



SYRACUSE WASTE LIMITED

PRIORSWOOD TRANSFER STATION, COMPOSTING AND HWRC

ODOUR MANAGEMENT PLAN

JULY 2023

DATE ISSUED: JULY 2023
JOB NUMBER: ST19587
REPORT NUMBER: 0006
VERSION: V1.0
STATUS: FINAL

SYRACUSE WASTE LIMITED

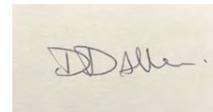
PRIORSWOOD TRANSFER STATION, COMPOSTING AND HWRC

ODOUR MANAGEMENT PLAN

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APPENDICES

Appendix 1	On-Site Odour Survey Log Sheet
Appendix 2	Off-Site Odour Survey Log Sheet

DRAWINGS	TITLE
ST19587-005	Site Layout Plan
ST19587-002	Compost Facility Layout Plan
ST19587-003	HWRC Facility Layout Plan
ST19587-004	HCI Transfer Station Layout Plan
ST19587-006	Odour Monitoring Plan

1 INTRODUCTION

- 1.1.1 Syracuse Waste Limited (Biffa) operate the Priorswood Waste Management Facility, at Crown Industrial Estate, Taunton. The site waste management activities are regulated by the Environment Agency under Environmental Permit reference EPR/KB3605KR.
- 1.1.2 Activities which have potential to cause odour emissions through waste processing, treatment and storage are carried out on site, including;
- Open Windrow Composting Facility (also referred to as OWCF);
 - Household Commercial and Industrial waste transfer station (also referred to as the HCI Transfer Station);
 - Household Waste Recycling Centre (also referred to as the HWRC).
- 1.1.3 The OWCF accepts green wastes only and waste stock feed is stored outside, prior to treatment in open windrows. The nearest residential receptor from the OWCF is approximately 150m away from the site boundary.
- 1.1.4 The HCI waste transfer station and the HWRC accept a range of different waste types, however the majority of the wastes that are permitted are not odorous in nature. However there are some wastes, for example municipal biodegradable kitchen and canteen wastes, which have potential to be odorous. The site operates on robust waste acceptance procedures and operating techniques to appropriately managed different wastes to ensure potential odour emissions are effectively managed, as set out in this OMP.
- 1.1.5 This Odour Management Plan (OMP) sets out appropriate management and control specifically for the OWCF. The site also operates a HCI Transfer Station and HWRC, which are also managed in accordance with the OMP. The OMP has been prepared in accordance with Environment Agency guidance H4 Odour Management¹ and Environment Agency guidance on Control and Monitor your Emissions².
- 1.1.6 This version of the Odour Management Plan has been prepared to reflect changes to the monitoring location points and revised site boundary to reflect changes made through a permit variation and partial surrender application.

1

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/296737/geho0411btqm-e-e.pdf

² <https://www.gov.uk/guidance/control-and-monitor-emissions-for-your-environmental-permit#odour>

1.2 Overarching Management Responsibility

- 1.2.1 The site management will have a responsibility for ensuring that potentially odorous emissions arising from the site are minimised.
- 1.2.2 Consideration will be given to the prevailing and forecast weather conditions when planning operational activities in order to reduce any potential off-site odour impact. Operations staff will remain vigilant to changes in weather conditions and will alter operations when the wind is blowing towards sensitive receptors.
- 1.2.3 Adequate staffing levels will be maintained at all times to ensure the effective operation of the facility.

2 ENVIRONMENTAL SITE SETTING

2.1 Site Location

2.1.1 The Priorswood OWCF, HCI Transfer Station and HWRC site is located on the Crown Industrial Estate, Taunton off the A3259. The site lies on flat land adjacent to the River Tone to the south and Bridgewater and Taunton Canal to the north. To the immediate south is the main west country railway line. There are a number of residential developments on land to the north and east of the site beyond the closed Priorswood Landfill site. On the western side of the site are a number of commercial and industrial activities.

2.2 Site Layout

2.2.1 There is a depot area to the north of the site, the OWCF is to the south of the depot area, the HWRC is to the south of the OWCF and the HCI Transfer Station is to the south of the HWRC. There is an access road with entrance and exit to the site to allow public access to the HWRC. The OWCF and HWRC activities are undertaken outside. There is a large Waste Transfer and Recycling Building to the south of the site where the HCI Transfer Station activities are carried out, with some waste storage outside associated with the Transfer Station. Waste treatment takes place inside the building. The site layout is shown in drawing ST19587-005.

2.3 Pathway Assessment

2.3.1 A review of wind direction data has been conducted from the closest wind monitoring location, which is Dunkeswell Aerodrome, situated approximately 16 miles from Priorswood waste management facility. Using data available from Windfinder.com³, data this indicates the dominant wind direction across a 12 month period is westerly, as shown in Plate 1 below.

³ [Wind & weather statistics Dunkeswell Aerodrome - Windfinder](#)

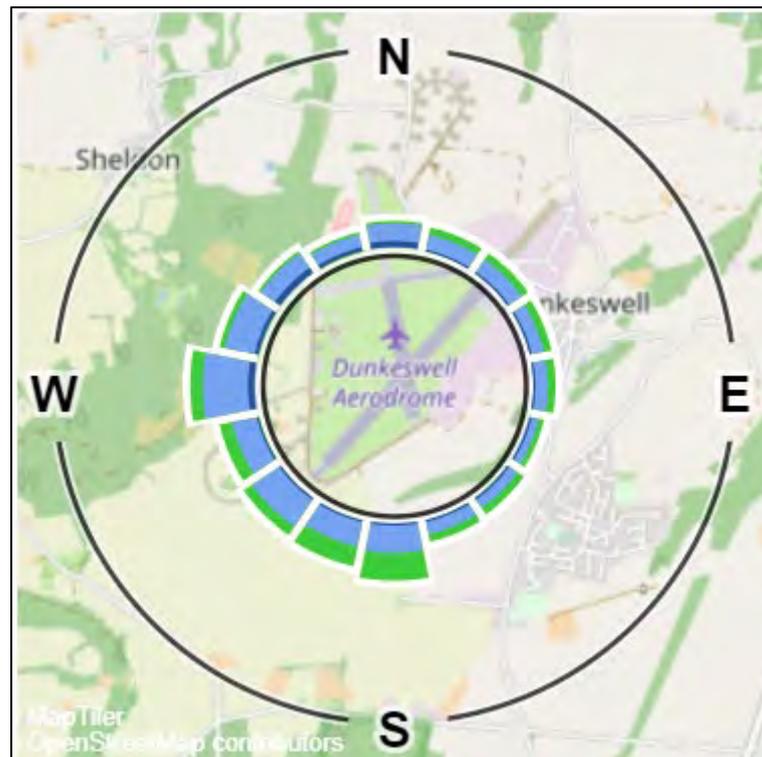


Plate 1: Wind rose indicating average wind direction (source: world-weather information archive).

2.4 Potential Receptor Locations

2.4.1 A review of the site’s environmental setting has highlighted potentially sensitive off-site receptors with regard to any odorous emissions from Priorswood OWCF, HCl Transfer Station and HWRC. Potential receptor sensitivity has been assessed based on the proximity to the site, prevailing local weather conditions and associated complaint history. Receptor sensitivity remains under management review and is evaluated on a minimum quarterly basis. The identified receptors are identified in Table 2.1.

Table 1.1: List of Receptors		
Receptor	Distance from Site	Direction
Residential		
Priorswood housing estate	440m	North and Northwest
Maidenbrook housing estate	100m	North
Waterleaze housing estate	160m	North and North East
Bathpool housing estate	500m	East
Halcon housing estate	500m	South

Table 1.1: List of Receptors

Receptor	Distance from Site	Direction
Infrastructure		
Railway	30m	South
Wessex Water Sewage Works	400m	Southwest
A358 Toneway	150m	South
A358 Obridge	500m	West
A3259 Priorswood Road	260m	Northwest
Environmental		
River Tone	90m	South
Bridgwater & Taunton Canal	100m	North
Children's Wood/Riverside Park Local Nature Reserve	50m	South
Industrial/Commercial/Social		
Crown industrial estate	30m	West
Crown Medical Centre	100m	North
AniMedics Vets Centre	200m	Southeast
Taunton Dialysis Centre	200m	Southeast
Mini Mariners Day Nursery	500m	Southeast
Minerva Primary School	740m	South
Nerols Primary School	500m	North
Odeon Cinema	200m	East
Hollywood Bowl	400m	East
All Saints Church	620m	South
Halcon Baptist Church	530m	South
Church of St. Teresa of Lisieux	850m	Northwest
Church of Nazarene	580m	East

3 POTENTIAL ODOUR SOURCES

3.1 Identification of Potential Odour Sources at the OWCF

3.1.1 The primary potential odour sources associated with the composting process undertaken at Priorswood OWCF are:

- Emissions from fresh feedstock material;
- Emissions from the normal compost breakdown process;
- Emissions from anaerobic conditions;
- Emissions from chemical reactions in hot conditions;
- Emissions from the screening and grading of compost materials.

3.2 Identification of Potential Odour Sources at the HCI Transfer Station and HWRC

3.2.1 The primary potential odour sources associated with the composting process undertaken at Priorswood HCI Transfer Station and the HWRC are:

- Emissions from incoming waste received at the HWRC from waste bought to site by members of the public;
- Emissions from waste deliveries to the site which are malodourous;
- Emissions from malodourous wastes stored on site;
- Emissions from the physical treatment activities including baling, sorting, screening, crushing, compaction.

3.3 Potential Off Site Odour Sources

3.3.1 In addition to the potential on site odour sources specified in paragraphs 3.1.1 and 3.2.1 above, the following off site odour sources have also been identified:

- Emissions from agricultural activities in the surrounding area, for example manure spreading;
- Emissions from a variety of industrial processes located on the adjacent industrial area.

4 ODOUR CONTROLS – OWCF

4.1 Open Windrow Composting Facility (OWCF) Process Description

- 4.1.1 The site is located on the capped surface area of Priorswood (Closed) Landfill site and has a compacted stone base. The site's base has an engineered gradient towards the North West corner where a drainage pipe and settlement tank system collects surface runoff and discharges via a settlement tank then enters into a desilting chamber which passes into the historic landfill leachate collection system and is then discharged to foul sewer.
- 4.1.2 A layout plan detailing the composting facility is shown in drawing ST19587-002.
- 4.1.3 Feedstock material is received at the site's storage area prior to further processing. The material is blended and mixed prior to shredding to balance the porosity, C:N ratio, moisture, and consistency. Once shredded, the material is formed into windrows in the composting area.
- 4.1.4 Once the 20-week composting process is complete, material is screened to the required grade. Oversize material is returned to the composting process and rejected materials are stored prior to off-site disposal.
- 4.1.5 Operation of the site plant associated with the OWCF process is continuous during operational hours. All stationary and mobile plant used on site is subject to inspection and maintenance procedures.
- 4.1.6 The OWCF accepts only the permitted wastes as detailed in Table S2.1 of the Environmental Permit. The total quantity of waste accepted at the OWCF site shall be less than 15,000 tonnes per year.
- 4.1.7 Waste exclusions apply including catering wastes and other wastes containing animal by-products covered by the Animal By-Products Regulations 2005 and the Animal By-Products (Wales) Regulations 2006.
- 4.1.8 Assessment of each waste stream's odour potential under 'normal' operational conditions is provided. Each waste stream has been scored from 0 – 6 using the odour intensity scale detailed in Appendix 4 – Classification Systems.
- 4.1.9 Permitted waste streams are not considered to be potential odour sources beyond the site boundary. In the event that wastes are received on site and have an odour intensity higher than 3, then the Odour Action Plan as detailed in Section 7 of this OMP will be followed.

4.1.10 Odour potential may be affected by the age of the waste when it is received on site.

The waste is managed by minimising quantities and storage times of potentially odorous wastes, on a first-in, first-out principal. The oldest material will be prioritised for shredding and treatment.

4.1.11 In the event of an issue of waste being received on site which appears to be old and/or malodorous, the Site Management Team will liaise with the waste producers and transport contractors as soon as possible following the waste delivery to minimise the storage and transport periods for wastes prior to being delivered to the site.

4.2 Receipt of Potentially Odorous Feedstock

4.2.1 All waste received at the site is initially assessed to ensure it complies with the waste transfer note description and the permitted waste types for the facility. Any unauthorised waste will be refused access to the site. If accepted, the waste is transferred to the OWCF where it is subject to visual and olfactory assessment by a trained site operative after discharge from the delivery vehicle onto the site's storage area.

4.2.2 Any load that is deposited that contains more than 25% potentially malodorous waste will be segregated and covered with oversize material or product within 1 hour during operational hours and prioritised for processing or will be immediately reloaded into the delivery vehicle and disposed of at an appropriate off-site facility. Examples of potentially malodorous wastes include:

- Any waste that has become anaerobic in nature and has become malodorous;
- Wet, compacted or old grass clippings that have become malodorous;
- Old garden waste that has become malodorous;
- Rotting fruit that has become malodorous.

4.2.3 If appropriate, amendment material such as wood chips or oversize compost will be mixed in with the wastes to increase porosity and to achieve the appropriate feedstock composition.

4.3 Feedstock Composition

4.3.1 Available feedstock materials will be visually assessed and blended by a site operative using experience and professional judgement. The material will be mixed

during processing to create a blend with a target carbon to nitrogen ration (C:N) of between 20:1 – 45:1. Monthly monitoring of the shredded feedstock's C:N ratio will be used to inform the blending process.

4.3.2 Guidance on the C:N ratio of various feedstocks is contained in the Composting Association Industry Guide for the Prevention and Control of Odours at Bio-waste Processing Facilities (2007)⁴.

4.3.3 The mechanical shredder will be operated to ensure that the feedstock particle size is suitably sized to give a surface area of microbial activity but allow sufficient porosity for aeration.

4.3.4 Total Organic Carbon and Total Kjeldahl Nitrogen are monitored in accordance with BS EN 13654-1.

4.4 Windrow Management

4.4.1 The site is managed, and aerobic conditions maintained, in accordance with the limits specified in PAS100 and the Compost Quality Protocol (CQP).

4.4.2 The optimal moisture content for feedstock should be 55 to 65% (w/w) at the initial formulation stage. Moisture content will be physically assessed for each batch prior to further processing using the accepted industry 'squeeze test' method, as described in section 5.5.4 of Industry Guide for the Prevention and Control of Odours at Bio-waste Processing Facilities (2007)⁵. Taking a handful of compost and squeezing it, no liquid should be emitted but the hand should be left damp if the compost moisture levels are within the optimal range. Material wetter than this will encourage the formation anaerobic pockets, which will inevitably generate malodorous compounds.

4.5 Windrow Turning

4.5.1 Windrows will be turned at the appropriate frequency to ensure the critical limits criteria set out in the PAS100 and CQP documents are maintained, and to ensure optimal conditions and adequate mixing of the material.

4.5.2 When the wind is blowing towards the closest residential receptor at between 5-10 m/s then windrow turning operations will be suspended, and will only resume once

⁴ http://www.organics-recycling.org.uk/dmdocuments/Industry_guide_for_prevention_and_control_of_odours.pdf

⁵ http://www.organics-recycling.org.uk/dmdocuments/Industry_guide_for_prevention_and_control_of_odours.pdf

the conditions change. Any changes to windrow turning operations will be recorded in the site diary.

4.6 Screening

4.6.1 Screening of stabilised product will be undertaken within the composting area. Screening is not considered a key odour release point, as the stockpile is regularly cleared and the product should be stable. This matter remains subject to a review if control measures become ineffective.

4.7 Planned Temporary Odorous Activities

4.7.1 If it is necessary to complete planned temporary activities that have an associated high risk of significant off-site odour (e.g. removal of odorous unauthorised waste from site), Site Management will contact the Environment Agency and any high risk receptors prior to such actions commencing to advise them of:

- The operation being undertaken;
- The reason(s) for doing so;
- Planned additional mitigation measures; and
- Timescales for completion.

4.7.2 Consideration will be given to the prevailing weather conditions when undertaking such activities in order to minimise any potential off-site odour impact.

4.7.3 'Unplanned' temporary odorous activities (e.g. in the event of a site emergency) will be addressed immediately in accordance with the Odour Action Plan set out in Section 7 of this OMP.

4.8 Maintenance

4.8.1 All plant and equipment will be maintained in good working order and in accordance with the supplier or manufacturer's recommendations. Plant operators will be responsible for daily checks of their respective machines. Any defects will be reported to the Site Management promptly and will be rectified as soon as possible. Records will be retained.

4.8.2 Drainage ditches and sumps will be checked monthly for sediment build-up and cleared if required. All checks and maintenance will be recorded in the site diary.

4.9 Plant Wash Down in the Compost Area

4.9.1 The plant and equipment will be regularly cleaned, to reduce the build-up of waste and any potential associated odour.

4.10 Training

4.10.1 All site personnel working at the OWCF facility will be subject to a formal documented training programme in accordance with company procedures. Matters relating to site odour management and control form part of this core training programme for all individuals.

4.10.2 A third party independent contractor completes the odour monitoring surveys on behalf of Syracuse Waste Limited (Biffa) Additional training would be provided for internal personnel should they be required to carry out and record the results of odour monitoring surveys as set out in Section 6 of this OMP.

4.10.3 Subjective odour surveys that are undertaken following an odour complaint are conducted by staff not based on the operational area full time, who may become desensitised to site odour.

5 ODOUR CONTROLS – HWRC AND HCI TRANSFER STATION

5.1 HWRC Process Description

5.1.1 The HWRC is located outside, and comprises of an access road for members of the public to deposit household waste for recycling. Wastes can be deposited into a number of designated containers which are clearly marked to indicate which wastes can be put into them. A layout plan detailing the HWRC is shown in drawing ST19587-003

5.1.2 The HWRC is permitted to accept a range of wastes, the majority of which are unlikely to cause odour pollution. However, there are some permitted wastes which could potentially give rise to odour emissions, including:

- Biodegradable kitchen and canteen wastes;
- Garden and park wastes;
- Animal tissue wastes.

5.2 HCI Transfer Station Description

5.2.1 The HCI Transfer Station is located at the south of the site and comprises of an outside yard area with storage bays, and a large Recycling Building. A layout plan detailing the HCI Transfer Station is shown in drawing ST19587-005.

5.2.2 The HCI Transfer Station is permitted to accept a range of wastes, the majority of which are unlikely to cause odour pollution. However there are some permitted wastes which could potentially give rise to odour emissions, including;

- Wastes from food preparation e.g. materials unsuitable for consumption from the dairy industry);
- Kitchen and canteen wastes;
- Garden and park wastes;
- Animal tissue wastes.

5.2.3 Wastes received that are suitable to be processed and treated at the OWCF will be transferred from the HCI Transfer Station and HWRC. All wastes are treated indoors. Storage times are kept to a minimum, and are specified within the Fire Prevention Plan.

- 5.2.4 Permitted waste streams are not considered to be potential odour sources beyond the site boundary. In the event that wastes are received on site and have an odour detectability higher than 3 (as per Appendix 4 – Classification Systems), then the Odour Action Plan as detailed in Section 7 of this OMP will be followed.
- 5.2.5 Odour potential may be affected by the age of the waste when it is received on site. The waste is managed by minimising quantities and storage times of potentially odorous wastes, on a first-in, first-out principal. The oldest material will be removed off site for disposal or recovery first.
- 5.2.6 In the event of an issue of waste being received on site which appears to be old and/or malodorous, the Site Management Team will liaise with the waste producers and transport contractors as soon as possible following the waste delivery to minimise the storage and transport periods for wastes prior to being delivered to the site.
- 5.3 Receipt of Potentially Odorous Feedstock
- 5.3.1 All waste received at the site is initially assessed to ensure it complies with the waste transfer note description and the permitted waste types for the facility. Any unauthorised waste will be refused access to the site. If accepted, the waste is subject to visual and olfactory assessment by a trained site operative after discharge from the delivery vehicle onto the site's storage area.
- 5.4 Planned Temporary Odorous Activities
- 5.4.1 If it is necessary to complete planned temporary activities that have an associated high risk of significant off-site odour (e.g. removal of odorous unauthorised waste from site), Site Management will contact the Environment Agency and any high risk receptors prior to such actions commencing to advise them of:
- The operation being undertaken;
 - The reason(s) for doing so;
 - Planned additional mitigation measures; and
 - Timescales for completion.
- 5.4.2 Consideration will be given to the prevailing weather conditions when undertaking such activities in order to minimise any potential off-site odour impact.

- 5.4.3 'Unplanned' temporary odorous activities (e.g. in the event of a site emergency) will be addressed immediately in accordance with the Odour Action Plan set out in Section 7 of this OMP.
- 5.5 Maintenance
- 5.5.1 All plant and equipment will be maintained in good working order and in accordance with the supplier or manufacturer's recommendations. Plant operators will be responsible for daily checks of their respective machines. Any defects will be reported to the Site Management promptly and will be rectified as soon as possible. Records will be retained.
- 5.5.2 Drainage ditches and sumps will be checked monthly for sediment build-up and cleared if required. All checks and maintenance will be recorded in the site diary.
- 5.6 Plant Wash Down
- 5.6.1 The plant and equipment will be regularly cleaned, to reduce the build-up of waste and any potential associated odour.
- 5.7 Training
- 5.7.1 All Syracuse Waste Limited (Biffa) site personnel working at the HCI Transfer Station or HWRC will be subject to a formal documented training programme in accordance with company procedures. Matters relating to site odour management and control form part of this core training programme for all individuals.
- 5.7.2 On-site and off-site odour monitoring is carried out by a third-party accredited odour surveyor, as set out in Section 6 of this OMP.
- 5.7.3 Subjective odour surveys that are undertaken following an odour complaint are conducted by staff not based on the operational area full time that they may become desensitised to site odour.

6 ODOUR MONITORING

6.1 Meteorological Conditions

6.1.1 Local meteorological conditions (wind speed, air temperature and wind direction) are reviewed daily, and a record maintained in the daily site log. In promoting proactive management of the risks arising at the site, Site Management will also maintain an awareness of the local weekly weather forecast.

6.1.2 Details of the forecasted conditions will be assessed against proposed activities for the period. This will help in the prediction of potential odour issues and any necessary remedial action, such as modifications to composting operations or additional monitoring resources.

6.1.3 Classification of meteorological data is provided in Appendix 4 to support the logging of the meteorological conditions when monitoring odour on site.

6.2 Odour Monitoring Point Locations

6.2.1 The monitoring points locations are selected as they are in the direction of potential pathways to nearby sensitive receptors. Monitoring points are both on site and off site to monitor whether odour can be detected beyond the site boundary.

6.2.2 There are a range of monitoring points both on site and off site, the locations of these points are shown in drawing ST19587-006.

6.2.3 The odour survey comprises of an assessment and record of the following:

- Date and time of assessment;
- Details of the person responsible for the assessment;
- meteorological conditions;
- An assessment of any odour present at a specified monitoring location including intensity, odour description, odour offensiveness, extent, sensitivity, suspected source and whether it is controlled;
- Any additional comment.

6.2.4 There are four monitoring points on each boundary of the compost area, to be monitored on a weekly basis, covering the centre of the site (monitoring points referenced PROD101 – PROD104). A third-party odour surveyor monitors odour at each boundary (north, south, east, west) of the site on a weekly basis. A log sheet is

kept as a record of the survey findings, an example of which is provided in Appendix 1.

6.2.5 There are 14 monitoring points monitored on a monthly basis (referenced PRMP1 – PMRP14), Some are within the permit boundary to monitor potential emissions at the boundary, and some are located close to sensitive receptors. Odour is monitored off site by a third-party odour surveyor on a monthly basis, and a log sheet kept as a record of survey findings, an example of which is provided in Appendix 2.

6.3 Onsite Odour Monitoring Survey

6.3.1 Ambient monitoring will be undertaken daily in accordance with Environment Agency guidance H4 Odour Management – How to Comply with your Environmental Permit.

6.3.2 This monitoring will be primarily undertaken within the curtilage of the site, with monitoring beyond the site boundary in response to the identification of potential significant odours within the site or following the receipt of complaints. All monitoring will be carried out taking into account the prevailing weather conditions.

6.3.3 Monitoring will comprise olfactory monitoring (i.e. ‘Sniff’ tests) with monitoring records completed and stored electronically. Any odour emissions noted will result in the implementation of odour control measures.

6.3.4 All staff are trained to understand the procedures if odour is detected on site which has potential to be detectable beyond the site boundary. Staff will report any concerns to the on-duty Site Manager as soon as practicable, and further investigation will take place.

6.3.5 All personnel are responsible for reporting any odour problems immediately to the Site Management (or an appropriate responsible person). The Site Supervisor (or responsible person) will ensure that a weekly inspection is made of the activity boundary during operational periods in order to establish whether any odours are discernible (monitoring points PROD101 – PROD104). The inspection will be undertaken as follows and a record of the survey time made in the site diary/log.

6.4 Monthly Off-Site Odour Survey

6.4.1 In addition to the weekly onsite odour surveys, offsite odour surveys will also be conducted by a third-party contractor at designated offsite monitoring point locations (PRMP1 – PRMP14) at a minimum monthly intervals.

6.4.2 The survey will be undertaken in line with the third-party odour specialist who holds the appropriate accreditation and training records. Inspections shall comprise of the following.

- The surveyor will walk around in the immediate area of an odour monitoring point for a period of up to one minute.
- The intensity of the odour (if detected) is recorded in accordance with a numerical scoring system, as defined in Appendix 1.
- Following detection of any odour attributable to OWCF, HWRC or Transfer Station activities, a further on-site inspection will be carried out seeking to trace the odour back to the source. Site Management will be informed so that the appropriate corrective and/or preventative action can be taken in accordance with the Action Plan set out in Section 7 of this OMP.
- Following detection of any odour that is not attributable to the site's activities, the designated person will attempt to trace back the odour plume in order to identify and record the third party odour source.

6.4.3 Observations including time, date, weather conditions, odour type, location, intensity, extent and sensitivity will be recorded on the on and off-site Odour Survey Log Sheets (Appendices 1 and 2 respectively), which will be maintained at the site office.

7 ODOUR ACTION PLAN

7.1 Odour Complaint Recording and Investigation

7.1.1 The following sets out the actions to be taken on receipt of an external odour complaint.

7.1.2 The responsible person receiving the complaint at the site will initially record the key details electronically on the Company Database. The record made will set out the key information that must be recorded at this time in order to facilitate further investigation. The following information will be recorded:

- Weather conditions including atmospheric pressure, wind speed and wind direction;
- Results of latest olfactory monitoring carried out by facility personnel;
- Operational status of the facility (noting any abnormal conditions that may have caused the complaint);
- Details of the proposed corrective action if required;
- Records of complaints received will either be kept in the appropriate file in the site office or electronically on the Company's Compliance Database for inspection and review by both internal and external personnel.

7.1.3 Records of complaints received will either be kept in the appropriate file in the site office or electronically on the Company's Compliance Database for inspection and review by both internal and external personnel.

7.1.4 Any incident notified to the EA will be investigated, and a report of the investigation sent to the EA. The report will detail, as a minimum, the circumstances of the incident, an assessment of any harm to the environment and the steps taken to bring the incident to an end. The report will also set out proposals for remediation (if appropriate) and for preventing a repetition of the incident. These incidents will be stored electronically on the Company's Compliance Database.

7.1.5 Site Management will be informed of the odour complaint within two hours or as soon as possible, and made aware of the location, time and date of the complaint being logged (where available).

7.1.6 In recognising that odour can be transient and short-lived, timely notification of odour complaints directly from the complainant and/or the Environment Agency is

imperative to allow for appropriate investigation. If the odour complaint occurred more than 12 hours before the notification is provided to Syracuse Waste Limited (Biffa), it may not be possible to fully investigate or substantiate the complaint. Syracuse Waste Limited (Biffa) will, however, complete and record a complaint investigation, as set out below, as appropriate.

7.1.7 If the complaint is received within 12 hours of the incident, the Site Manager (or appointed representative) will visit the complaint location as soon as practicable in order to subjectively determine odour presence or absence.

7.1.8 Opportunities to meet the complainant to discuss the matter directly will be pursued, wherever possible, provided the complainant is happy to do so.

7.1.9 The Site Management will subsequently undertake the following further assessment process:

- Review of the operations at the site prior to and at the time of the complaint;
- Review of the environmental control systems operative prior to and at the time of the complaint;
- Review of the meteorological conditions (wind speed/wind direction/rainfall/atmospheric pressure) prior to and at the time of the complaint – to establish whether a pathway can be established between the site and the complainant;
- Review of the previous complaint history at the location identified.

7.1.10 The odour complaint will be reviewed and substantiated (or otherwise) by the Site Supervisor (or appointed representative).

7.1.11 Syracuse Waste Limited (Biffa) will contact the Environment Agency to discuss any substantiated odour complaint within a target response time of 24 hours (during a normal working week) from the receipt of the complaint. This will allow sufficient time for the details of the incident to be compiled and on site investigation to be completed. If the necessary contact details are available and direct feedback has been requested, Syracuse Waste Limited (Biffa) will also contact the complainant directly to discuss the issue, the findings and the subsequent investigation and any actions arising.

7.2 Action Plan

7.2.1 Odour 'non-conformances' may be determined at the site as follows:

- Receipt of an odour complaint that is attributable to the site;
- Detection of significant/offensive odour beyond the site boundary during routine odour surveys.

7.2.2 In the event that either of the above odour 'non-conformances' are determined at the site, the following actions will be taken.

- 1) The on duty Site Supervisor will be informed.
- 2) The Site Supervisor will co-ordinate with the Environment Agency (central EA call centre if outside of working hours) and operational staff.
- 3) If the incident relates to the receipt of an external complaint, an investigation will be completed in accordance with section 7.1 above.
- 4) If not previously undertaken, the Site Supervisor (or appropriate responsible person) will undertake an investigation in order to determine the likely cause(s) of the off-site odour. The site investigation will incorporate a detailed assessment of the site infrastructure and process conditions against the specific requirements of the facility odour controls set out in this OMP, to determine any diversion away from 'normal' site operating conditions.

Key items for consideration will be as follows:

- Material inputs – change in waste type, volume, odour characteristics;
 - Site maintenance – housekeeping;
 - Short-term abnormal weather patterns – wind direction, temperature, inversions, etc;
 - Abnormal operating conditions – temporary odorous activities.
- 5) Upon identification of the likely odour source(s), the appropriate corrective and preventative measures will be identified and implemented under the direction of the Site Supervisor.
 - 6) In the event that sustained or significant plant or process failure occurs, waste feedstock material will be diverted to alternative off-site facilities. In extreme conditions, composting operations will temporarily cease, and materials removed from the site through close liaison with the Environment Agency.

7.2.3 This OMP will be reviewed in line with section 8 of this document, in order to ensure that it continues to represent all appropriate measures.

7.3 Timescales

7.3.1 In the event that it proves impractical to carry out adequate remedial measures within 5 working days, the Site Management will agree with the Environment Agency the proposed actions and the timescale for their completion.

7.4 Records

7.4.1 Details of odour 'non-conformances' including subsequent investigations, timescales and remedial measures taken, and notifications of the relevant internal and external bodies will be recorded in accordance with the requirements of this OMP.

7.4.2 Any odour complaints may be analysed centrally to see if any trends exist.

7.5 Additional supportive odour monitoring

7.5.1 The requirement for (and frequency of) additional supportive odour monitoring will be agreed between the Site Management and the Compliance Team. This may include, but not limited to:

- Additional on-site subjective odour inspections;
- Additional site perimeter subjective odour inspections; and
- Additional off-site subjective odour inspections.

8 DOCUMENT AUDIT AND REVIEW

8.1 Review Requirement and Timescale

8.1.1 This odour management plan will be formally reviewed by Syracuse Waste Limited (Biffa) at minimum annual intervals to ensure that the stated management controls and conditions within it continue to reflect best available techniques and the operational requirements/sensitivities of the site, which may change over time. Audits will be conducted more frequently if required.

8.1.2 An updated copy will be submitted to the Environment Agency following any changes for review, as required. Any required changes to the conditions set out within this document will be formally agreed with the Environment Agency prior to their implementation.

8.2 Audit

8.2.1 The processes described in this document will be audited by the Compliance Team, in accordance with the Company's auditing procedure. Audit reports will be stored electronically and made available as necessary. .

8.3 Review and Plan Update

8.3.1 This OMP sets out the appropriate measures that will be undertaken in controlling any odorous or potentially odorous activities from the facility and the odour monitoring procedures.

8.3.2 In the event of remedial action being required to be taken following an event or complaint, the OMP will be reviewed within two months of the event taking place to review whether any changes to the operating procedures need to be made.

APPENDICES

APPENDIX 1

On-Site Odour Survey Log Sheet

Odour Survey Log Sheet

Site: Priorswood

Personnel: Rebecca Saxton

Date & Time of monitoring: 19/04/2023 09:03:40 - 09:09:02

Weatherstation: Online Report

Table 1: Weather Conditions

	Description	Wind Direction	Wind Force	Temperature (oC)	Atm Pressure (mb)	Ground Conditions	Air Stability Daytime
Start	100% cloud cover, Overcast	ENE	Beaufort 4 (13mph)	7	1024	Moist	D
End	100% cloud cover, Overcast	ENE	Beaufort 4 (13mph)	7	1024	Moist	D

Table 2: Odour Classification - Routine

Location Code	Location	Odour Character type	Intensity	Extent	Sensitivity	Offensiveness	Suspected Source	Source Operator Controlled	Comments	Date/Time
PROD101	Northern boundary of compost pad	NOD	0							19/4/23 09:03
PROD102	Eastern boundary of compost pad	NOD	0							19/4/23 09:05
PROD103	Southern boundary of compost pad	NOD	0							19/4/23 09:06
PROD104	Western boundary of compost pad	compost	3	3	Medium	2	compost windrows	Probable		19/4/23 09:09

Additional Comments:

Odour Survey Log Sheet

Site: Priorswood

Personnel: Rebecca Saxton

Date & Time of monitoring: 19/04/2023 09:03:40 - 09:09:02

Weatherstation: Online Report

Key:



Actual Complaint Location / Address:

The Beaufort Wind Scale

Description	Specification
0 - Calm	Smoke rises vertically (0mph)
1 - Light air	Smoke drifts in wind direction; wind vanes not moved (1-3mph)
2 - Light breeze	Wind felt on face; leaves rustle; wind vanes moved (4-7mph)
3 - Gentle breeze	Leaves and small twigs in constant motion (8-12mph)
4 - Moderate breeze	Raises dust and paper; small branches are moved (13-18mph)
5 - Fresh breeze	Small leafy trees swayed; medium branches moved (19-24mph)
6 - Strong breeze	Large branches moved; umbrellas used with difficulty (25-31mph)
7 - Near gale	Whole trees moving; walking against wind inconvenient (32-38mph)
8 - Gale	Twigs break off trees; walking generally impeded (39-46mph)
9 - Strong gale	Slight structural damage occurs (47-54mph)

Rating	Intensity
0	0
0	0 No detectable odour
1	1 Very faint odour
2	2 Faint Odour
3	3 Distinct Odour
4	4 Strong Odour (bearable)
5	5 Very Strong Odour
6	6 Extremely strong odour

The Pasquill atmospheric stability classes

Stability class	Definition
A	very unstable
B	unstable
C	slightly
D	unstable
E	neutral
F	slightly stable
G	stable

Meteorological conditions that define the Pasquill stability classes

Surface wind speed	Sunshine			Nighttime cloud cover	
	Strong	Moderate	Slight	>50%	<3/8 cover
mph					
<4.5	A	A-B	B	-	G
4.5-6.7	A-B	B	C	E	F
6.7-11.2	B	B-C	C	D	E
11.2-13.4	C	C-D	D	D	D
>13.4	C	D	D	D	D

Rating	Extent
1	1 Local and transient
2	2 Transient
3	3 Persistent but fairly localised
4	4 Persistent & pervasive
5	5 Persistent and widespread
0	n/a

Odour Survey Log Sheet

Site: Priorswood

Personnel: Rebecca Saxton

Date & Time of monitoring: 19/04/2023 09:03:40 - 09:09:02

Weatherstation: Online Report

Rating	Sensitivity
Low	e.g. footpath,road
Medium	e.g industrial or commercial workplaces
High	e.g housing, pub / hotel

Rating	Offensiveness
1	1 Less/potentially offensive
2	2 Moderately offensive
3	3 Most/highly offensive



Priorswood Weekly Odour Survey 19/04/2023

Aerial Plan Showing Locations



APPENDIX 2

Off-Site Odour Survey Log Sheet

Odour Survey Log Sheet



Site: Priorswood

Personnel: A Meaden

Date & Time of monitoring: 28/04/2023 11:02:54 - 12:01:32

Weatherstation: Met Office

Table 2: Odour Classification - Routine

Location Code	Location	Odour Character type	Intensity	Extent	Sensitivity	Offensiveness	Suspected Source	Source Operator Controlled	Comments	Date/Time
PROD008	Waterleaze residential area	NOD	0							28/4/23 11:14
PROD009	Barber Mead Road	NOD	0							28/4/23 11:11
PROD010	Canal bridge on Venture Way	NOD	0							28/4/23 11:17
PROD011	Entrance to Screwfix on Venture Way	NOD	0							28/4/23 11:21
PROD012	Outside pumping station on Venture Way	Cooking	3	3	Low	1	Cafe	No		28/4/23 11:19
PROD013	Acacia Gardens residential area	NOD	0							28/4/23 11:05
PROD014	Bridgewater Road	NOD	0							28/4/23 11:02
PROD101	Northern boundary of compost pad	NOD	0							28/4/23 11:57
PROD102	Eastern boundary of compost pad	compost	2	2	Medium	1	compost windrows	Probable		28/4/23 11:58

Odour Survey Log Sheet



Site: Priorswood

Personnel: A Meaden

Date & Time of monitoring: 28/04/2023 11:02:54 - 12:01:32

Weatherstation: Met Office

Table 2: Odour Classification - Routine

Location Code	Location	Odour Character type	Intensity	Extent	Sensitivity	Offensiveness	Suspected Source	Source Operator Controlled	Comments	Date/Time
PROD103	Southern boundary of compost pad	compost	2	2	Low	1	compost windrows	Probable		28/4/23 12:00
PROD104	Western boundary of compost pad	NOD	0							28/4/23 12:01

Additional Comments:

Odour Survey Log Sheet

Site: Priorswood

Personnel: A Meaden

Date & Time of monitoring: 28/04/2023 11:02:54 - 12:01:32

Weatherstation: Met Office

Key:



Actual Complaint Location / Address:

The Beaufort Wind Scale

Description	Specification
0 - Calm	Smoke rises vertically (0mph)
1 - Light air	Smoke drifts in wind direction; wind vanes not moved (1-3mph)
2 - Light breeze	Wind felt on face; leaves rustle; wind vanes moved (4-7mph)
3 - Gentle breeze	Leaves and small twigs in constant motion (8-12mph)
4 - Moderate breeze	Raises dust and paper; small branches are moved (13-18mph)
5 - Fresh breeze	Small leafy trees swayed; medium branches moved (19-24mph)
6 - Strong breeze	Large branches moved; umbrellas used with difficulty (25-31mph)
7 - Near gale	Whole trees moving; walking against wind inconvenient (32-38mph)
8 - Gale	Twigs break off trees; walking generally impeded (39-46mph)
9 - Strong gale	Slight structural damage occurs (47-54mph)

Rating	Intensity
0	0
0	0 No detectable odour
1	1 Very faint odour
2	2 Faint Odour
3	3 Distinct Odour
4	4 Strong Odour (bearable)
5	5 Very Strong Odour
6	6 Extremely strong odour

The Pasquill atmospheric stability classes

Stability class	Definition
A	very unstable
B	unstable
C	slightly unstable
D	unstable
E	neutral
F	slightly stable
G	stable

Meteorological conditions that define the Pasquill stability classes

Surface wind speed	Sunshine			Nighttime cloud cover	
	mph	Strong	Moderate	Slight	>50%
<4.5	A	A-B	B	-	G
4.5-6.7	A-B	B	C	E	F
6.7-11.2	B	B-C	C	D	E
11.2-13.4	C	C-D	D	D	D
>13.4	C	D	D	D	D

Rating	Extent
1	1 Local and transient
2	2 Transient
3	3 Persistent but fairly localised
4	4 Persistent & pervasive
5	5 Persistent and widespread
0	n/a

Odour Survey Log Sheet

Site: Priorswood

Personnel: A Meaden

Date & Time of monitoring: 28/04/2023 11:02:54 - 12:01:32

Weatherstation: Met Office

Rating	Sensitivity
Low	e.g. footpath,road
Medium	e.g industrial or commercial workplaces
High	e.g housing, pub / hotel

Rating	Offensiveness
1	1 Less/potentially offensive
2	2 Moderately offensive
3	3 Most/highly offensive



Priorswood Monthly Odour Survey 28/04/2023

Aerial Plan Showing Locations



DRAWINGS

Bridgwater
and Taunton Canal

NOTE:
BASE PLAN PROVIDED BY CLIENT REF: PH230100
TITLED: ENVIRONMENTAL PERMIT BOUNDARY DATED 05/11/21

KEY
PERMIT BOUNDARY

LOGISTICS
DEPOT

COMPOSTING
AREA

SKIP STORE

HWRC

Waste Transfer Station with Treatment

Emission point
to foul sewer
(82703100)



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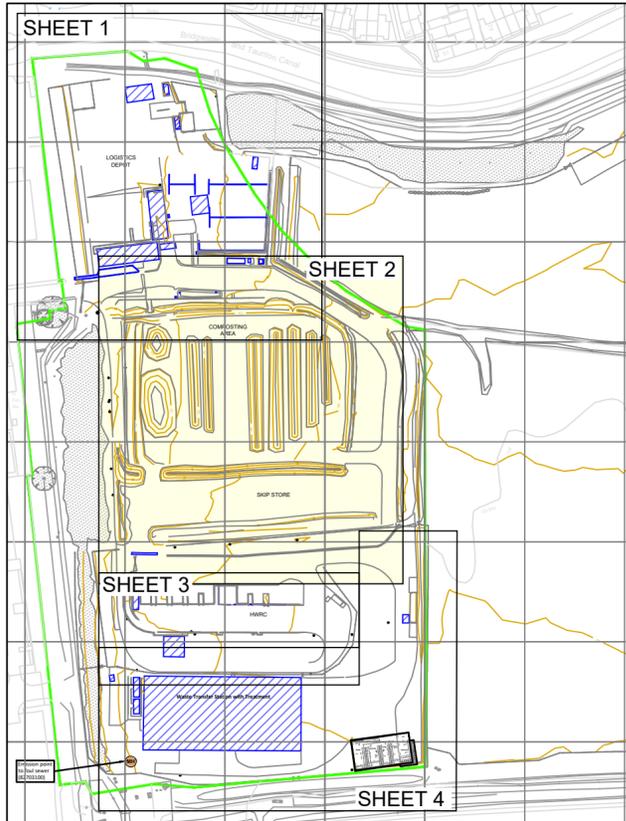
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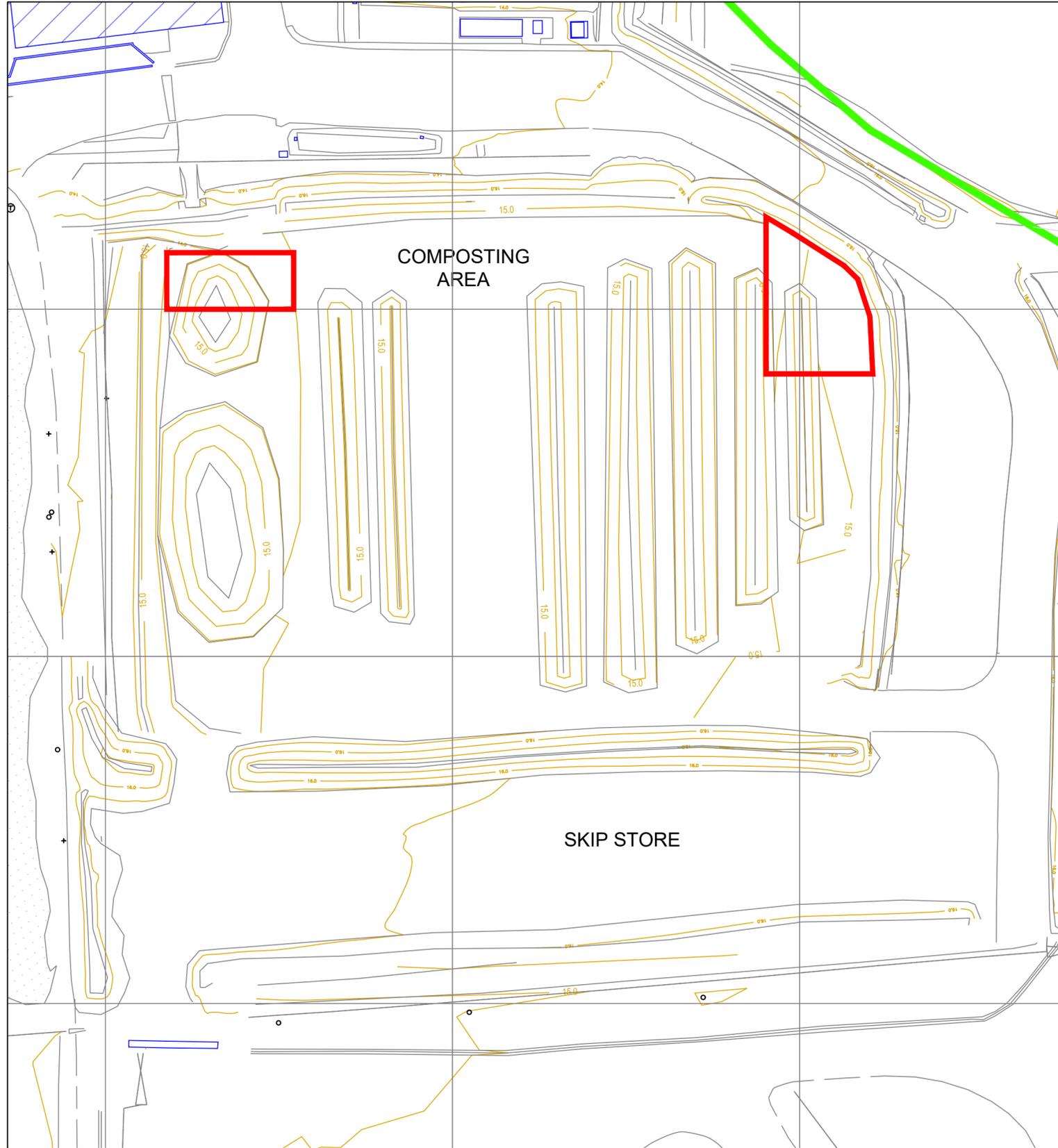
PROJECT	HCI T/S, COMPOSTING & HWRC	DRAWN	SJB
LOCATION	PRIORSWOOD	DATE	30/06/23
DRAWING TITLE	SITE LAYOUT PLAN	SCALE(S)	AS SHOWN
DRAWING No.	PH230600	COMPUTER REF.	ST19587-005

NOTE:
 BASE PLAN PROVIDED BY CLIENT REF: PH230100
 TITLED: ENVIRONMENTAL PERMIT BOUNDARY DATED 05/11/21

KEY
 PERMIT BOUNDARY
 PLANT STORAGE



KEY PLAN
 SCALE 1:2500



COMPOSTING AREA
 SCALE 1:500



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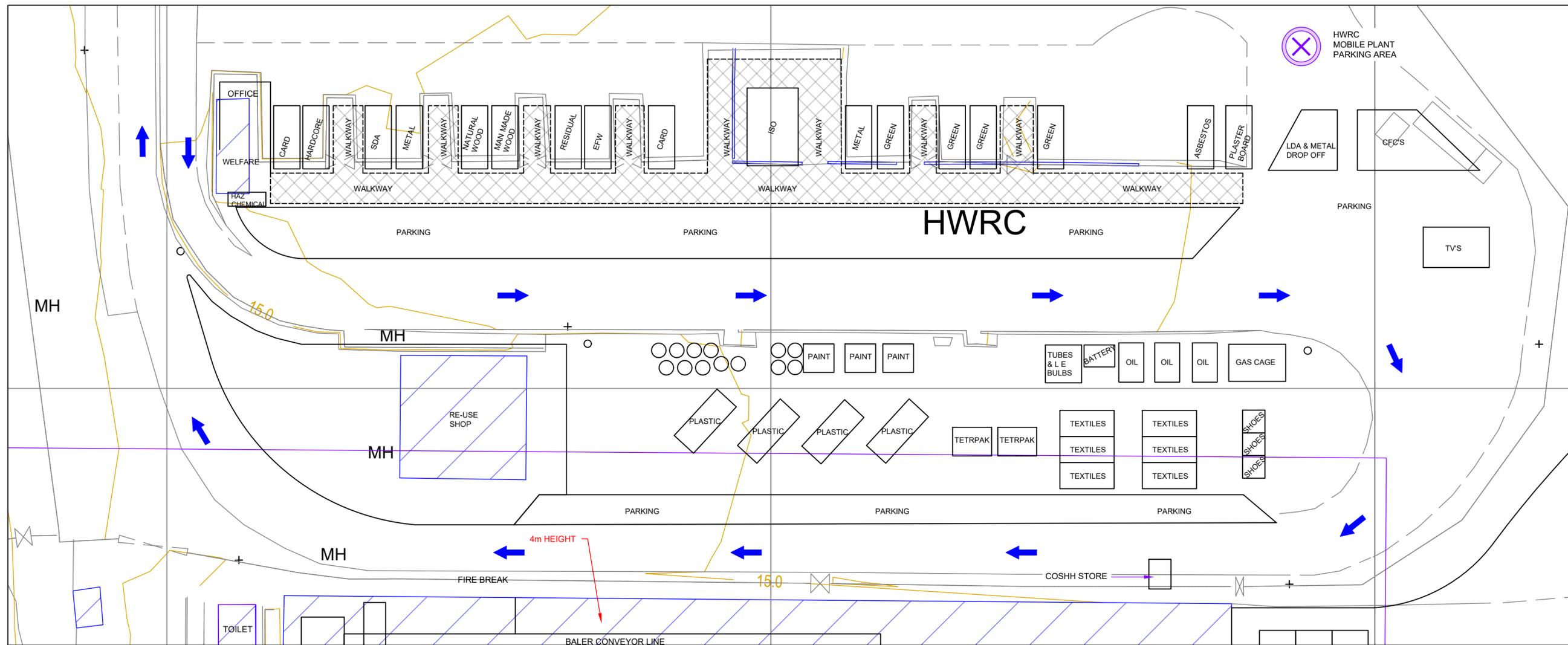
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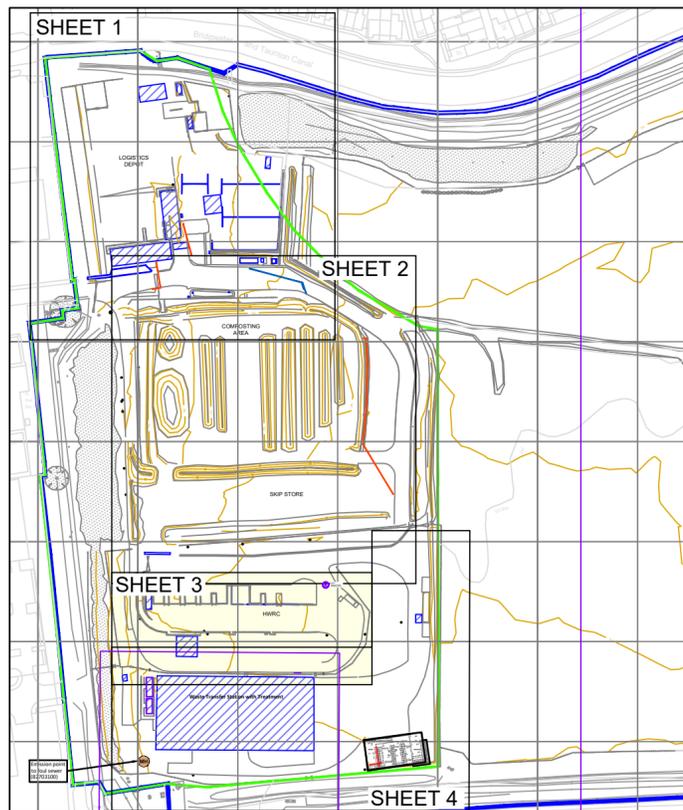


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PROJECT	HCI T/S, COMPOSTING & HWRC	DRAWN	SJB
LOCATION	PRIORSWOOD	DATE	30/06/23
DRAWING TITLE	COMPOSTING AREA (SHEET 2 OF 4)	SCALE(S)	AS SHOWN
DRAWING No.	PH230300	COMPUTER REF.	ST19587-002



HWRC
SCALE 1:250



KEY PLAN
SCALE 1:2500



NOTE:
BASE PLAN PROVIDED BY CLIENT REF: PH230100
TITLED: ENVIRONMENTAL PERMIT BOUNDARY DATED 05/11/21

KEY
 PERMIT BOUNDARY

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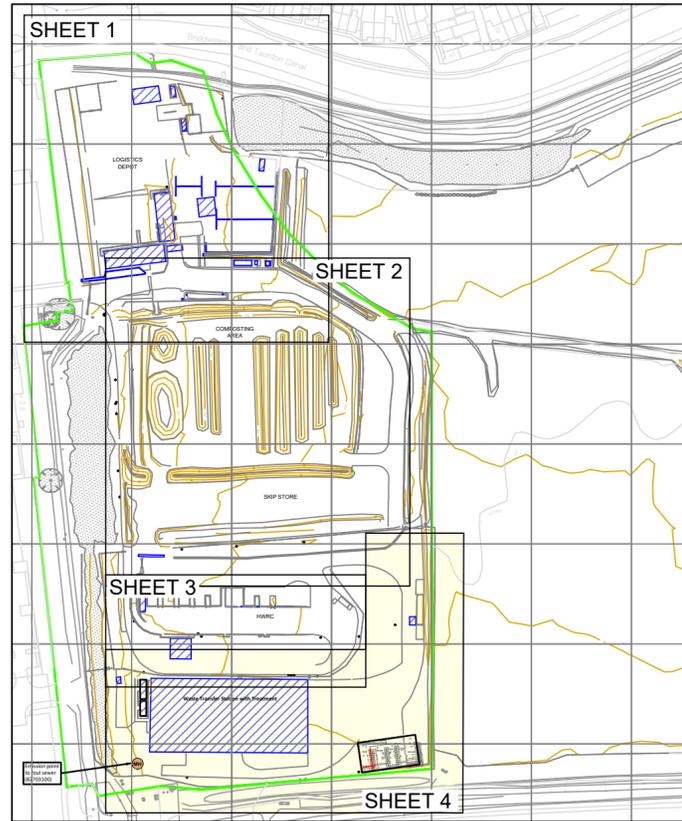
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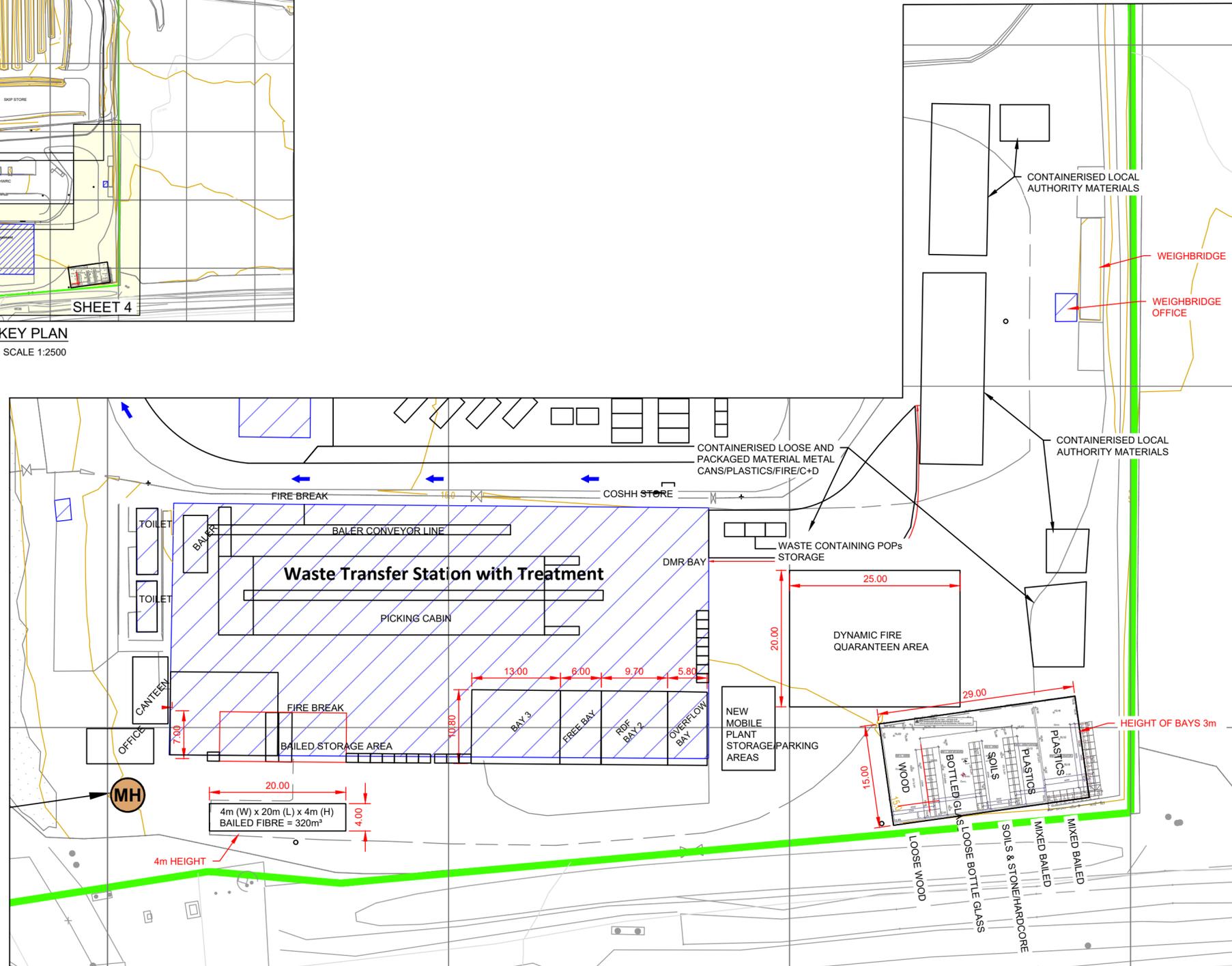
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LOCATION	PRIORSWOOD	DATE	20/06/23
DRAWING TITLE	HWRC (SHEET 3 OF 4)	SCALE(S)	AS SHOWN
DRAWING No.	PH230400	COMPUTER REF.	ST19587-003

NOTE:
 BASE PLAN PROVIDED BY CLIENT REF: PH230100
 TITLED: ENVIRONMENTAL PERMIT BOUNDARY DATED 05/11/21

KEY
 PERMIT BOUNDARY



KEY PLAN
 SCALE 1:2500



WASTE TRANSFER STATION
 SCALE 1:500

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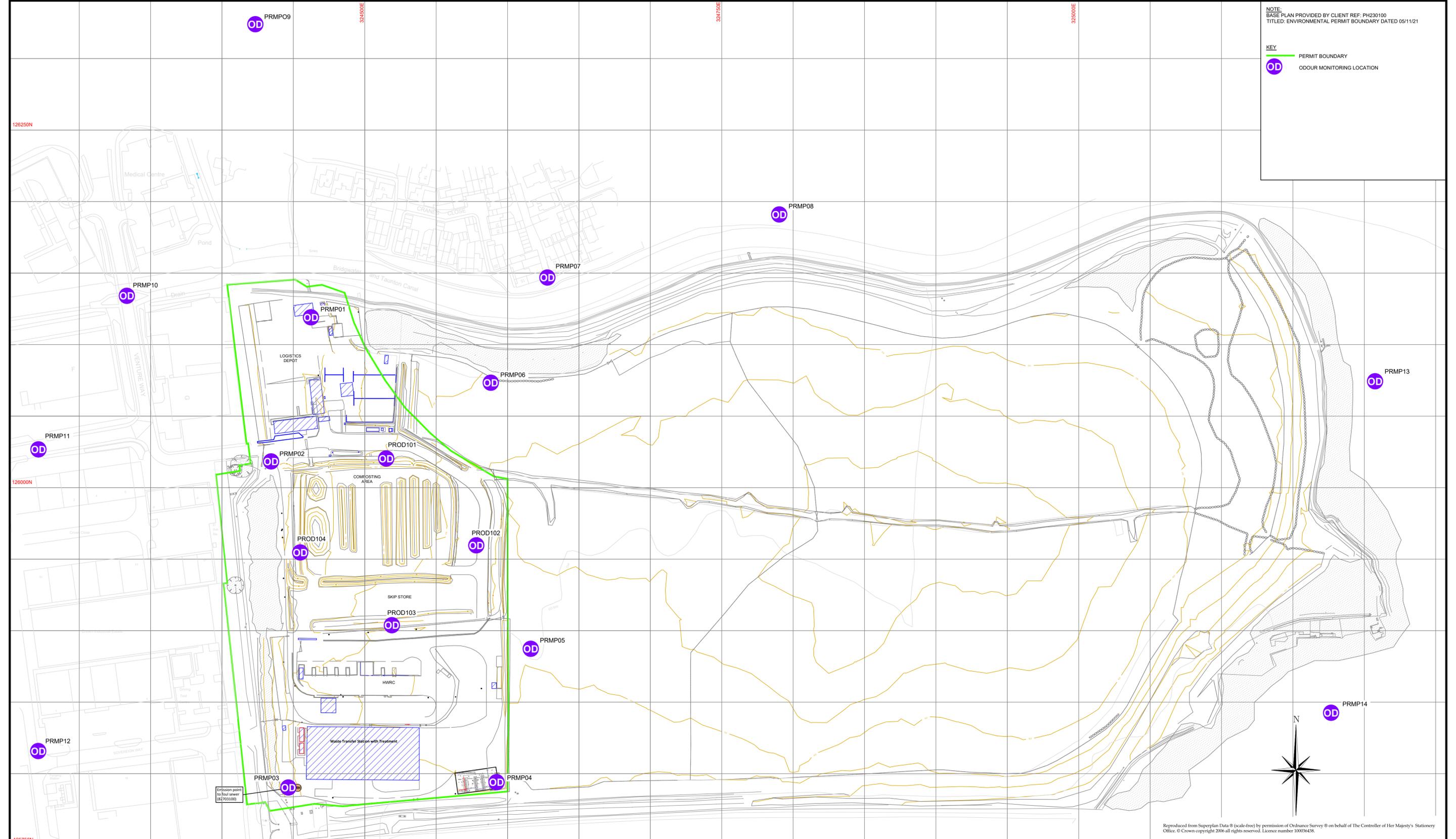


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PROJECT	HCI T/S, COMPOSTING & HWRC	DRAWN	SJB
LOCATION	PRIORSWOOD	DATE	20/06/23
DRAWING TITLE	WASTE TRANSFER STATION (SHEET 4 OF 4)	SCALE(S)	AS SHOWN
DRAWING No.	PH230500	COMPUTER REF.	ST19587-004

NOTE:
 BASE PLAN PROVIDED BY CLIENT REF. PH230100
 TITLED: ENVIRONMENTAL PERMIT BOUNDARY DATED 05/11/21

KEY
 PERMIT BOUNDARY
 ODOUR MONITORING LOCATION



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PROJECT	HCI T/S, COMPOSTING & HWRC	DRAWN	SJB
LOCATION	PRIORSWOOD	DATE	30/06/23
DRAWING TITLE	ODOUR MONITORING PLAN	SCALE(S)	1:1250
DRAWING No.	PH230700	COMPUTER REF.	ST19587-006

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