitats, and other features have been checked for, where they are relevant for the permit type requested, but have not been found within screening distance of your site unless included in the list above.

Special Areas of Conservation (cSAC or SAC), Special Protection Area (pSPA or SPA), Marine Conservation Zone (MCZ), Ramsar, Sites of Special Scientific Interest (SSSI), National Nature Reserve (NNR), Local Nature Reserve (LNR), Local Wildlife Sites (LWS), Ancient Woodland, relevant species and habitats.

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

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

Protected Species

Environment Agency