



U M B R E L L A
ENVIRONMENTAL
PROTECTING YOUR BUSINESS

Emissions Management Plan

Umbrella Environmental
9 Goldington Road
Bedford
MK40 3JY
Company Number:
13446157

Website: www.umbrella-environmental.co.uk
Email: andrew@umbrellaenvironmental.co.uk
Mob: 07498 671713



CIWM

Affiliated Organisation 2022

Together, we stand for a world beyond waste

Site Address:

Environmental Solutions Waste Management Ltd

241 Engineers Road
Greenham Business Park
Newbury
Berkshire
RG19 6HN



Registered Office

Accounting & Taxation Centre
4a 36 Queens Road
Newbury
Berkshire
RG14 7NE

Application Reference:

EPR/JB3408LY/A001

Document Reference:

004.1_05_011

Issue Date:

13/04/2023

Document Control

Document Title	Reference	Client	Status
Emissions Management Plan	004.1_05_011	Environmental Solutions Waste Management Ltd	DRAFT

Document History

Version	Issue date	Author	Checked	Description
D1	06/03/2023	AIL	AIL	Drafted for application EPR/JB3408LY/A001, to be reviewed by client.
V1	13/04/2023	AIL	AIL	Approved by client for submission.

CONTENTS

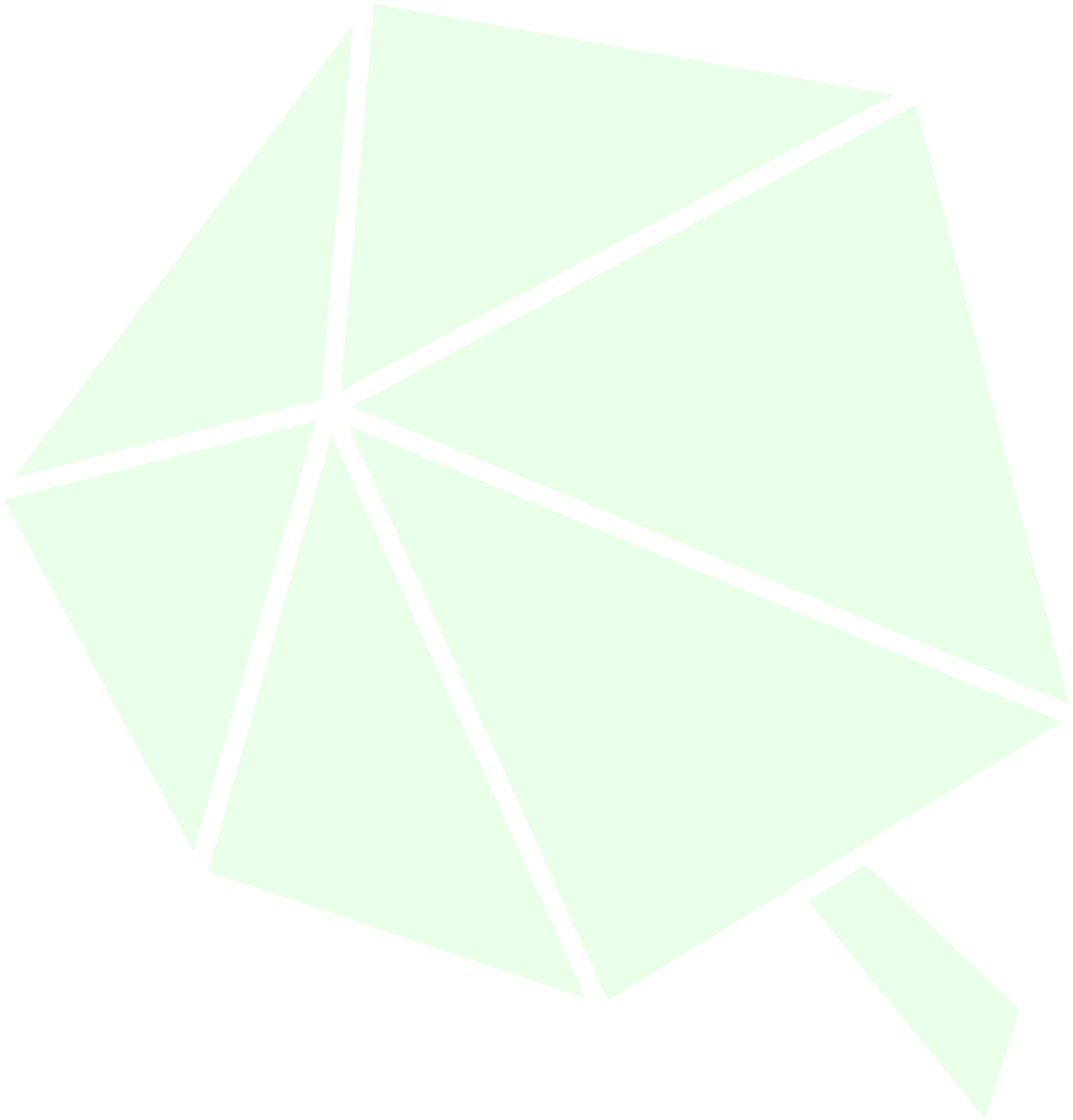
1	Introduction.....	6
1.1	Sensitive Receptors.....	7
2	Operations.....	11
2.1	Waste Deliveries.....	11
2.2	Vehicle Arrival.....	11
2.3	Consignment/Transfer note.....	11
2.4	Unloading of Waste.....	12
2.5	Non-Conformances.....	12
2.6	Overview of Waste Processing Dust and Other Emission Controls.....	15
2.7	Mobile Plant and Equipment.....	5
3	Dust and Particulate (PM ₁₀) Management.....	6
3.1	Responsibility for Implementation of EMP.....	6
3.2	Sources and Control of Fugitive Dust/Particulate Emissions.....	6
3.3	Other Considerations.....	11
3.3.1	Water usage/ availability:.....	11
3.3.2	In the event of a drought:.....	11
3.4	Enclosure of Waste Processing and Storage Areas.....	11
3.5	Visual Dust Monitoring.....	11
4	Particulate Matter Monitoring.....	12
4.1	Monitoring Location.....	12
5	Actions when Alarm Level is Triggered.....	13
6	Reporting and Complaints Response.....	14
6.1	Engagement with the Community.....	14
6.2	Reporting of Complaints.....	14
6.3	Management Responsibilities.....	15
7	Record Keeping.....	16
8	Management Plan Review.....	17

9 Availability EMP..... 18

10 Summary..... 19

11 Appendices..... 20

12 Drawings 24



Tables

Table 1 Distances to selected, Representative Locations.....	9
Table 2 Sources of Dust and/ or other Emissions.....	10
Table 2 List Of Waste.....	13
Table 3 Typical Waste Accepted.....	2
Table 4 Mobile Plant.....	5
Table 5 Source-Pathway-Receptor-Routes.....	7
Table 6 Measures to Control Dust/Particules (PM10) and other Emissions.....	8

Figures

Figure 1 Site Location.....	7
Figure 2 Wind Rose.....	8
Figure 3 Process Flow Diagram.....	1

Appendices

Appendix 1 Beaufort Scale.....	21
Appendix 2 Emission Complaint Form.....	22

Drawings

Drawing 1 Permit Boundary 004.1_09_001.....	25
Drawing 2 Overall Site View 004.1_09_004.....	26
Drawing 3 Site Layout Ground 004.1_09_006.....	27
Drawing 4 Site Layout 1st Floor 004.1_09_007.....	28
Drawing 5 Sensitive Receptors 1 km Plan 004.1_09_005.....	29
Drawing 6 Monitoring Locations 004.1_09_009.....	30

1 INTRODUCTION

This Emission Management Plan (EMP) relates to Environmental Solutions Waste Management site 241 Engineers Road Greenham Business Park Newbury Berkshire RG19 6HN. The permit being applied for is based on the Standard rules SR2015 No15, Waste electrical and electronic equipment authorised treatment facility (ATF) excluding ozone-depleting substances. However, with the additional waste codes being added the site will reflect more of a waste transfer station. The addition of these extra waste codes enables Environmental Solutions Waste Management to provide a complete waste service for the commercial sector.

The purpose of the site is to reduce disposal of waste and encourage re-use, refurbishment or recycling of Waste Electrical and Electronics Equipment (WEEE) and other waste arising from business clearances..

The permit does not allow the treatment of WEEE containing ozone-depleting substances but this waste can be accepted for storage only. The treatment and storage of WEEE meets the technical requirements of the WEEE Directive (2012/19/EU). Treatment of WEEE is carried out using Appropriate Measures, Recovery and Recycling Techniques (BATRRT).

WEEE treatment must be carried out inside a building. There are no point source emissions to air outside the building. Treatment includes, dismantling, separation, shredding, screening, grading, baling, shearing, compacting, crushing, granulation, repair or refurbishment, or cutting of waste into different components for recovery.

The permitted activities are carried out within 200 m of a European Site, Ramsar site or a Site of Special Scientific Interest (SSSI). The activities are not carried out within 50 m of any well spring or borehole used for the supply of water for human consumption. This includes private water supplies. There is no burning of any wastes, either in the open, inside buildings or in any form of incinerator. On site managerial procedures mitigate the risk posed by the activities to these receptors.

The site is approx. 0.174 ha and operates from Monday to Friday from 08:00 until 17:00. Waste is delivered by Environmental Solutions Waste Management Ltd own fleet or third parties that have worked with the operator for a long time and is pre booked into site prior to arrival. For waste deliveries the site is accessed via its northern boundary as shown on Site layout Ground 004.1_09_007 and Site Layout 1st floor 004.1_09_007. Once the waste vehicle has arrived on site it will be directed to the correct location to deposit their waste. All waste received to the permitted facility are subject to the waste acceptance procedures prior to being unloading see Environmental Management System (EMS) 004.1_05_007. During this stage if any non-conforming wastes are identified they are rejected, where not possible they will be stored in an appropriate manner and removed from site to an appropriately authorised facility as soon as practicably possible.

Figure 1 Site Location



1.1 Sensitive Receptors

Sensitive receptors have been identified up to 1 km and are shown on the sensitive receptors plan 004.1_09_005. A full list of receptors up to 1 km is also shown in Table 1 Distances to selected, Representative Locations. The sensitive receptors shown are in all directions of the site. The closest observing station where weather data is available is Heads Hill approximately 2 km to the east of the site (based on observations between 2017 – present). Figure 1 below shows the wind rose for Heads Hill which indicates the prevailing wind is WSW.

Figure 2 Wind Rose

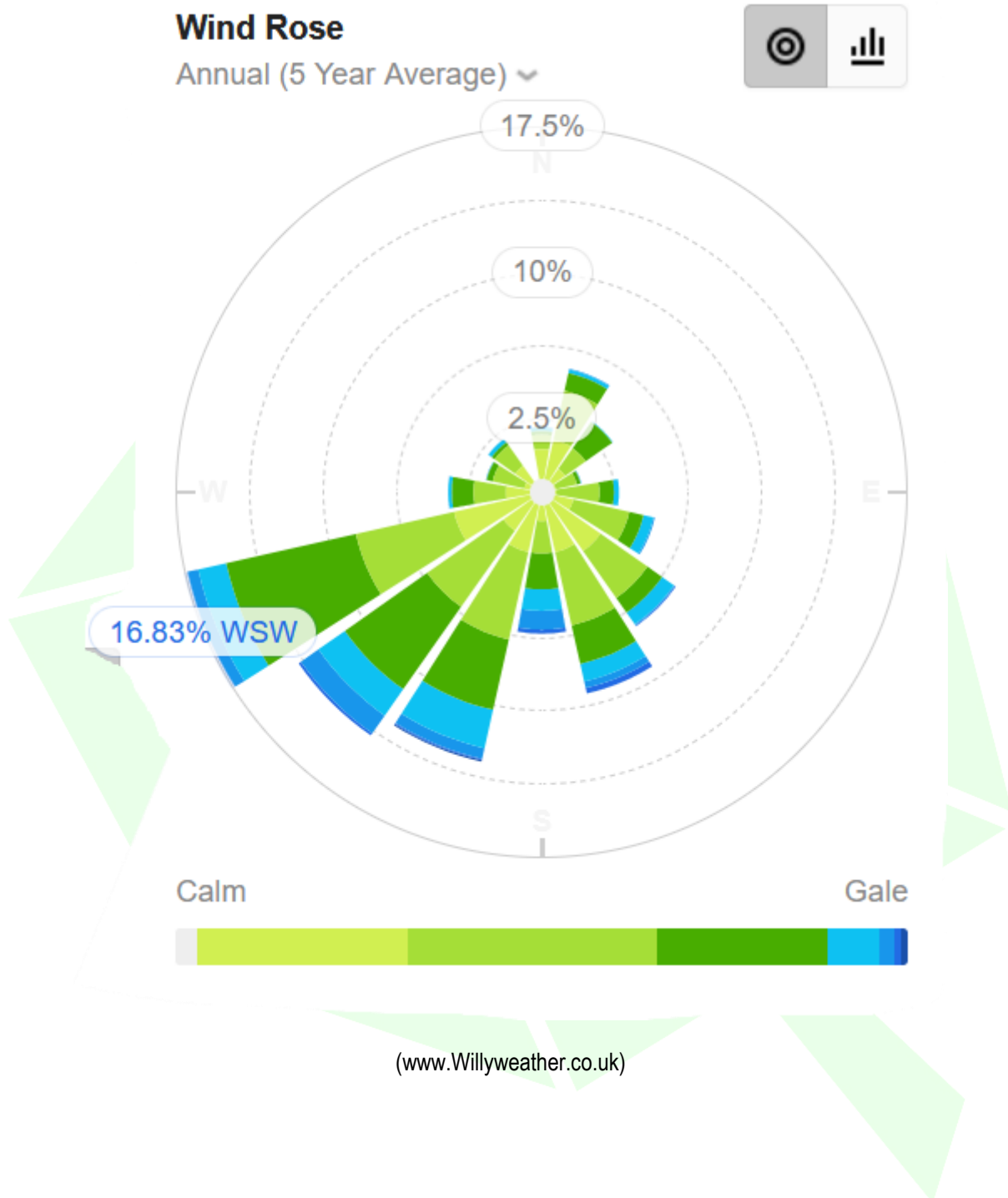


Table 1 Distances to selected, Representative Locations

TYPE OF RECEPTOR	ID #	DESCRIPTION	DISTANCE FROM BOUNDARY (M) APPROX	DIRECTION
HUMANS AND PROPERTY		SITE		
		Site Workers	On site	-
		Site Visitors	On site	-
		COMMERCIAL		
	1	Greenham Business Park - Vehicle Storage to the North	0 m	N
	2	Greenham Business Park - Smaller Units to the South East	0 m	SE
	3	Greenham Business Park - Larger Units to the West	86 m	WSW
	4	Sewage Works off Echchinswell Road	792 m	SSE
	5	Scrap Yard off Thornford Road	896 m	SE
		RESIDENTIAL		
	1	Residential Properties east of Greenham Business Park	431 m	ESE
	2	Residential Properties south of the A339	437 m	SSW
	3	Residential Properties within Bowdon Woods	673 m	NNE
		PUBLIC USE		
	1	Greenham Control Tower Museum	676 m	NNW
	-	Footpath adjacent to the River Enborne	792 m	SSE
	-	Footpath between Echchinswell Road & Featherbed Lane	795 m	S
		ROADS & RAILWAYS		
	-	Apron Road	12 m	N
	-	Main Street	50 m	SW
	-	A339	378 m	S
		RECREATIONAL		
	1	Greenham Common	182 m	NNE
	2	Newbury & Crockham Golf Club	917 m	NNW
		AGRICULTURAL		
	1	Packets of Arable Land between Bishops Green & North Sydmonton	773 m	S
	2	Packets of Arable Land between Echchinswell Road & the A339	775 m	SW
		ATMOSPHERE		
-	Not located within an AQMA	-	-	
WATER		SURFACE WATER		
	-	River Enborne	816 m	SW
	-	Ponds at Greenham Common	824 m	NNW

TYPE OF RECEPTOR	ID #	DESCRIPTION	DISTANCE FROM BOUNDARY (M) APPROX	DIRECTION
		GROUNDWATER		
	-	Bedrock- Secondary A	On site	-
	-	Superficial Drift- Secondary A	On site	-
ENVIRONMENTALLY SENSITIVE		DESIGNATED SITES (European)		
	1	SSSI - Greenham & Cookham Commons - Former Runway Area	178 m	N
	2	SSSI - Greenham & Cookham Commons - Area West of Greenham Business Park	299 m	W
	3	Ancient Woodland - Peckmoor Copse	407 m	WSW
	4	SSSI - Greenham & Cookham Commons - Area East of Greenham Business Park	607 m	ESE
	5	SSSI - Bowdon & Chamberhouse Woods	941 m	NNE
	6	Ancient Woodland - Great Wood & Cakeball Copse	945 m	NE
		NON-DESIGNATED SITES		
	1	BAP - Lowland Heathland throughout Greenham & Cookham Commons	152 m	N
	2	BAP - Deciduous Woodland surrounding Greenham & Cookham Commons	288 m	ESE
3	BAP - Coastal & Floodplain Grazing Marshes adjacent to the River Enborne	815 m	SW	
HERITAGE LOCATIONS		LISTED BUILDINGS AND PARKS		
	1	Grade II Listed - RAF Greenham Wing Headquarter & Combat Support Offices	601 m	WNW

Table 2 Sources of Dust and/ or other Emissions

Company	Address	Type of Business	Distance from site boundary (m)
Arable Farm Land	Packets of Arable Land between Bishops Green & North Sydmonton	Farming	773
Arable Farm Land	Packets of Arable Land between Ecchinswell Road & the A339	Farming	775

2 OPERATIONS

2.1 Waste Deliveries

All wastes received at Environmental Solutions sites are pre-booked.

Operator has a legal obligation under the 'Duty of Care' to know what wastes are being deposited, that waste is controlled correctly, and that there is sufficient and accurate written information accompanying the waste.

- To ensure compliance with legal requirements
- To ensure the identification on non-compliant waste
- To ensure correct completion of paperwork and therefore customer invoicing
- To ensure the identification of reuse items, and compliance with the Waste Hierarchy

2.2 Vehicle Arrival

Upon arrival of delivery vehicle, the duty of care paper work must be handed to site operator for first compliance inspection of paper work and visual inspection of waste. This inspection includes but not limited to;

- Integrity of vehicle and containers looking for potential sources of pollution
- Waste type
- Written description matching what is actually there
- Any obvious non-conforming waste types (against permitted wastes)

2.3 Consignment/Transfer note

The Hazardous consignment note must be inspected. Ensure all Parts (A-D) have been completed, and that the driver and waste producer have signed and dated Part C and D respectively.

Ensure that the date of consignment is the same date as the date upon which the load is received, or within one working day.

Check the written description of the waste, provided on the Consignment Note Recyclables Annex. Confirm with the driver that this is a true representation of the waste collected and undertaken an initial visual inspection of the waste within the vehicle.

Ensure that the correct box is completed to indicate whether hazardous or non-hazardous wastes are being received.

The transfer note should be completed and signed by both persons the handling the waste e.g. producer and person receiving.

A non-hazardous waste transfer note must include;

- a description of the waste
- any processes the waste has been through

- how the waste is contained or packaged
- the quantity of the waste
- the place and date of transfer
- the name and address of both parties
- details of the permit, licence or exemption of the person receiving the waste
- the licence or registration number of the person handing over the waste, if they have a waste management licence or are a registered carrier of controlled waste
- the Standard Industry Code (SIC) of your business
- the appropriate European Waste Catalogue (EWC) code for your waste
- a declaration that the waste producer has applied the Waste Hierarchy.

2.4 Unloading of Waste

The Reuse Operator must be present during the unloading of the vehicle to identify any items which are suitable for reuse.

Continue to observe the wastes as they are unloaded, check that the waste types match the number and type listed on the Hazardous Consignment Note/Non-Hazardous Waste Transfer Note. Only those wastes listed on the Consignment Note/Transfer Note Annexes are to be accepted at the site, these are the only wastes permitted for acceptance in accordance with the sites Environmental Permit.

Where any waste is identified which has not been noted on the Consignment Note/Transfer Note inform the Site Manager and place the waste within an isolation area.

Where the load conforms with the accompanying Consignment Note or Transfer Note, continue to weigh and categorise WEEE Inputs and record all net weights on the Consignment Note Annex.

Identify the treatment/recovery operations to which the waste is to be subjected, this is likely to be one of the following:

- Temporary Storage Pending Recovery Elsewhere
- Mechanical Reprocessing of WEEE
- Repair / refurbishment / cleaning etc. for reuse
- Repair / refurbishment / cleaning for re-use in products or components

Complete the information required within Part E and sign/date.

2.5 Non-Conformances

Where a non-conformance with the Consignment Note/Transfer Note has been identified the Site Manager will assess the action to be taken:

Where a non-conformance with the Consignment Note/Transfer Note has been identified the Site Manager will assess the action to be taken:

Where the Consignment Note/Transfer Note is incomplete Waste is rejected.

Where the waste is not permitted at the site – Reject the load, take photographs and reload. The Site Manager will assess whether it is safe for the load to go back on the road. If so, they will contact the waste producer to arrange to return the waste. Where this is not possible the waste is to be quarantined, Environment Agency and Directors informed, and arrangements made between the parties to remove the waste to a suitable licenced facility at the earliest opportunity.

The safety of personnel, road users and the site are the paramount concern.

Table 3 List Of Waste

EWC code	Description
06	WASTES FROM INORGANIC CHEMICAL PROCESSES
06 01	wastes from the manufacture, formulation, supply and use (MFSU) of acids
06 01 06*	other acids
06 04	metal-containing wastes other than those mentioned in 06 03
06 04 05*	wastes containing other heavy metals
08	WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND PRINTING INKS
08 01	wastes from MFSU and removal of paint and varnish
08 01 11*	waste paint and varnish containing organic solvents or other hazardous substances
08 04	wastes from MFSU of adhesives and sealants (including waterproofing products)
08 04 09*	waste adhesives and sealants containing organic solvents or other hazardous substances
09	WASTES FROM THE PHOTOGRAPHIC INDUSTRY
09 01	wastes from the photographic industry
09 01 11*	single-use cameras containing batteries included in 16 06 01, 16 06 02 or 16 06 03
09 01 12	single-use cameras containing batteries other than those mentioned in 09 01 11
12	WASTES FROM SHAPING AND PHYSICAL AND MECHANICAL SURFACE TREATMENT OF METALS AND PLASTICS
12 01	wastes from shaping and physical and mechanical surface treatment of metals and plastics
12 01 09*	machining emulsions and solutions free of halogens
12 01 18*	metal sludge (grinding, honing and lapping sludge) containing oil
13	OIL WASTES AND WASTES OF LIQUID FUELS (except edible oils, and those in chapters 05, 12 and 19)
13 02	waste engine, gear and lubricating oils
13 02 04*	mineral-based chlorinated engine, gear and lubricating oils

13 02 05*	mineral-based non-chlorinated engine, gear and lubricating oils
14	WASTE ORGANIC SOLVENTS, REFRIGERANTS AND PROPELLANTS (except 07 and 08)
14 06	waste organic solvents, refrigerants and foam/aerosol propellants
14 06 03*	other solvents and solvent mixtures
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 06	mixed packaging
15 01 07	glass packaging
15 02	absorbents, filter materials, wiping cloths and protective clothing
15 02 02*	absorbents, filter materials (including oil filters not otherwise specified), wiping cloths, protective clothing contaminated by hazardous substances
16	WASTES NOT OTHERWISE SPECIFIED IN THE LIST
16 01	end-of-life vehicles from different means of transport (including off-road machinery) and wastes from dismantling of end-of-life vehicles and vehicle maintenance (except 13, 14, 16 06 and 16 08)
16 01 07*	Oil Filters
16 02	wastes from electrical and electronic equipment
16 02 09*	transformers and capacitors containing PCBs
16 02 10*	discarded equipment containing or contaminated by PCBs other than those mentioned in 16 02 09
16 02 11*	discarded equipment containing chlorofluorocarbons, hydrochlorofluorocarbons and hydrofluorocarbons
16 02 12*	discarded equipment containing free asbestos
16 02 13*	discarded equipment containing hazardous components other than those mentioned in 16 02 09 to 16 02 12
16 02 14	discarded equipment other than those mentioned in 16 02 09 to 16 02.13
16 02 15*	hazardous components removed from discarded equipment
16 02 16	components removed from discarded equipment other than those mentioned in 16 02 15
16 05	gases in pressure containers and discarded chemicals
16 05 08*	discarded organic chemicals consisting of or containing hazardous substances
16 06	batteries and accumulators
16 06 01*	lead batteries
16 06 02*	Ni-Cad batteries
16 06 03*	mercury-containing batteries
16 06 04	alkaline batteries (except 16 06 03)
16 06 05	other batteries and accumulators
16 10	aqueous liquid wastes destined for off-site treatment
16 10 01*	aqueous liquid wastes containing hazardous substances
16 10 02	aqueous liquid wastes other than those mentioned in 16 10 01
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
21 01 02	Glass
20 01 13*	Solvents
21 01 14*	acids
20 01 21*	fluorescent tubes and other mercury-containing waste
20 01 23*	discarded equipment containing chlorofluorocarbons
20 01 27*	paint, inks, adhesives and resins containing hazardous substances
20 01 30	detergents other than those mentioned in 20 01 29
20 01 33*	Batteries and accumulators included in 16 06 01, 16 06 02 or 16 06 03 and unsorted batteries and accumulators containing these batteries.
20 01 34	Batteries and accumulators other than those mentioned in 20 01 33
20 01 35*	discarded electrical and electronic equipment other than those mentioned in 20 01 21 and 20 01 23 containing hazardous components
20 01 38	wood other than that mentioned in 20 01 37
20 01 39	Plastics
20 01 40	metals
20 03	other municipal wastes

2.6 Overview of Waste Processing Dust and Other Emission Controls

All waste processing occurs inside warehouse 1 and or 2. Waste arrives in containers and is unloaded by hand or fork lift truck at location shown on Drawing 3 Site Layout Ground 004.1_09_006.

All processing and waste storage for each waste stream is shown in Figure 3 Process Flow Diagram.

Figure 3 Process Flow Diagram

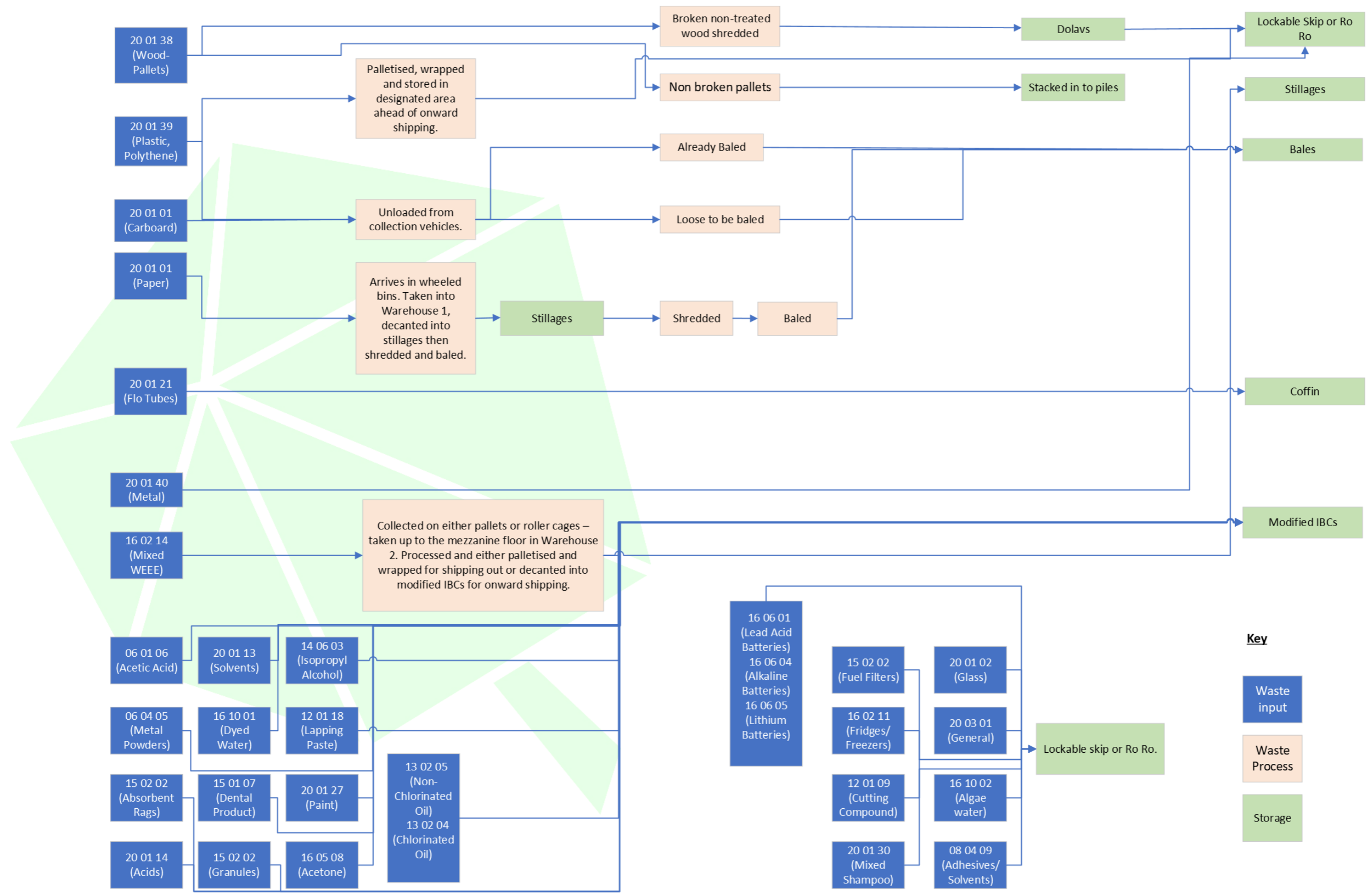


Table 4 Typical Waste Accepted

Waste stream	Location	How it is stored	Max. length / m	Max. width / m	Max. height / m	Volume / m ³	Max. time it will be stored
20 01 21 (Flo Tubes)	61	Container (Coffin)	1.9	0.3	0.3	0.17	Up to 3 weeks
16 02 14 (Mixed WEEE)	1-60	Container (Stillages)	1.2	0.8	0.96	0.9	
16 06 01 (Lead Acid Batteries)		Container (Upright Cages)					
16 06 04 (Alkaline Batteries)		Pallet (wrapped on pallet)					
16 02 11 (Fridges/Freezers)							
16 06 05 (Lithium Batteries)							
16 02 14 (Mixed WEEE)	Permitted Waste	Container (Ro Ro)	6.2	2.4	2.4	36	
16 06 01 (Lead Acid Batteries)							
16 06 04 (Alkaline Batteries)							
16 02 11 (Fridges/Freezers)							
16 06 05 (Lithium Batteries)							
20 01 13 (Solvents)							
20 01 14 (Acids)							
15 02 02 (Absorbent Rags)							
08 04 09 (Adhesives/Solvents)							
20 01 27 (Paint)							
15 02 02 (Fuel Filters)							
16 10 02 (Algae water)							

Waste stream	Location	How it is stored	Max. length / m	Max. width / m	Max. height / m	Volume / m ³	Max. time it will be stored
20 01 30 (Mixed Shampoo)							
12 01 09 (Cutting Compound)							
13 02 05 (Non-Chlorinated Oil)							
13 02 04 (Chlorinated Oil)							
16 10 01 (Dyed Water)							
15 02 02 (Granules)							
15 01 07 (Dental Product)							
20 01 01 (Carboard, Paper)							
20 01 39 (Polythene, Plastic Buckets)							
20 01 38 (Wood)							
20 03 01 (General)							
20 01 02 (Glass)							
20 01 40 (Metal)							
12 01 18 (Lapping Paste)							
14 06 03 (Isopropyl Alcohol)							
16 05 08 (Acetone)							
06 04 05 (Metal Powders)							
06 01 06 (Acetic Acid)							

Waste stream	Location	How it is stored	Max. length / m	Max. width / m	Max. height / m	Volume / m ³	Max. time it will be stored
Spare container storage	58,65, 67,68,69,70	Spare empty containers.					

2.7 Mobile Plant and Equipment

Table 5 Mobile Plant

Description	Make	Model	Emission Rating
IDEAL shredder	Caterpillar	996G	Tier 3a
HSM shredder	Cummins	C90D5	Tier 3b
AXO shredder			
Kodak scanner			
Untha shredder			
Genox shredder			
Green baler			
Blue baler			
HSM baler			
Can crusher			
Aerosol crusher			
Bergmann compactor			
KK 500 balemaster			
KK minibaler			
Waste compactor			
Compressor - small			
Compressor – large			
Forklift trucks			

All equipment is owned, manufactures maintenance is followed unless stated otherwise in the Environment Management System (004.1_005_007 EMS) All replacements purchased in the future will have the lowest emissions at time of purchase. Machinery is only on whilst it is in use otherwise it is all turned off as an anti idling policy covers the whole site.

3 DUST AND PARTICULATE (PM₁₀) MANAGEMENT

3.1 Responsibility for Implementation of EMP

The TCM shall be responsible for the implementation onsite, training of relevant persons and the annual review of the EMP. The site's Environment Management System will be updated to incorporate these changes.

Refresher training and additional support may be provided by external competent persons as required.

All records of training and document reviews will be retained by the operator.

Site supervisor will be the designated person of responsibility after the TCM. Training of the EMP will take the form of tool box talks covering the person individual job role and the relation to the EMP.

Training will be provided as a part of the induction programme for a new employee and a refresher training session provided once every two years.

3.2 Sources and Control of Fugitive Dust/Particulate Emissions

Table 6 Source-Pathway-Receptor-Routes and Table 7 Measures to Control Dust/Particules (PM₁₀) and other Emissions identify the Source-Pathway-Receptor routes of the dust and particulates from the process and describes the proposed dust abatement/control measures to be employed at site.

Table 6 Source-Pathway-Receptor-Routes

Source	Pathway	Receptor	Type of impact	Where relationship can be interrupted
Mud	tracking dust on wheels and vehicles, then mud dropping off wheels/vehicles when dry	Table 1 Distances to selected, Representative Locations	Visual soiling, also consequent resuspension as airborne particulates	Remove mud before vehicles leave site, broom, hose pipe.
Debris	falling off vehicles		Visual soiling, also consequent resuspension as airborne particulates	All waste is containerised or sheeted. Vehicles are visually inspected by drivers to ensure no loose debris is present before leaving, if it is, its removed and stored into the container or another container on site.
Tipping, storage and sorting of wastes in the open	Atmospheric dispersion		Visual soiling and airborne particulates	Waste comes in containers or baled. Waste is removed from vehicle either via hand or for lift, waste is not tipped loose.
Tipping, storage and sorting of waste inside buildings	Escape from buildings and subsequent atmospheric dispersion		Visual soiling and airborne particulates	All waste arrives containerised or baled. Doors can be closed whilst processing if processing is shredding.
Vehicle exhaust emissions	Atmospheric dispersion		Airborne particulates	Regulatory controls and best-practice measures to minimise source strength
Non road going machinery exhaust emissions	Atmospheric dispersion		Airborne particulates	Regulatory controls and best-practice measures to minimise source strength

Table 7 Measures to Control Dust/Particules (PM10) and other Emissions

Abatement Measure	Description / Effect	Overall consideration and implementation	Trigger for implementation
Preventative Measures			
Enclosure within a building	Creating a solid barrier between the source of dust and particulates and receptors	Full enclosure of waste storage and processing breaks the pathway to the receptor and keeps particulate matter contained the same for external waste stored in containers. Baled waste also provides containment for bigger particulate matter more difficult to achieve suspension.	Will this be used all the time the site is operational, due to site infrastructure and choice of operator to collect waste in containers or baled to make transportation easier and more cost effective.
Site / process layout in relation to receptors	All particulate emitting activities like shredding are carried out internally either in warehouse 1 or 2.	Breaks path way prevents particulate matter from be suspended in the air.	Will this be used all the time the site is operational, due to site infrastructure
Site speed limit, 'no idling' policy and minimisation of vehicle movements on site	Site speed limit in place (reduce re-suspension), no idling policy to reduce emissions, all mobile and static equipment maintained to manufactures specification.	Implemented as part as appropriate measures on site.	Will this be used all the time the site is operational. Compliance with this is regulated by TCM and senior site management
Minimising drop heights for waste. Use of enclosed chutes for waste drops/end of conveyor transfers and covered skips / storage vessels.	Minimising the height at which waste is handled should reduce the distance over which debris, dust and particulates could be blown and dispersed by winds. Enclosing processes will further reduce dispersion.	Waste is unloaded either by hand or fork lift truck waste is not tipped loose on to the floor. Implemented as part as appropriate measures on site.	Will this be used all the time the site is operational. Compliance with this is regulated by TCM and senior site management
Good house-keeping	Having a consistent, regular housekeeping regime that is supported by management, will ensure site is regularly checked and	Regular house keeping in accordance with EMS 004.1_05_007.	Will this be used all the time the site is operational. Compliance with this is regulated by TCM and senior site management

Abatement Measure	Description / Effect	Overall consideration and implementation	Trigger for implementation
	issues remedied to prevent and remove dust and particulate build up.		
Sheeting/Hosing of vehicles	Prevents the escape of debris, dust and particulates from vehicles as they travel.	Remove mud before vehicles leave site, broom, hose pipe.	Will this be used all the time the site is operational. Compliance with this is regulated by TCM and senior site management
Ceasing operation during high winds and/or prevailing wind direction	Mobilisation of dust and particulates is likely to be greater during periods of strong winds and hence ceasing operation at these times may reduce peak pollution events.	Will reduce dust and particulate emissions, in the short term. Check weather app on phones/BBC weather.	Will this be used all the time the site is operational. Compliance with this is regulated by TCM and senior site management
Easy to clean concrete impermeable surfaces	Concrete impermeable site surface.	Ensure clear of waste regular litter pick/sweeping site surface inspected to ensure fit for purpose may need maintenance.	Will this be used all the time the site is operational. Compliance with this is regulated by TCM and senior site management
Minimisation of waste storage heights and volumes on site	Minimising the height at which waste is handled should reduce the distance over which debris, dust and particulates could be blown and dispersed by winds. Reducing storage volumes should reduce the surface area over which particulates can be mobilised.	Clearly identified waste storage areas see Drawing 3 Site Layout Ground 004.1_09_006 and Drawing 4 Site Layout 1st Floor 004.1_09_007.	Designed for internal, baled and containerised storage. Will this be used all the time the site is operational. Compliance with this is regulated by TCM and senior site management
Reduction in operations (waste throughput, vehicle size, operational hours)	Reducing the amount of activity on site, including no tipping, shredding, chipping or screening of high risk loads during windy weather as well as associated traffic movements should result in reduced emissions and re-suspension of dust and particulates from a site.	If complaints received this can be reviewed and implemented if thought to be required by TCM and or senior site management.	Only used in extreme circumstances.
Remedial Measures			
On-site sweeping	Sweeping could be effective in managing larger debris, dust and particulates but may also cause the mobilisation of smaller particles.	Regular house keeping in accordance with EMS 004.1_05_007.	Will this be used all the time the site is operational. Compliance with this is regulated by TCM and senior site management

Abatement Measure	Description / Effect	Overall consideration and implementation	Trigger for implementation
Water suppression with hoses & water jets	Damping down of site areas using hoses can reduce dust and particulate re-suspension and may assist in the cleaning of the site if combined with sweeping.	Unlikely to be required due to waste storage requirements of containers and or bales.	Use when required by assessment of the TCM and or senior site management.

3.3 Other Considerations

3.3.1 Water usage/ availability:

Site benefits from a mains water connection. If water is not available, then management will review the situation and amend operations in a way that reduces dust generation.

3.3.2 In the event of a drought:

Water usage is expected to be low due to storage in containers which help prevent dust generation. Drought is not expected to significantly impact this.

3.4 Enclosure of Waste Processing and Storage Areas

All processing activities are carried out internally within the on site warehouses see site plan Drawing 3 Site Layout Ground 004.1_09_006 and Drawing 4 Site Layout 1st Floor 004.1_09_007. Storage of pre processed and processed material is stored externally apart from WEEE.

3.5 Visual Dust Monitoring

Visual inspections will be undertaken by trained site staff for dust, particularly along the downwind site boundary on a daily basis. Observations will be recorded in the Site Diary. This will occur after a dry period of 3 working days and or if the wind speed is in excess of Beaufort 5.

Monitoring points shown in Visual Dust Monitoring Locations Drawing 6 Monitoring Locations 004.1_09_009.

If dust is identified then mobile dust suppression cannons will be deployed to prevent dust escaping site.

4 PARTICULATE MATTER MONITORING

Site management and staff will monitor dust on an informal basis throughout the day. Any adverse observations and details of the action taken will be recorded and retained in the Site Diary/Site Event Log.

All plant will be inspected daily and be regularly cleaned to prevent the build-up of dust on machinery parts.

No dust monitoring will occur when site is non-operational as none should be generated.

All dust monitoring results will be recorded and retained in the site office along with dates, times, weather conditions, wind direction and the name of the individual carrying out the monitoring event.

Where dust emissions are continually identified as an issue at the site boundary and complaints are received as a result, the TCM will review the mitigation measures (Table 5) and monitoring techniques detailed in this EMP in order to improve detection and prevent emissions being discharged from the site.

The TCM shall be responsible for the implementation onsite, training of relevant persons and the annual review of the EMP. The site's EMS will be updated to incorporate these changes.

Refresher training and additional support may be provided by external competent persons as required.

All records of training and document reviews will be retained by the operator.

4.1 Monitoring Location

Dust will be monitored onsite by all operatives during the working day. As part of daily checks, the north and southern boundary will be visually monitored as part of daily checks and during operations see Visual Dust Monitoring Locations 004.1_09_009. Locations 4 and 2 are chosen as they are up wind and down wind of the prevailing wind direction see Figure 2 Wind Rose.

5 ACTIONS WHEN ALARM LEVEL IS TRIGGERED

Trigger levels visual dust identified by a member of staff or TCM during normal operational parameters or a complaint received either from a member of the public or EA.

1. The TCM assesses yard activities and the nature of the waste handling and deliveries immediately prior to the alarm being activated, to work out what has caused the alarm to be activated.
2. If the source cannot be ascertained with 100% confidence, the TCM on duty suspends the **likely** dust/particulate generating activities, i.e. processing or blending.
3. If the source is within the site's control, the TCM on duty takes appropriate action in terms of dust abatement, to ensure that the alarm is not re-activated. This may take the form of the following;
 - (a) Investigating the source of the dust/particulates to prevent a re-occurrence.
 - (b) Suspending operations which are not being conducted using best-practice controls as set out in Table 7 Measures to Control Dust/Particules (PM10) and other Emissions
 - (c) Additional use of the dust abatement measures.
 - (d) Logging findings of a – c in the Site Event Log and also in the reporting template within the relevant appendix of the Environmental Permit.

Once dust has been mitigated a review will take place to identify the overall cause of the incident and or recommendations to improve process and or mitigation methods.

6 REPORTING AND COMPLAINTS RESPONSE

The TCM is responsible for responding to complaints and implementing the complaint procedure.

Upon receipt of a complaint, either directly from a neighbouring resident or indirectly via the Regulator. The following information will be requested but may not be provided in full:

- name;
- address;
- contact details;
- date(s) and time(s) to which the complaint relates; and
- nature of the complaint and any other details which may assist in the identification of the source, activity or circumstances which prompted the complaint.

The timings and description of the complaint will be analysed in conjunction with the activities and meteorological conditions logged on site without delay to identify the offending source or activity. The complainant may be asked to keep an ongoing log for correlation with the site operational log. Once the source or activity is identified suitable mitigation measures will be implemented immediately to prevent future dust emissions.

Where contact details are made available, the complainant will be contacted within 24 hours to check that the mitigation has been effective.

The complaints information and subsequent investigation will be recorded in Rock Solid Processing Limited (appendix B) or other format with relevant information.

6.1 Engagement with the Community

Neighbours will be provided with contact details to make complaints/provide feedback as shown in Management Responsibilities below.

6.2 Reporting of Complaints

Appendix B provides details of how complaints will be noted and recorded. Following investigation of a complaint the complainant will be contacted to be informed what the source of the dust was, why the issue occurred and what mitigation measures have been implemented to prevent any re-occurrence.

6.3 Management Responsibilities

The nominated person responsible for responding to complaints and implementing the complaint procedure is the TCM.

Contact Details:

Name	Contact Details
Site Manager	Tel: TBC
	Email: TBC

7 RECORD KEEPING

As a minimum, the following records must be kept to ensure compliance with the requirements of the Environmental Permit:

- A copy of the permit
- Risk assessments
- Competence and training records
- Duty of Care documentation and Environment Agency waste returns
- Other legally required documents
- Operational procedures
- Compliance records
-

Records must be retained for 6 years unless they relate to off-site environmental or health effects, or the condition of the land or groundwater when they shall be retained until permit surrender.

8 MANAGEMENT PLAN REVIEW

The EMP will be reviewed as a minimum at least annually or following any substantial change in site operations or complaint of dust, particulate matter emissions or at the request of the Environment Agency.

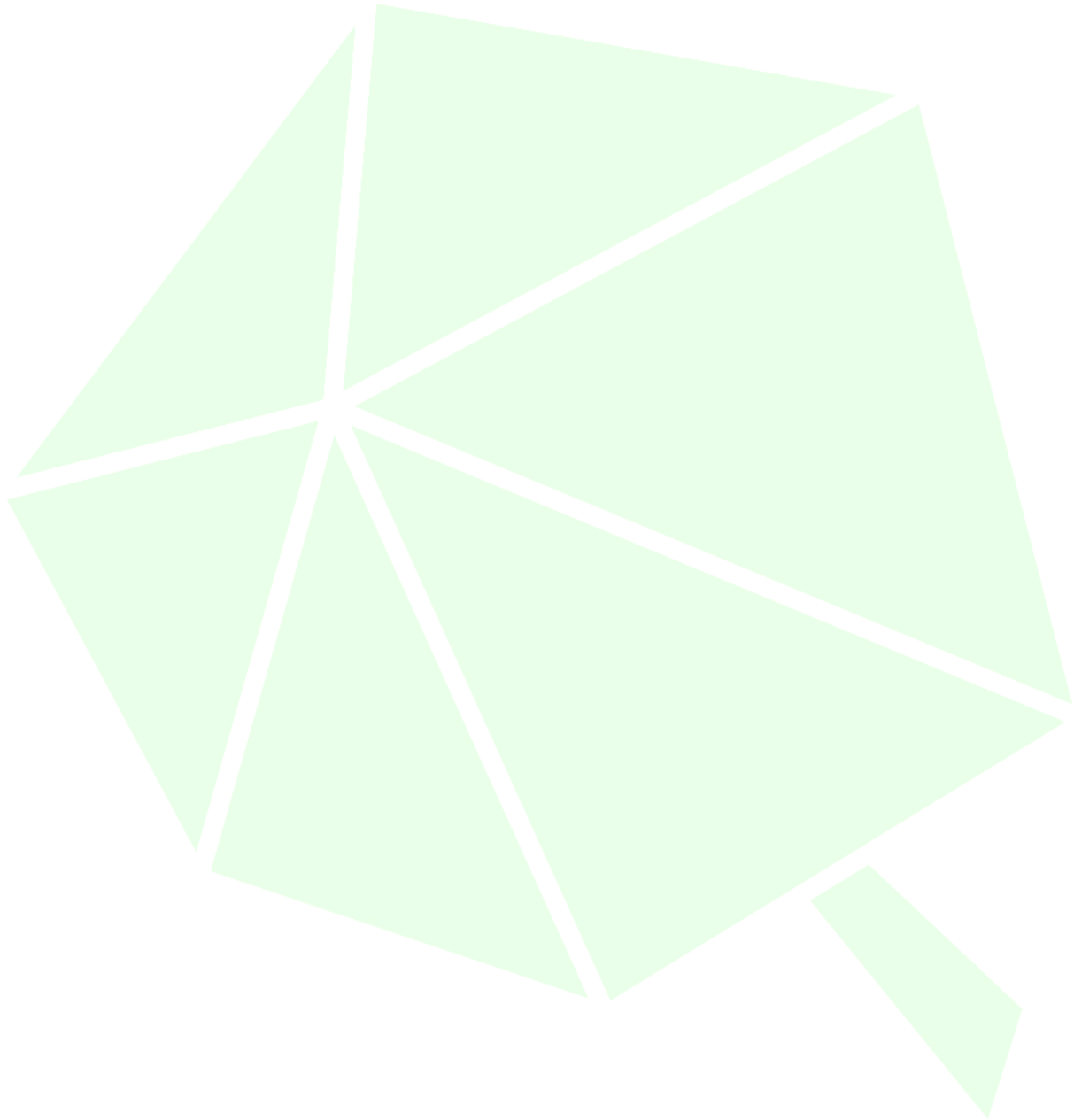
Other activities which may prompt review of the DEMP are variations to the environmental permit, accident, complaint, breach or a change in the site setting or sensitive receptors.

Where the review requires changes, this will be documented and maintained with the site records, for example, waste storage volumes, types of waste, changes to abatement measures, new or altered equipment.

9 AVAILABILITY EMP

All site operational staff will be trained in the contents of the EMP to ensure compliance and consistent operation of waste activities.

A copy of the EMP will be made available at the site for reference purposes and is available on request to the Environment Agency and other interested parties.



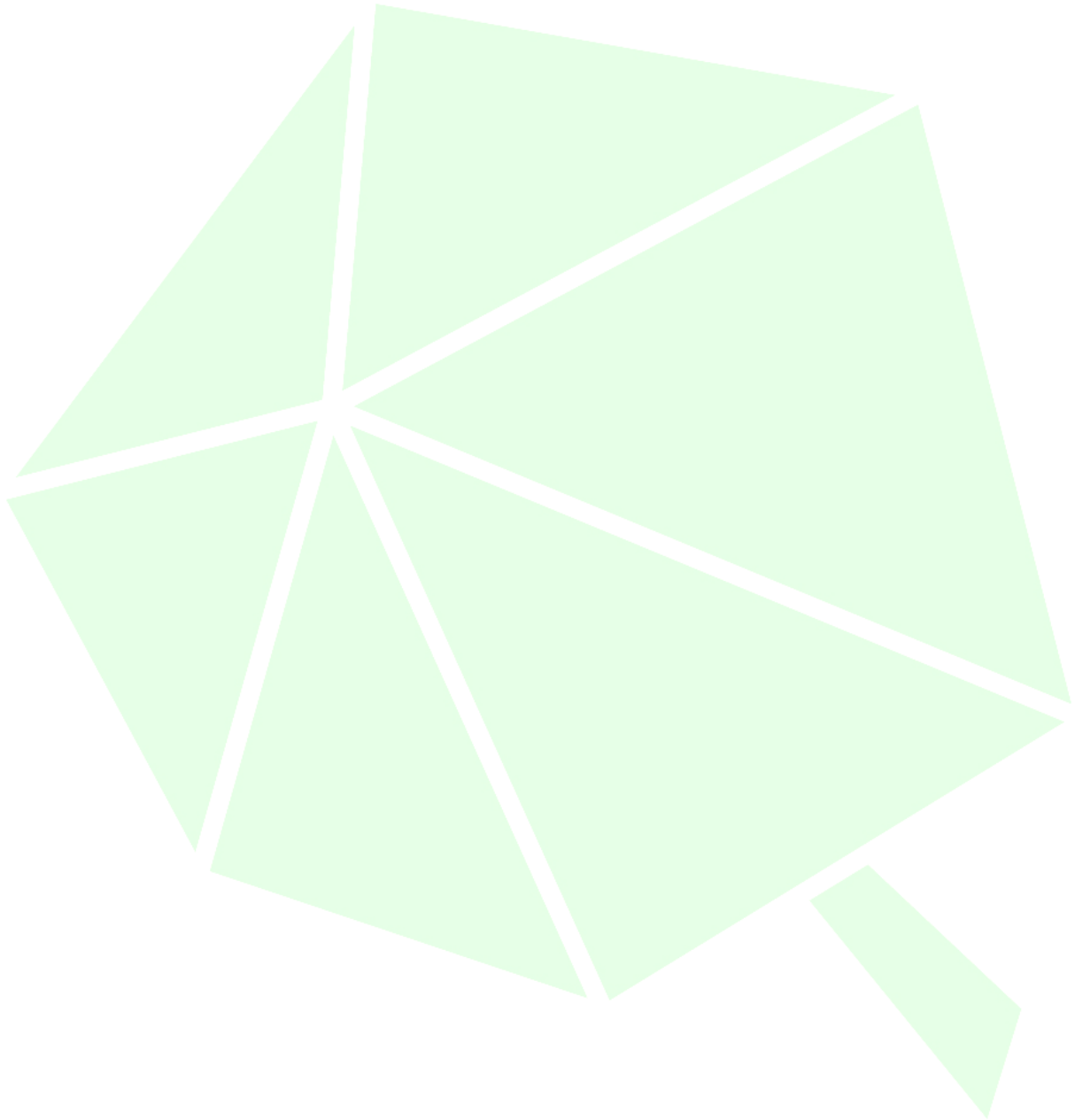
10 SUMMARY

The EMP seeks to ensure that by the adoption of industry best practice and appropriate measures, dust emissions are adequately controlled within the site and do not cause any significant impacts on amenity or the environment beyond the permit boundary.

This EMP describes how the operator is fully committed to operating responsibly and in compliance with the Environmental Permit.

The EMP will be reviewed annually and in the event of any complaint regarding dust emissions to ensure its provisions remain effective.

11 APPENDICES



Appendix 1 Beaufort Scale

Beaufort wind scale	Wind Speed			Limits of wind speed			Wind descriptive terms
	Knots	mph	ms ⁻¹	Knots	mph	ms ⁻¹	
0	0	0	0	<1	<1.15	<1	Calm
1	2	2.3	1	1-3	1.15-3.45	1-2	Light air
2	5	5.75	3	4-6	4.6-6.9	2-3	Light breeze
3	9	10.35	5	7-10	8.05-11.5	4-5	Gentle breeze
4	13	14.95	7	11-16	12.65-18.4	6-8	Moderate breeze
5	19	21.85	10	17-21	19.55-24.15	9-11	Fresh breeze
6	24	27.6	12	22-27	25.3-31.05	11-14	Strong breeze
7	30	34.5	15	28-33	32.2-37.95	14-17	Near gale
8	37	42.55	19	34-40	39.1-46	17-21	Gale
9	44	50.6	23	41-47	47.15-54.05	21-24	Strong gale*
10	52	59.8	27	48-55	55.2-63.25	25-28	Storm
11	60	69	31	56-63	64.4-72.45	29-32	Violent storm
12	-	-	-	64+	73.6	33+	Hurricane

<https://www.metoffice.gov.uk/weather/guides/coast-and-sea/beaufort-scale>

* Notes

- The official term is Strong gale, however, the Met Office uses the descriptive term Severe gale
- To convert knots to mph multiply by 1.15, for m/s multiply by 0.514.

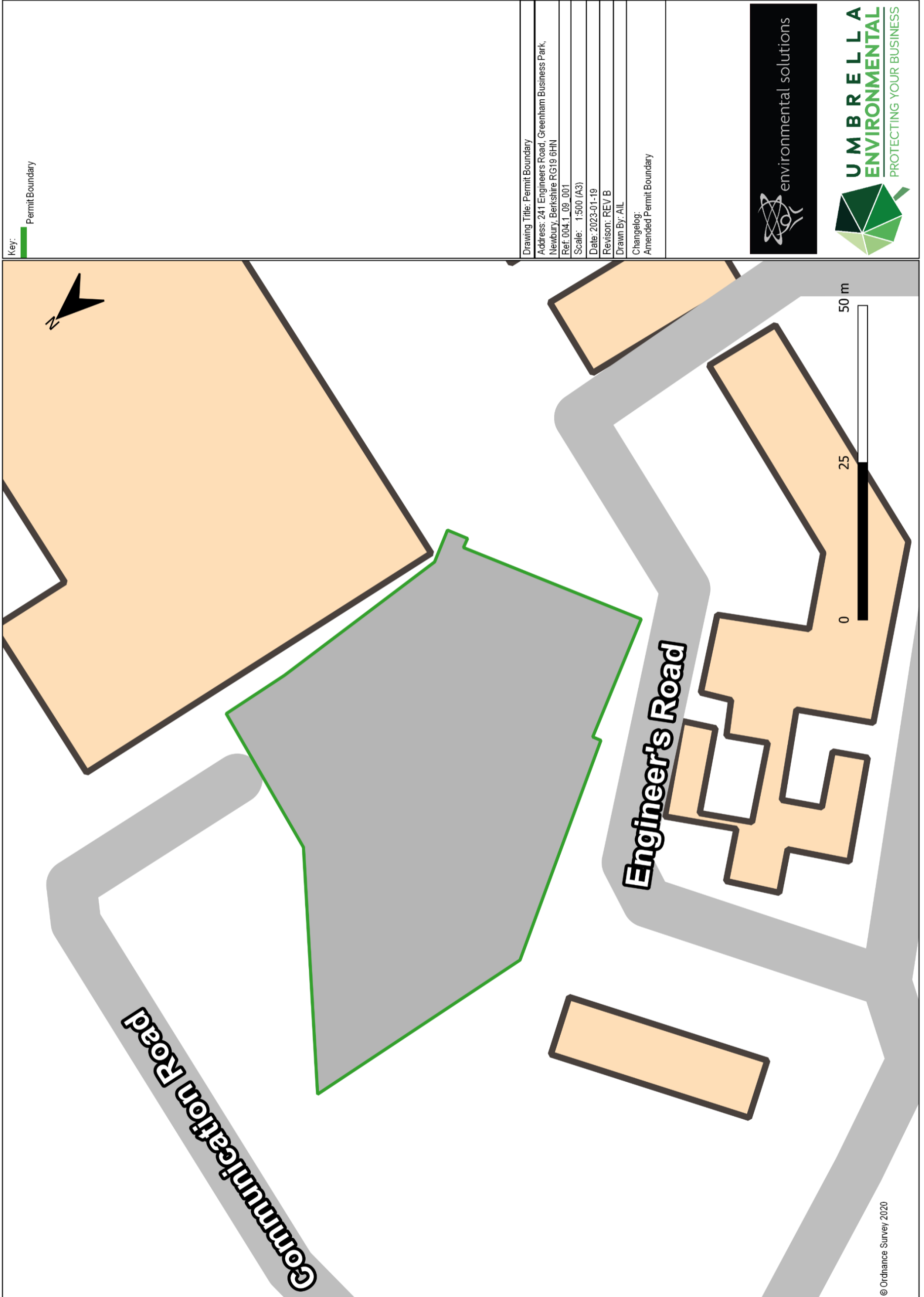
Appendix 2 Emission Complaint Form

Complaint Details	
Complainant Name	
Address	
Postcode	
Complainant Contact Details	
Tel	
Email	
Date	
Complaint Details	
Investigation Details	
Investigation carried out by -	
Name	
Position	
Date & time investigation carried out	
Weather conditions	
Wind direction and speed	
Investigation findings	
Feedback given to Environment Agency and/or local authority	
Date feedback given	
Feedback given to public	
Date feedback given	
Review and Improve	
Improvements needed to prevent a reoccurrence -	
Proposed date for completion of the improvements	
Actual date for completion	
If different insert reason for delay	
Does the noise and Vibration management plan/Emissions Management Plan need to be updated	
Date that the noise and Vibration management plan/Emissions Management	

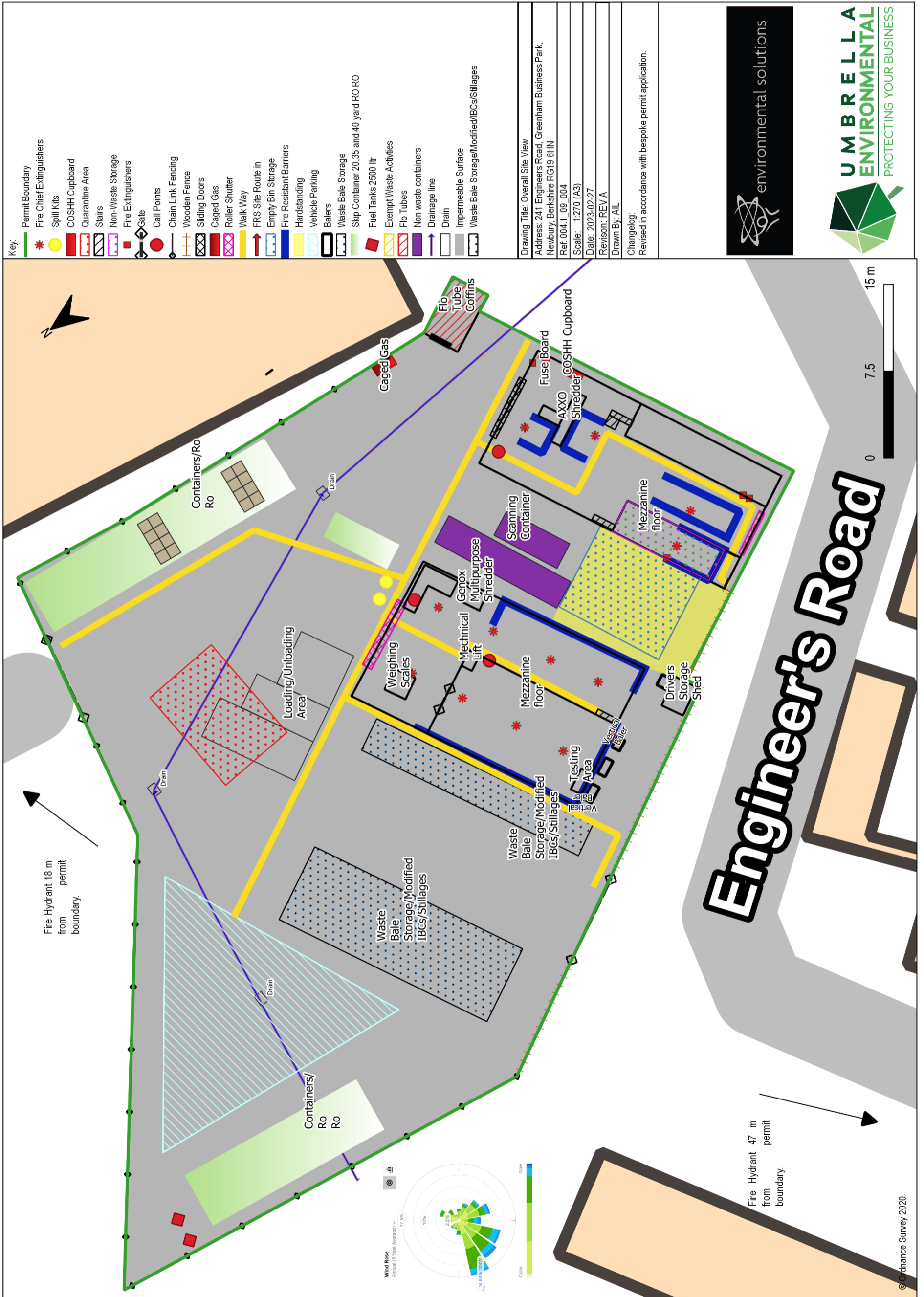
Plan was updated	
Closure	
Site manager review date	
Site manager signature to confirm no further action required	

12 DRAWINGS

Drawing 1 Permit Boundary 004.1_09_001



Drawing 2 Overall Site View 004.1_09_004

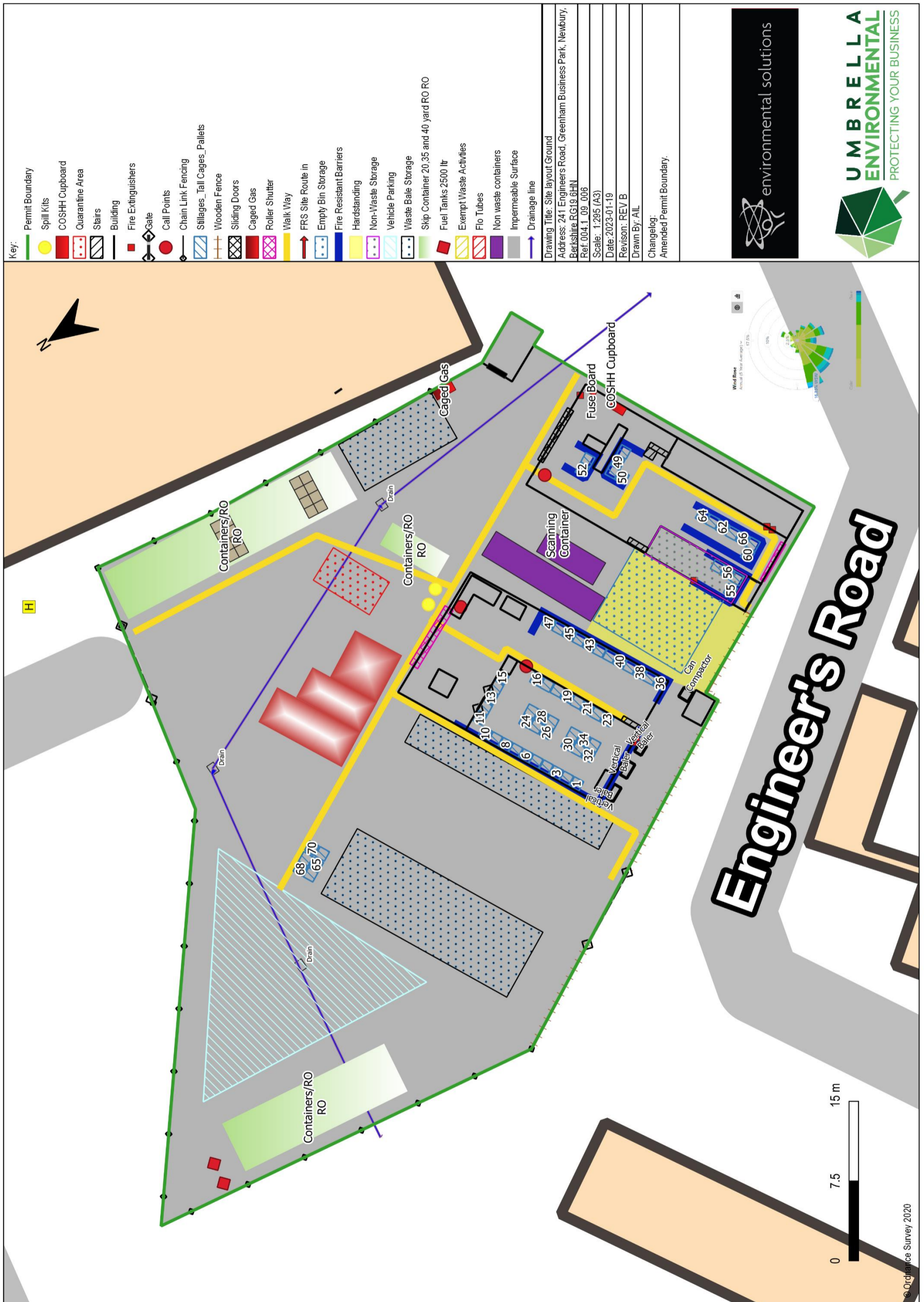


Drawing Title: Overall Site View
Address: 241 Engineers Road, Greenham Business Park,
Newbury, Berkshire RG19 6HN
Ref: 004.1_09_004
Scale: 1:270 (A3)
Date: 2023-02-27
Revision: REV A
Drawn By: AIL
Changelog:
Revised in accordance with bespoke permit application.

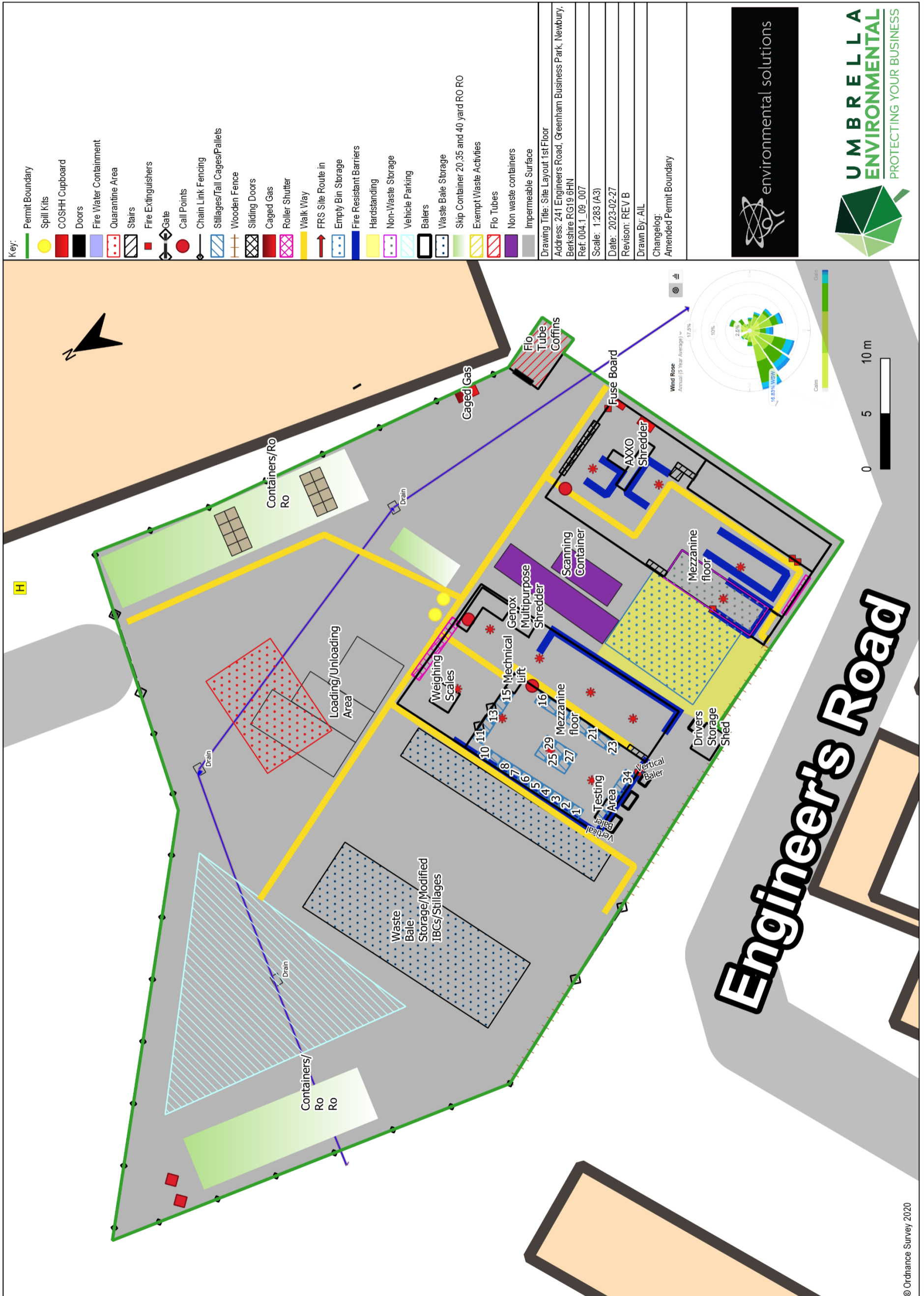
environmental solutions

UMBRELLA ENVIRONMENTAL
PROTECTING YOUR BUSINESS

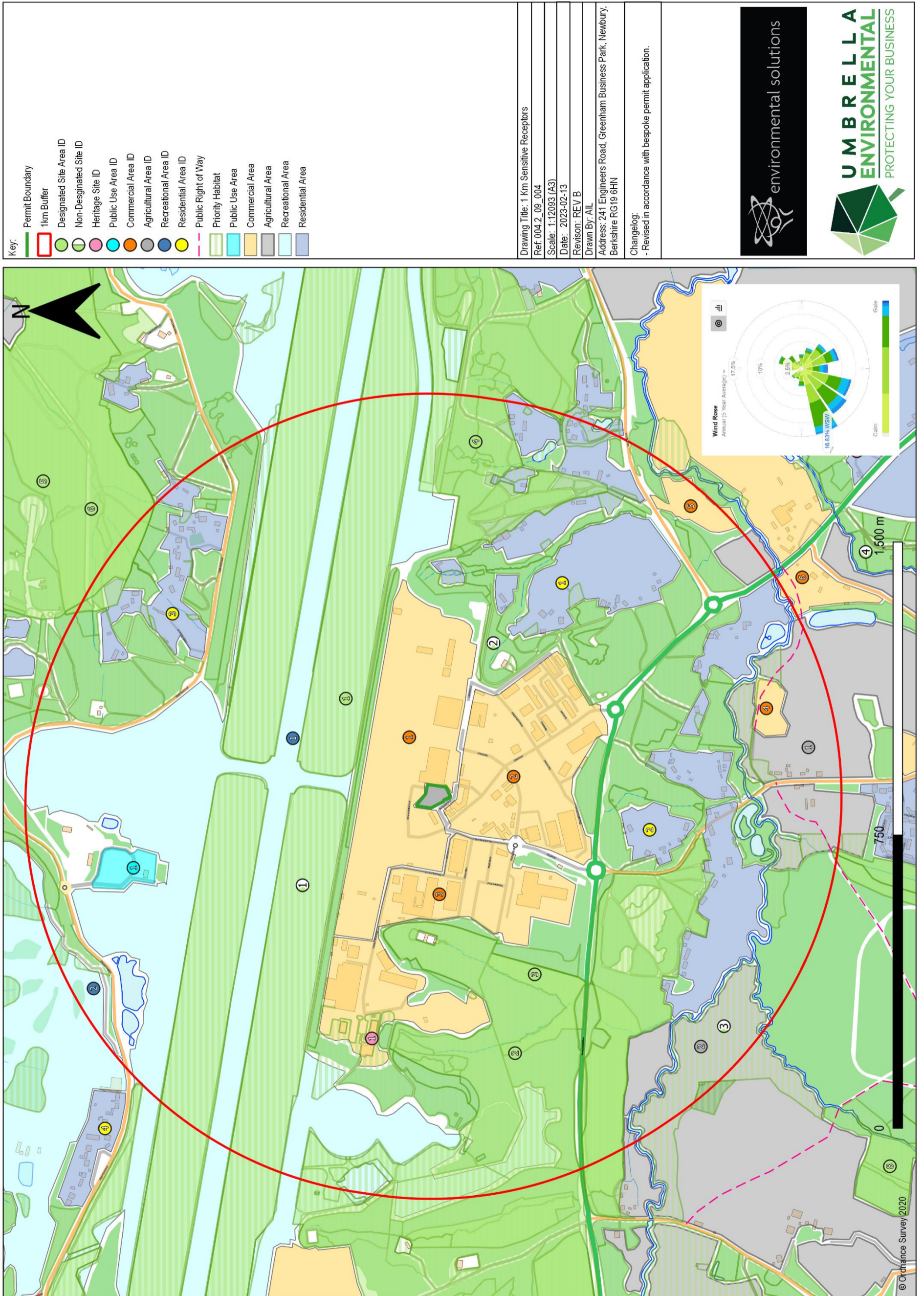
Drawing 3 Site Layout Ground 004.1_09_006



Drawing 4 Site Layout 1st Floor 004.1_09_007



Drawing 5 Sensitive Receptors 1 km Plan 004.1_09_005

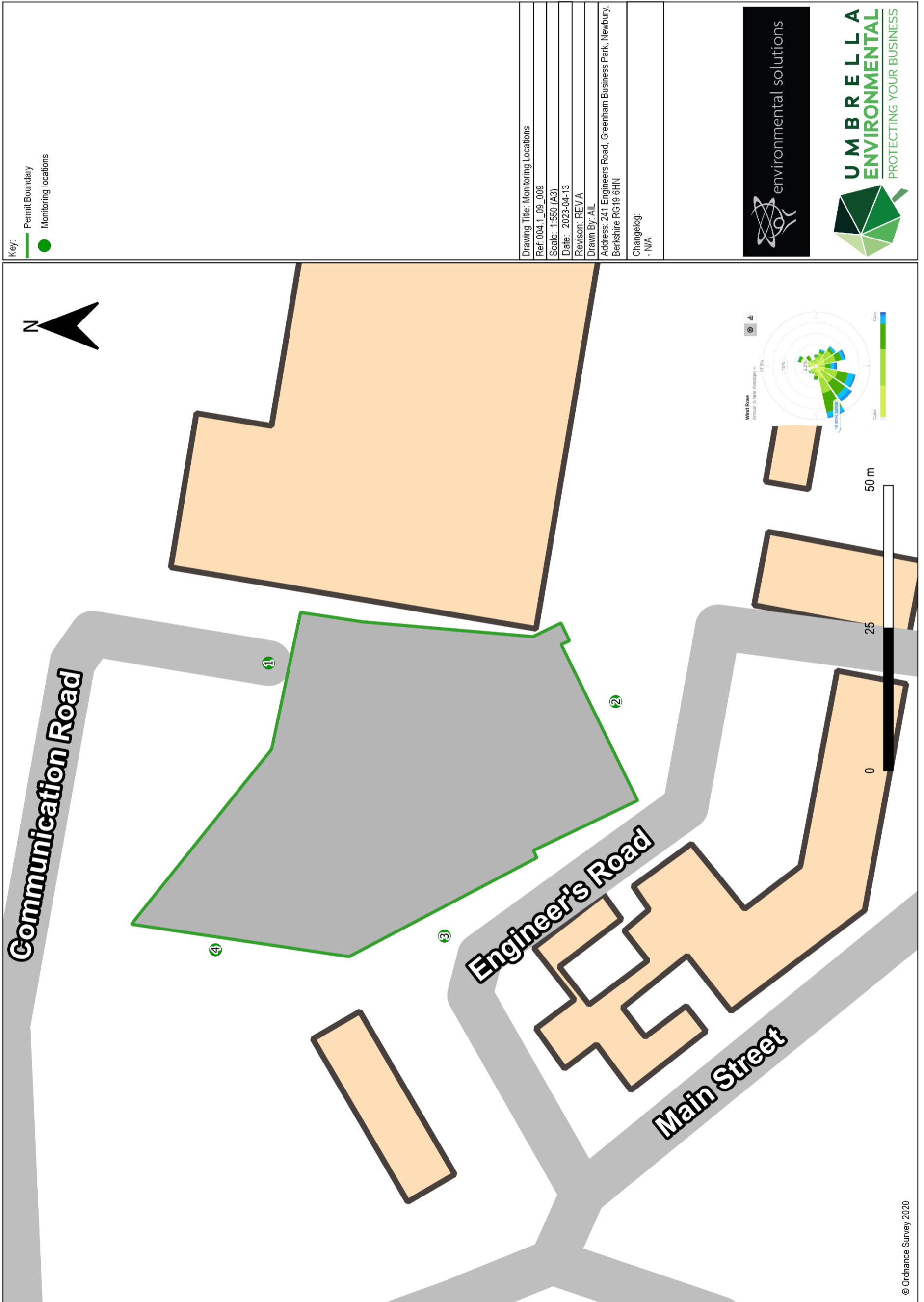


Drawing Title: 1 Km Sensitive Receptors
 Ref: 004.2_09_004
 Scale: 1:12093 (A3)
 Date: 2023-02-13
 Revision: REV B
 Drawn By: All
 Address: 241 Engineers Road, Greenham Business Park, Newbury, Berkshire RG19 6HN

Changelogs:
 - Revised in accordance with bespoke permit application.



Drawing 6 Monitoring Locations 004.1_09_009





U M B R E L L A
ENVIRONMENTAL

PROTECTING YOUR BUSINESS

9 Goldington Road Bedford MK40 3JY

www.umbrella-environmental.co.uk

andrew@umbrellaenvironmental.co.uk

Mob: 07498 671713