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**EMISSIONS MANAGEMENT PLAN
for
INERT WASTE RECYCLING CENTRE
SANDHAM HOUSE, LEYLAND**

Report No 103/2

October 2023

For

HURT
Plant Hire

DOCUMENT CONTROL

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DRAWINGS

Drawing No 103/01 – Site Location Plan
Drawing No 103/02 – Proposed Site Layout Plan
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1. INTRODUCTION

1.1 Report Context

- 1.1.1 Starling Environmental Limited (SEL) has been commissioned by Hurt Plant Hire Limited (the operator) to prepare an Emissions Management Plan (EMP) to accompany an environmental permit variation application for the waste transfer station located at Sandham House, off Redrose Drive, Leyland, Lancashire, PR26 6TJ. The site is regulated under environmental permit EPR/NB3094EE.
- 1.1.2 The site currently operates under Standard Rules permit SR2009 No 6 ‘inert and excavation waste transfer station with treatment’. This standard rules set is being withdrawn and the replacement standard rules on offer do not meet the existing requirements. To continue treatment under a standard rules permit would require a reduction in throughput from the current allowance of 250,000 tonnes per annum to 75,000 tonnes, which would not serve the operator’s business needs. Therefore, the operator wishes to vary the permit to a bespoke permit to enable continuation of operations.
- 1.1.3 Construction, demolition and excavation waste is imported and treated to produce soil, soil substitutes and aggregate products. Recycled aggregate products will be produced in accordance with the WRAP End of Waste Criteria for the production of aggregates from inert waste¹.
- 1.1.4 The aim of the EMP is to identify the potential risks of fugitive dust emissions from operations at the site, consider the impact to identified receptors and set out the required mitigation measures for the management of any dust or other emissions arising.
- 1.1.5 The treatment and movement of waste, storage of wastes and aggregate products, and associated HGV movements have the potential to generate dust and particulate (PM₁₀) emissions which may pose a risk of dust soiling impacts, ecological impacts or risks to human health from ambient PM₁₀.
- 1.1.6 The use of treatment plant and HGVs also have the potential to generate exhaust emissions which may pose a health risk to surrounding receptors.
- 1.1.7 The EMP is part of the Environmental Management System (EMS) for the site and is for use by management and site operators. A copy will be located within the site office.
- 1.1.8 The EMP has been prepared using the following guidance:
- Environment Agency Risk Assessment for Environmental Permits²
 - Institute of Air Quality Management (IAQM)³

¹ <https://www.gov.uk/government/publications/quality-protocol-production-of-aggregates-from-inert-waste>

² <https://www.gov.uk/guidance/risk-assessments-for-your-environmental-permit>

- Control & Monitor Emissions for your Environmental Permit⁴

1.2 Site Details

- 1.2.1 The site is located off Redrose Drive within an industrial area of Leyland. The national grid reference for the site is SD 54041 24071. The site location is shown on Drawing No 103/01.
- 1.2.2 The site is located approximately 1.4 km north of the centre of the town of Leyland and some 5 km to the south of Preston, Lancashire.
- 1.2.3 The site area is approximately 17,000 m² and is securely fenced with palisade fencing approximately 2 m high. The entrance is via lockable gates off Redrose Drive.
- 1.2.4 Site features include a large office building (Sandham House), car parking, weighbridge, workshop, waste processing building, wheel wash and a large yard area. Crushing and screening operations are carried out in the waste processing building and processed material is stored in the yard.
- 1.2.5 The site is surfaced with concrete and is served by two surface water drainage networks. The far eastern side of the site, which includes the aggregates storage yard, drains via surface channels into a hydrobrake and off site to the north. The western part of the site drains into an interceptor which is fitted with a high level alarm. From the interceptor water is discharged at the southern boundary. Both the northern and southern discharges join the surface water drainage system of the wider industrial estate.
- 1.2.6 The waste processing building is approximately 36m x 30m and 10.5m high. The building is fitted with lockable roller shutter doors. The base of the building comprises a reinforced concrete pavement.
- 1.2.7 A CCTV system is in use at the site to provide additional security.
- 1.2.8 Site features are shown on the Site Layout Plan, Drawing No 103/02.

1.3 Surrounding Area

- 1.3.1 The site is situated within an industrial estate (Lancashire Business Park) and is surrounded by industrial land use, including:
- FDC Leyland to the south-west
 - Leyland Trucks to the north and east

³ IAQM Guidance on the assessment of dust from demolition and construction, January 2014. Whilst this guidance is specifically for 'construction dust', in the absence of separate guidance for dust from waste or mineral sites, the IAQM guidance can be used as a starting point for waste dust assessment with appropriate modification or minor adjustments.

⁴ <https://www.gov.uk/guidance/control-and-monitor-emissions-for-your-environmental-permit>

- Warehousing and Amazon Couriers to the south and south-east
- Lancashire County Council waste transfer station to the west

1.4 AQMA Status

- 1.4.1 Reference to the interactive DEFRA Air Quality Management Area (AQMA) mapping tool⁵ identifies that the site is not located within an AQMA for PM₁₀.
- 1.4.2 Reference to the UK Ambient Air Quality Interactive Map⁶ identifies background annual mean PM₁₀ concentration for the area in 2021 as < 13 µg m³, which is well below the annual mean Air Quality Objective of 40 µg m³.

1.5 Climate Details

- 1.5.1 Figure 1 shows a wind rose for data collected at Blackpool Airport which is the closest recording station at approximately 23 km to the north-west.
- 1.5.2 The wind rose shows that the prevailing wind direction is from the west with wind speeds most frequently between 10 – 20 knots, ie moderate to fresh breeze on the Beaufort scale. The strongest winds typically come from the west-southwest and are recorded at speeds greater than 20 knots, ie strong breeze and above. Winds from the east are typically lower in strength and most frequently recorded at speeds less than 15 knots.
- 1.5.3 With reference to the data it is considered that wind direction at Sandham House will be variable but with a prevalence towards the north-east, east and south-east.

⁵ <https://uk-air.defra.gov.uk/aqma/maps>

⁶ Data obtained using interactive background maps <https://uk-air.defra.gov.uk/data/gis-mapping>.



Windrose Plot for [EGNH] Blackpool
Obs Between: 01 Jan 1973 12:00 AM - 03 May 2023 08:50 AM Europe/London

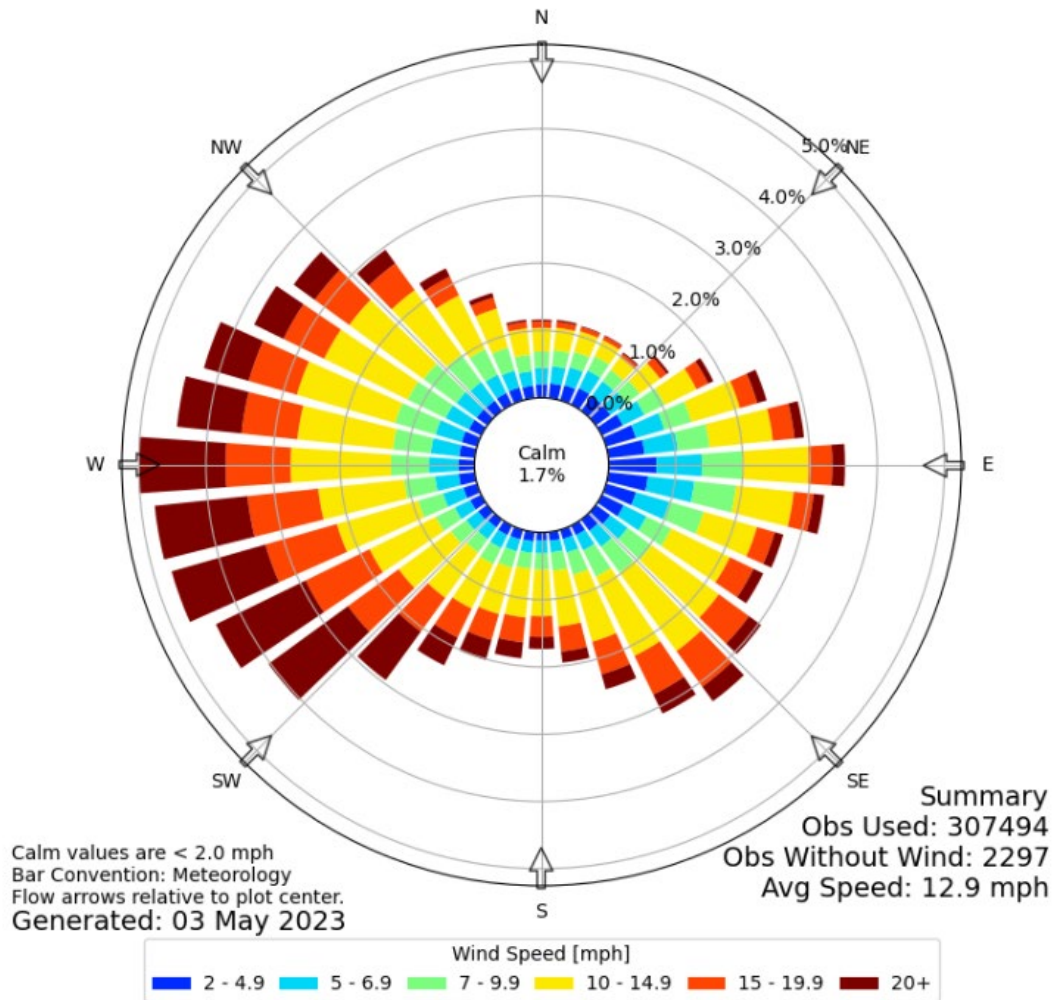


Figure 1: Wind Rose

Rainfall

- 1.5.4 Reference has been made to Met Office data for Myerscough available on the met office website⁷, the nearest climate recording station to the site at approximately 16 km due North. Total average annual rainfall during the period 1991 to 2020 was 1058 mm. The number of days of rainfall greater than or equal to 1 mm was 157 days on average each year, therefore providing natural dampening approximately 43% of the year.

⁷ <https://www.metoffice.gov.uk/research/climate/maps-and-data/uk-climate-averages/gcw435f21>

2. ASSESSMENT OF RECEPTORS



2.1 Receptors

2.1.1 Guidance requires that receptors within 1 km of the site that may be impacted by dust are identified, and that a further assessment is made to identify which of these are sensitive. Drawing No 103/03 in Appendix A and Figure 2 below shows the site and surrounding area setting.



Figure 2: Site and Surrounding Area

Notes:

-  Predominant Wind Direction
-  Proposed Site Boundary

2.1.2 Table 1 lists the receptors located within 1 km of the site and their distance and direction from the site, along with the reference as per Drawing No 103/03.

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Ref	Receptor	Direction from	Approximate Distance from (m)	No of Receptors	Receptor Sensitivity		
					Dust Soiling	Human Health Impacts	Ecological Impacts
Domestic Dwellings							
1	Closest residences in Farrington	W	410 - 630	>100	Low	Low	-
	Farms; Smith's Farm, Nock Nalling, Model Farm	NW	460	10-100	Low	Low	-
	Closest residences in Leyland	S	600	>100	Low	Low	-
	Farms; Nook Farm, Yew Tree Farm	E	440 - 490	10-100	Low	Low	-
Industrial/Commercial Premises							
2	FDC Leyland on Lancashire Business Park	SW	30	10-100	Low	Medium	-
	Warehouse on Lancashire Business Park	S	40	10-100	Low	Medium	-
	Amazon Couriers on Lancashire Business Park	SE	40	>100	Low	Medium	-
	Leyland Trucks on Lancashire Business Park	N	70 - 150	>100	Low	Low	-
	Industrial Operators in Leyland Business Park	E	370	>100	Low	Low	-
	Industrial Operators in Centurion Industrial Estate	SE	540	>100	Low	Low	-
	Industrial Operators in Hazelmere Industrial Estate	SW	770	>100	Low	Low	-
K Motors Independent Jaguar Land Rover	S	750	1-10	Low	Low	-	
Water Features							
3	Drains	N, E, S, W	150 – 1km	-	-	-	Low
	River Lostock	S, W, N, NE	390 – 1km	-	-	-	Low
	Ephemeral ponds	N,NW,W,SE	190 - 830	-	-	-	Low
Amenity/Recreation							
4	Recreation Grounds	SE	780 - 885	10-100	Low	Low	-
Highway/Major Road or Transport Link							
5	Northern Rail Link	E	290	-	Low	Low	-
	Centurion Way	S	400	-	Low	Low	-
	Farington Road (A582)	N	580	-	Low	Low	-

Table 1: Potential Receptors Within 1 km

Ref	Receptor	Direction from	Approximate Distance from (m)	No of Receptors	Receptor Sensitivity		
					Dust Soiling	Human Health Impacts	Ecological Impacts
Hospitals/Care Homes							
6	Chorley House Care Home	S	285	10-100	Low	Low	-
Public Rights of Way							
7	Footpaths and Tracks	N,E,W,S	300 – 1km	-	Low	Low	-
Designated Sites/ Ecological Receptors							
8	Priority Habitat Deciduous Woodland	N,E,W,S	195 – 1km	-	Low	Low	-
Schools/Colleges							
-	None Identified	-	-	-	-	-	-

Table 1 (cont): Potential Receptors Within 1 km

2.2 Receptor Sensitivity Assessment

- 2.2.1 The sensitivity of each receptor to dust soiling, human health effects and the ecological effects of dust deposition has been assessed using the IAQM guidance³.
- 2.2.2 The sensitivity of surrounding receptors to human health effects has been assessed based on 2021 background annual mean PM₁₀ concentration at <13.0 µg/m³ which is well below the annual mean Air Quality Objective of 40 µg/m³.

Residential Receptors

- 2.2.3 The closest residences in the suburb of Farington are located approximately 410 m to the west, and the closest residences in the suburb of Leyland are located approximately 600 m to the south. Whilst residential receptors are classified as ‘high sensitivity’ receptors to both dust soiling and human health effects, due to the distance from source (ie >350 m), properties in both Farington and Leyland are assessed as having low sensitivity to both dust soiling and human health impacts.
- 2.2.4 There are a number of farms in the surrounding area; Smith’s Farm, Nock Nalling and Model Farm are located approximately 460 m to the north-west, and Nook Farm and Yew Tree Farm are located approximately 440 m to the east. Based on IAQM guidance, due to the distance from source residents of the farms are assessed as having low sensitivity to both dust soiling and human health impacts.

Commercial/Industrial Receptors

- 2.2.5 The site is located on the Lancashire Business Park which is an extensive light commercial/industrial area covering approximately 60 hectares. The surrounding area is also light commercial/industrial and includes Leyland Business Park to the east (370 m), Centurion Industrial Estate to the south-east (540 m) and Hazelmere Industrial estate to the south-west (770 m).
- 2.2.6 The IAQM consider places of work as being ‘medium sensitivity’ receptors to both dust soiling and human health effects. The closest places of work to the site are FDC Leyland located approximately 30 m to the south-west, a warehouse located approximately 40 m to the south and Amazon Couriers which is located approximately 40 m to the south-east of the site. In accordance with IAQM, places of work located over 20 m from the source are assessed as having low sensitivity to dust soiling, and places of work located between 20 m and 50 m from the site are considered as having medium sensitivity to human health impacts.
- 2.2.7 All other places of work in the vicinity of the site are assessed as having low sensitivity to both dust soiling and human health impacts due to their distance from the source.

Water Features

- 2.2.8 There are a number of farm drains in the farmland surrounding the industrial estates as can be seen on Drawing No 103/03, the closest of which is approximately 150 m to the west. The River Lostock meanders around the site to the south, west, north and north-east and is located approximately 390 m from the site at its closest point. There are also a number of ephemeral farm ponds in the area.
- 2.2.9 In accordance with the IAQM guidance, the identified water features in the area are classified as having low sensitivity to ecological effects from dust deposition as they are not designated sites.

Amenity/Recreation

- 2.2.10 There are two recreational grounds within 1 km of the site; these are located approximately 780 – 885 m to the south-east.
- 2.2.11 In accordance with IAQM, playing fields are considered as having low sensitivity to both dust soiling and human health impacts due to the transient nature of exposure.

Transport Links

- 2.2.12 In accordance with IAQM, receptors where human exposure is transient (eg. roads) are considered as having low sensitivity to both dust soiling and human health impacts.

Hospitals/Care Homes

- 2.2.13 Hospitals or care homes are classified as 'high sensitivity' to both dust soiling and human health impacts. There are no hospitals within 1 km of the site. There is however a care home (Chorley House Care Home) which is located approximately 285 m to the south of the site.
- 2.2.14 In accordance with IAQM due to the distance from source, this 'high sensitivity' receptor is assessed as having low sensitivity to both dust soiling and human health impacts.

Public Rights of Way

- 2.2.15 There are a number of footpaths in the area surrounding the industrial estates. In accordance with IAQM, receptors where human exposure is transient (eg. footpaths and roads) are considered as having low sensitivity to both dust soiling and human health impacts.

Designated Sites/Ecological Receptors

- 2.2.16 There are no locally or nationally designated sites within 1 km of the site.
- 2.2.17 There are some patches of woodland around the industrial estates in this area and these are listed as being Priority Habitat Deciduous Woodland. The closest listed woodland is approximately 195 m to the west. As these woodlands are not nationally designated sites, they are classified by the IAQM as having low sensitivity to ecological effects from dust deposition.

Schools/Colleges

- 2.2.18 There are no identified schools or colleges within 1 km of the site.

3. SITE OPERATIONS

3.1 Waste Deliveries

3.1.1 HGVs will enter the site via the gated entrance. Haulage operators will be given specific instruction at the waste pre-acceptance stage that all waste loads should be covered prior to entering site.

3.1.2 Waste acceptance procedures are detailed in the EMS which include;

- Ensuring that all HGVs transporting waste into or out of the site will be covered;
- If a load arrives at site that appears to be non-conforming due to it being mainly dust following initial inspection, it is rejected; and
- If a load is deposited at the site and then found to be dusty, it will be dampened down prior to processing.

3.1.3 Haulage operators removing aggregate products from site are instructed to cover loads on leaving the site.

3.2 Overview of Waste Processing and Emissions Controls

3.2.1 Treatment consists of manual sorting and separation, crushing, screening and blending. Recycled aggregate products produced include 6F2, 6F5 and Type 1 MOT. Products are manufactured according to a Quality Protocol⁸ and tested in accordance with end of waste requirements as per the WRAP quality protocol.

3.2.2 Screened soil is dispatched as waste to permitted sites, usually to either deposit for recovery or landfill sites.

3.2.3 The annual permitted throughput for the site is 250,000 tonnes per annum. The predominant waste types are concrete, bricks, soil and stones from construction, demolition and excavation works.

3.2.4 Control of exhaust emissions from plant will be predominantly through use of high tier emissions standard⁹ plant/machinery and regular inspection and maintenance of machinery.

3.2.5 Mitigation and control will primarily be through avoidance and containment. If there are still potential emissions, then these will be mitigated by suppression measures as follows:

⁸ Wrap Factory Production Plan & Quality Protocol – Aggregate Recovery Facility. Hurt Plant Hire, Sandham House. June 2022

⁹ Emissions Standards are set out in the 'Non-Road Mobile Machinery (Emission of Gaseous and Particulate Pollutants) Regulations 1999' as amended.

Avoidance/Containment:

- All processing is carried out inside a building;
- Wheel cleaning facility;
- Speed limit restrictions;
- Movement of material at the site will be conducted by trained and competent operators who are aware of the requirement for careful movement and avoidance of double handling;
- All HGVs transporting material into or out of the site will be covered;
- Daily inspections of site road and sweeping when required. Removal of mud from vehicles; and
- Minimising drop heights during tipping and movement of wastes/ aggregates.

Suppression:

- Crushing plant is fitted with dust suppression equipment;
- Use of water bowser to dampen stockpiles if dust is becoming an issue; and
- Water will be used to suppress dust arising on the access road, plant storage area, and aggregate storage area.

3.3 Mobile Plant and Equipment

- 3.3.1 Waste treatment plant includes mobile crusher and screening plant. Gaseous emissions will be produced by the internal combustion engines of the plant.
- 3.3.2 Mobile plant (eg loader, shovel) will be used at the site. The operator will ensure all mobile plant used at the site will be predominantly high tier⁹ emissions ratings plant.
- 3.3.3 IAQM guidance states that mobile plant are '*unlikely to make a significant impact on local air quality*', and would not need to be assessed as part of an Air Quality Assessment.
- 3.3.4 Regular servicing of plant, vehicles and machinery will be carried out according to applicable legislation.
- 3.3.5 Any major services and repairs required for mobile plant will be conducted off site. If replacement of plant/machine is required then the highest emission standard possible available will be purchased.

- 3.3.6 Daily checks on vehicles and plant are carried out by operatives before use and these are recorded on a check sheet.
- 3.3.7 All drivers of mobile plant and operators of stationary plant will be fully trained in the correct and safe use of the relevant machinery to ensure that the operating techniques are undertaken in line with the guidance within the manufacturers' instructions.
- 3.3.8 Staff will be trained on the use of mobile plant to reduce emissions where possible, including anti-idling.
- 3.3.9 Plant and machinery will be refuelled from the on-site bunded fuel tank as required.

3.4 Dust Suppression Equipment

- 3.4.1 The crusher is a mobile unit and includes integrated dust suppression. The exact layout of the suppression system may vary depending on the manufacturer of the plant used, however it will typically be a water spray bar mounted on the output conveyor.
- 3.4.2 A water bowser will be used to damp down stockpiles and the yard is fitted with a sprinkler system which is in use on dry days to prevent dust generation.

3.5 Water Supply

- 3.5.1 Water used for dust suppression is sourced from mains water.
- 3.5.2 In the unlikely scenario that water is unavailable and the resulting site conditions gave rise to a high risk of dust emissions waste operations would be temporarily suspended.

4. DUST AND PARTICULATE MANAGEMENT

4.1 Responsibility for Implementation of Plan

4.1.1 The Site Manager (SM) has overall responsibility for the control of the waste operations at the site and is responsible for ensuring that the procedures in the EMP are followed. The SM will:

- Ensure that the EMP is effectively communicated to all staff, and that any additional staff that may be required are competent to undertake their roles;
- Ensure that all operations and management procedures outlined in this document are implemented and complied with;
- Ensure that the EMP is reviewed annually, or following:
 - Permit variation
 - Accident, complaint or breach of permit
 - A new environmental issue
 - Any major changes to site operations
- Completion and storage of all required records for the EMP.

4.1.2 The SM may delegate some mitigation tasks to site representatives (eg dust monitoring, use of water bowser for dust suppression, training of other staff).

4.2 Sources and Control of Dust/ Particulates

4.2.1 Potential emissions that may be generated from waste operations at the site include the following:

- Dust from HGV movements, uncovered vehicles carrying waste soils/aggregates, or mud on the wheels deposited from vehicles off-site;
- Dust from tipping, movement and processing of imported wastes;
- Dust from stockpiled wastes/aggregates;
- Exhaust emissions from the use of mobile plant, treatment plant and generators; and
- Exhaust emissions from HGV movements.

4.2.2 Surrounding industrial and agricultural land use may also be a source of dust. Tables 2 and 3 below detail the sources of emissions at the site and include the pathways to identified receptors. Proposed mitigation and control measures are provided for each source-pathway-receptor linkage, and an assessment of overall risk is provided for each emission source.

Source	Pathway	Receptor	Type of Impact	Mitigation and Control Measures	Overall Risk
<p>Mud:</p> <p>HGV movements, or from uncovered vehicles</p> <p>Brought out on wheels of vehicles and deposited off-site</p>	<p>Wheels and vehicles tracking mud on and off-site and dropping off when dry, then resuspension as airborne particles</p>	<p>Local residents</p> <p>Surrounding workplaces</p> <p>River Lostock and surrounding habitat</p>	<p>Dust deposition soiling surfaces</p> <p>Visible dust plumes</p> <p>Elevated PM₁₀ and associated health impacts</p> <p>Ecological impacts</p>	<p>Avoidance/ Containment:</p> <p>Wheel washing facility. Limit vehicle speeds to < 10 mph. Haulage operators instructed to use wheel wash on leaving.</p> <p>Suppression:</p> <p>Use of sprinkler system to dampen site surfaces. Use of road sweeper to dampen roads.</p> <p>Management Control (EMS):</p> <p>Regular monitoring of off-site roads and use of road sweeper if required. Visual dust monitoring during daily checks. All vehicles will be covered before entering and leaving site in accordance with Waste Acceptance Procedures.</p>	<p>Low</p>
<p>Dust /particulates:</p> <p>Generated from waste tipping, processing, movement and stockpile storage</p>	<p>Atmospheric dispersion (wind-blown dust)</p>	<p>Local residents</p> <p>Surrounding workplaces</p> <p>Pedestrian users of footpaths</p> <p>River Lostock and surrounding habitat</p>	<p>Dust deposition soiling surfaces</p> <p>Visible dust plumes</p> <p>Elevated PM₁₀ and associated health impacts</p> <p>Ecological impacts</p>	<p>Avoidance/ Containment:</p> <p>All processing carried out inside a building. Minimise drop heights during tipping and movement of wastes/aggregates. Clean up any spillages that occur during material loading into vehicles. Careful placement of material onto the crusher/screener, into vehicles or stockpiles by fully trained and competent operatives.</p> <p>Suppression:</p> <p>Use of sprinkler system and mobile water bowser to dampen stockpiles if dust is being generated. Dust suppression system installed in crusher.</p> <p>Management Control (EMS):</p> <p>Visual dust monitoring during daily checks.</p>	<p>Low</p>

Table 2: Assessment of Risks from Dust

Source	Pathway	Receptor	Type of Impact	Mitigation and Control Measures	Overall Risk
<p>Gaseous pollutants:</p> <p>HGV exhaust emissions</p>	Atmospheric dispersion	Local residents Surrounding workplaces	Increase in airborne particles and in nitrogen dioxide, sulphur dioxide and associated human health impacts	<p>Avoidance/ Containment: Regulatory controls and best practice measures are in place.</p> <p>Management Control (EMS): Ensure all vehicles switch off engines - no idling vehicles. Regular inspection and maintenance. Use of higher tier emission standard⁹ machinery/plant where available.</p>	Very Low
<p>Gaseous pollutants:</p> <p>Mobile plant exhaust emissions</p>	Atmospheric dispersion	Local residents Surrounding workplaces	Increase in airborne particles and in nitrogen dioxide, sulphur dioxide and associated human health impacts	<p>Avoidance/ Containment: Regulatory controls and best practice measures are in place. Use of higher tier emission standard machinery/ plant⁹ where available.</p> <p>Management Control (EMS): Ensure all vehicles switch off engines - no idling vehicles. Regular inspection and maintenance.</p>	Very Low

Table 3: Assessment of Risks from Gaseous Pollutants

4.3 Monitoring and Inspections

- 4.3.1 The SM or delegated representative will undertake daily on and offsite inspections including dust soiling checks of surfaces around the site and the site access road to monitor compliance with the EMP. Inspection results will be recorded in the site diary, and a record kept detailing weather conditions.
- 4.3.2 In effect, visual assessment of dust will be undertaken by site operatives throughout the day, as they will be trained with the EMP and will take preventative/ suppression mitigation measures if required. If visible dust is observed, this will trigger the use of dust suppression and a site operative/SM will position and switch on the mobile bowser unit. Operatives are trained to be more aware of dust potential during periods of strong winds and waste processing may be temporarily suspended.
- 4.3.3 Quantitative monitoring of particulates (PM₁₀) is not considered to be warranted at this site due to the low sensitivity of surrounding receptors, and the avoidance, containment and suppression mitigation measures in place.

5. CONTINGENCY AND ACTION PLAN

- 5.1 In the event that dust or excessive vehicle emissions are perceived as a concern by site operatives or as the result of a complaint, the source will be investigated immediately by the SM.
- 5.2 When investigating any such report, the following factors will be considered:
- Location of the source relative to receptors;
 - Prevailing wind directions on site; and
 - Dust/particulates and vehicle emissions from external source
- 5.3 Remedial actions will be undertaken. Appropriate actions will be taken on an escalating basis and include the following:
- Simple repairs or modifications to plant or machinery or switching off equipment.
 - Deployment of road sweeper and sprinkler system to clean and dampen site surfaces.
 - Use of water suppression on stockpiles or site surfaces.
- 5.4 The SM with the support of the Managing Director (MD) will coordinate more complex responses, which could include: review of customers at the pre-acceptance stage if certain hauliers continue to bring in mainly dusty loads or have excessive exhaust emissions; implementing a local community engagement exercise; or liaising with regulators.
- 5.5 Any incidents, their outcomes and details of any remedial actions taken related to emissions will be recorded in the site diary.
- 5.6 The SM will ensure that the site is equipped with contingency provisions for replacement plant and parts relating to emissions management equipment (eg suppression sprays and road sweeping equipment). The aim will be to repair equipment within 24 hours of breakdown. If key suppression equipment cannot be repaired or replaced within 24 hours, or other failure occurs (eg freezing water), the SM will consider whether to suspend processing operations based on the potential for dust emissions as a result of the breakdown.

6. REPORTING AND COMPLAINTS PROCEDURES

6.1 Reporting of Complaints

- 6.1.1 Any complaints relating to the site will be recorded in the site diary as detailed in the EMS. This includes complaints relating to dust or air quality.
- 6.1.2 All complaints received will be recorded and investigated by the SM. A response will be reported back to the complainant.
- 6.1.3 A record of incidents, accidents or non-conformances will be kept including the following information:
- Date and time of incident
 - What happened
 - What caused it
 - Details of any contamination
 - Who was involved
 - What action was taken
 - Were external agencies involved
 - Any changes that have been made to the procedures/ EMS to ensure the incident does not reoccur

6.2 Management Responsibilities

- 6.2.1 The responsibility of handling complaints is with the SM with support from the MD. Incidents are investigated by the SM whereby rectifying action is determined.

7. SUMMARY AND CONCLUSIONS

- 7.1 Waste operations at the site will consist of processing construction, demolition and excavation wastes to produce recycled aggregate products using a mobile crusher and screening plant.
- 7.2 The sensitivity of receptors to adverse impacts from dust has been assessed in accordance with IAQM guidance. The majority of identified receptors in the surrounding area were assessed as having low sensitivity to both dust soiling and human health impacts predominantly due to their distance from dust sources at the site.
- 7.3 The closest places of work are located between 20 m and 50 m to the south, south-east and south-west of the site, and as such are assessed as having medium sensitivity for human health impacts from dust deposition in accordance with the IAQM. Based on the mitigation measures that are already employed by Hurt Plant Hire Limited, particularly that all waste processing is conducted inside a building and a sprinkler system is used in the yard, the overall risk to these receptors is considered to be low.
- 7.4 All processing is carried out inside a building which reduces the likelihood of dust migration from the site.
- 7.5 Further containment of emissions will be conducted through; use of a wheel wash, regular inspections of off-site roads, limiting vehicle speeds, and anti-idling policy. Suppression measures include the use of a sprinkler system and mobile water bowser to dampen surfaces and stockpiles. The overall risk of emissions following mitigation measures has been determined as low.
- 7.6 The EMP will be reviewed annually as part of the annual review of the EMS, following any complaints received relating to emissions or following relevant variations to the waste operations.

APPENDIX A

Drawings



ORDNANCE SURVEY © CROWN COPYRIGHT 2023. ALL RIGHTS RESERVED. LICENCE NUMBER 100022432.

LEGEND — SITE LOCATION

STARLING ENVIRONMENTAL LIMITED
 67 Chorley Old Road, Bolton,
 Greater Manchester, BL1 3AJ
 www: starlingenvironmental.co.uk
 email: claire@starlingenvironmental.co.uk
 Tel: 07989 673122

CLIENT
 HURT PLANT HIRE LIMITED

JOB TITLE.
 SANDHAM HOUSE, LEYLAND

DRAWING TITLE.
 SITE LOCATION PLAN

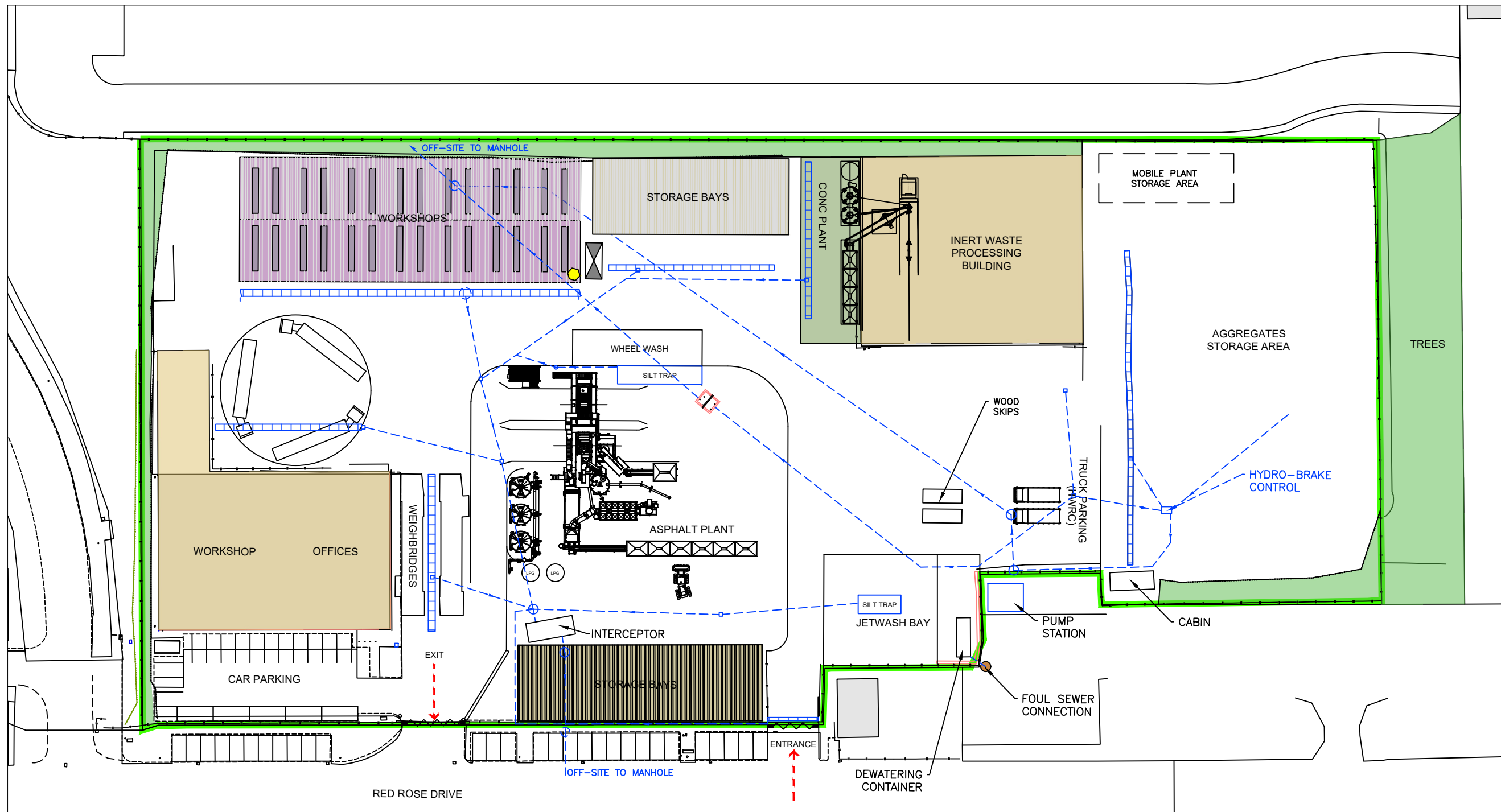
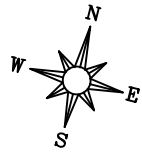
DRAWN BY.
 M.Y.B

DATE.
 08/09/23

SCALE @ A4.
 1:50,000

APPROVED BY.
 C.G

DRAWING No.
 103/01



LEGEND

- PERMIT BOUNDARY
- - - DRAINS
- ◆ SPILL KIT
- LOCKABLE GATES
- FUEL/OIL STORAGE
- - - CATCH DRAIN
- FUEL/OILS

STARLING ENVIRONMENTAL LIMITED

67 Chorley Old Road, Bolton, Greater Manchester, BL1 3AJ

www: starlingenvironmental.co.uk

email: claire@starlingenvironmental.co.uk

Tel: 07989 673122

CLIENT
HURT PLANT HIRE LIMITED

JOB TITLE.
SANDHAM HOUSE, LEYLAND

DRAWING TITLE.
INDICATIVE SITE LAYOUT PLAN

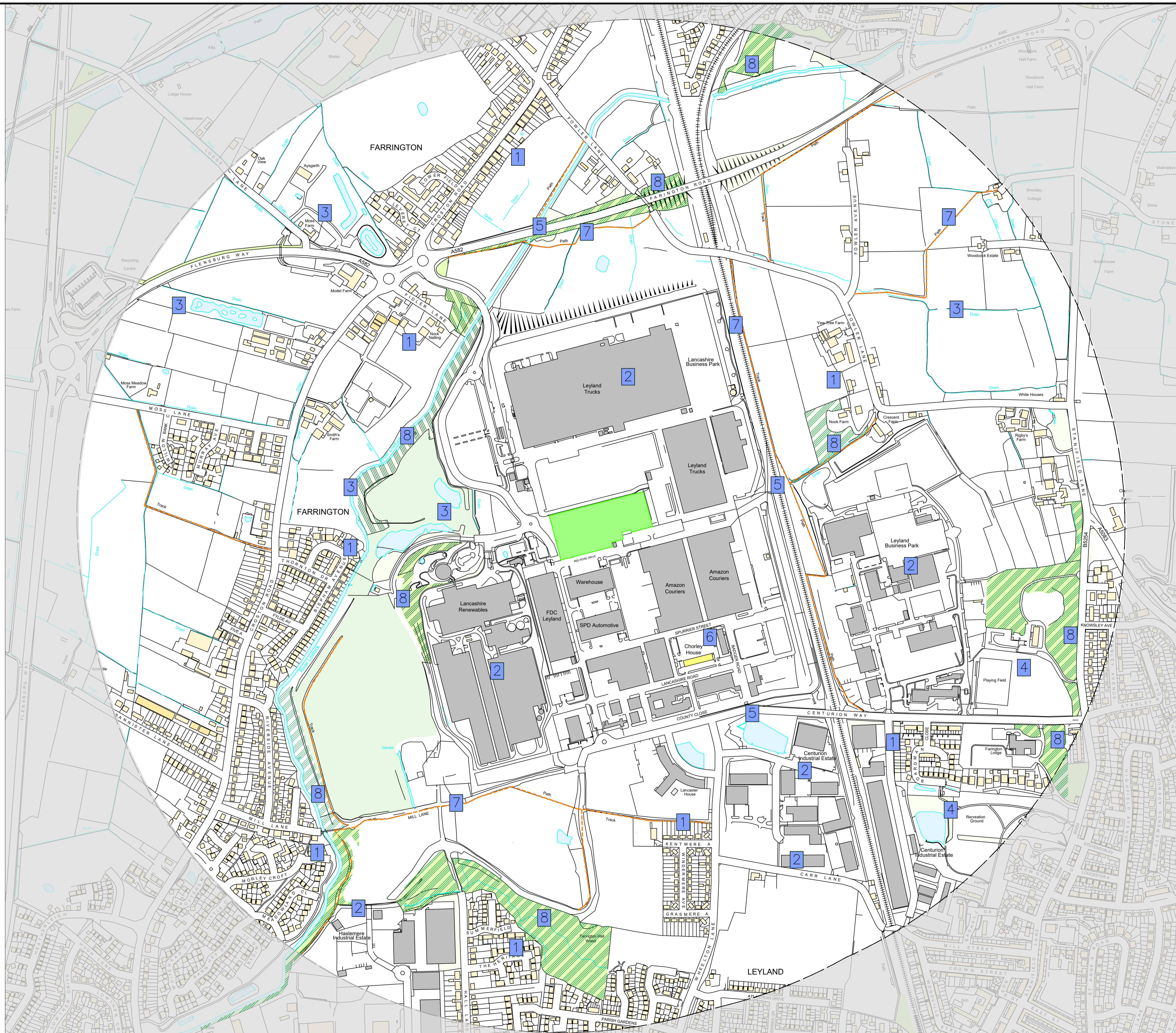
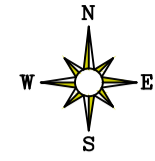
DRAWN BY.
M.Y.B

DATE.
04/09/23

SCALE @ A3.
1:800

APPROVED BY.
C.G

DRAWING No.
103/02



- LEGEND**
- PERMIT AREA
 - 1 KM RECEPTOR BOUNDARY
 - FOOTPATHS
 - RESIDENTIAL AREA
 - INDUSTRIAL/COMMERCIAL AREA
 - WOODLAND
 - WATERBODIES/WATERWAYS
 - 1 RECEPTOR REFERENCE (SEE REPORTS 103/2 AND 103/3)



PREVAILING WIND DIRECTION (FROM THE WEST)

REV.	DESCRIPTION	DATE	BY

STARLING ENVIRONMENTAL LIMITED
 67 Chorley Old Road, Bolton,
 Greater Manchester, BL1 3AJ
 www: starlingenvironmental.co.uk
 email: claire@starlingenvironmental.co.uk
 Tel: 07989 673122

CLIENT:

**HURT PLANT
HIRE LIMITED**

JOB TITLE:

**SANDHAM HOUSE,
LEYLAND**

DRAWING TITLE:

**RECEPTORS
WITHIN 1 KM**

DRAWN BY: M.Y.B	APPROVED BY: C.G	DRAWING No: 103/03
DATE: 05/9/23	SCALE: ϕ A1: 1:4000	



**Starling
Environmental
Limited**