Caulmert Limited

Engineering, Environmental & Planning Consultancy Services

Knottingley Waste to Resource Facility

FCC Recycling (UK) Limited

Environmental Permit Variation Application

Noise Management Plan

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DISCLAIMER

Environmental Permit Variation Application

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1.0 INTRODUCTION

1.1 Overview

1.1.1 Caulmert Limited have been appointed by FCC Recycling (UK) Limited ('the Operator') to prepare a bespoke environmental permit variation application to vary the existing permit to allow a number of additional activities at Knottingley Waste to Resource Facility on Weeland Road, Knottingley, in West Yorkshire, at postcode WF11 8DZ (hereafter referred to as 'the Site').

1.1.2 The proposed amendments to the permit (ref. EPR/JP3547JL) entail a comprehensive revaluation and optimisation of its operational activities. Primarily with the intention to refine existing processes while introducing activities to enhance waste management on site.

1.1.3 This Noise Management Plan (NMP) will provide thorough detail of appropriate measures that are required for effective noise management at the site and will outline proposed control measures, in accordance with EA guidance on 'Noise and vibration management: environmental permits' (last updated 31 January 2022).

1.1.4 This NMP has the aim of ensuring that potential noise emission sources are identified and controlled at source where possible. The NMP aims to minimise the risk of noise emission impacts on receptors outside of the site boundary. As a minimum, this NMP will consider the following elements:

- An assessment of the risks of noise emissions at the site;
- Identify the appropriate controls to manage the identified risks;
- Monitoring to confirm effectiveness of control measures;
- Complaints handling;
- Identify actions, contingencies, and responsibilities when noise emissions arise; and,
- Regular review of the effectiveness of the noise emissions control measures.

1.2 Existing Site Operations

1.2.1 The current permitted activities at the Site include the bulk handling and transfer of both hazardous and non-hazardous waste, distillation-based solvent recovery, biological treatment of associated aqueous effluents, the creation of Secondary Liquid Fuel (involving the utilisation of heat and steam from boilers), as well as the storage and management of waste materials and raw substances. Furthermore, the site conducts surface water and process water treatment through a biological treatment plant.

1.2.2 It is proposed to remove the distillation of solvents activities and the activity/waste list for Tank S13 from the permit, but to retain two of the previously three permitted boilers using gas and Secondary Liquid Fuels (SLF) as fuel. Currently, the two remaining boilers (boilers numbered 4 and 5) and associated storage tanks are mothballed, however the Operator would

be using the boiler installation to provide steam to the proposed dryer, the ammonia recovery unit and the metals recovery facility as directly associated activities (DAA).

1.2.3 The following activities are also being proposed to be retained in the existing permit but requires amending as follows:

- **Waste Transfer Station -** the storage and transfer of hazardous and non-hazardous wastes, including where appropriate repackaging, size reduction and decanting. To amend the waste list in the permit to add additional waste codes for storage and transfer and to allow these activities to take place on the site as a whole.

- **Associated raw materials/reagents will be stored** and used on site.

- **Discharge of treated effluents** (i.e., site surface water and process water in the aerobic treatment plant) **to sewer** is already permitted but needs updating to reflect the changes that pertains the existing biological treatment activity which is mothballed and will not recommence. However, the Operator has repurposed the infrastructure as a **surface water collection tank,** and no waste treatment activities takes place.

- **The use of existing gas or liquid-fuelled boilers** which is to be reduced to two (i.e., Boiler 4 with rated thermal input of 6.6MWth and Boiler 5 with rated thermal input of 9.0MWth) with tag numbers B01-ZP-01 and B01-ZP-02 and their corresponding boiler stack emission points - EP08 (SE 51324 23809) and EP12 (SE 51333 23792) (currently A12 and A13 in the existing permit ref. EPR/JP3547JL) within the Boiler Complex, indicated on the Sampling and Emissions Point Plan (ref. 5827-CAU-XX-XX-DR-V-1805) will be retained to provide steam to the proposed dryer, the ammonia recovery unit and the metals recovery facility as directly associated activities (DAA).

1.3 Site Description

1.3.1 The Site is in Knottingley, West Yorkshire. It is centred on National Grid Reference SE 51279 23861 and postcode WF11 8DZ. The main site entrance is accessed from Weeland Road on the southern boundary. See Figure 1 below for Site Location map.

Figure 1: Site Location Plan (approx. permit boundary in red).

1.4 Maintenance and Review of the NMP

1.4.1 This NMP has the aim of ensuring that potential noise emission sources on-site are identified and controlled at source where possible. The NMP aims to minimise the risk of noise impact on receptors outside of the site boundary.

1.4.2 This NMP will be reviewed by Site Management on a regular basis and at least annually, to ensure that the controls described are effective and reflect best available techniques. The management plan will also be reviewed following any complaint at the site or if there are relevant changes in the site operations or procedures.

1.4.3 The integrated management system (IMS) procedure relevant to reporting complaints is 'IMS-PRO-176 Environmental Incident/Near Miss/Complaint and CAR Reporting Procedure'. The records will be stored electronically on the FCC EcoOnline system and will be made available to the regulatory authorities on request. The record keeping will form part of the site's Management System.

1.4.4 Site management shall be responsible for ensuring the efficient operation of the entire site and its activities, to ensure full compliance with this Noise Management Plan (NMP).

1.4.5 Site management shall ensure that all personnel working at the site or visiting the site are aware of the need to comply with this Noise Management Plan.

1.4.6 Site management will be responsible for checking the meteorological conditions for each day to ensure the appropriate noise control measures are in place.

1.4.7 As part of the site Management System, staff will receive the necessary training and instruction in their duties relating to all operations, the potential sources of noise emissions on-site and the requirements of this NMP. Emphasis will be given to plant and equipment malfunctions and abnormal conditions. Refresher training will be offered by site management at least once a year, or if the operations on-site changes which will require the NMP to be updated or new site-specific noise control measures and procedures to be implemented.

1.4.8 Any persons on-site failing to comply with the requirements of the NMP and site procedures will be re-trained as necessary. Deliveries (i.e., drivers) failing to abide by site rules in respect of vehicle operations and minimising noise emissions will be reported and if required, asked to leave site.

1.4.9 Records of training, noise complaints and associated investigations will be maintained in accordance with the site's Management System, which will be overseen by the Site Manager or nominated deputy.

1.4.10 The Site Manager or nominated deputy will ensure routine noise monitoring is undertaken as part of the daily site checks and that if noise is identified to be a potential issue on-site, that the source of the noise is investigated, and any additional actions or control measures implemented are recorded as per the Management System procedures.

1.4.11 A copy of this NMP should be kept in the Site Office at all times and is intended for use by site operatives and managers for the control of noise emissions at the site. Electronic copies will also be held on FCC's electronic database system.

1.5 Relevant sector guidance on which this NMP is based

1.5.1 In the production of this NMP the following guidance and reference materials were used:

- Activities & Operating Techniques report ref. 5827-CAU-XX-XX-RP-V-0305;
- Environmental Risk Assessment report ref. 5827-CAU-XX-XX-RP-V-0302;
- Best Available Techniques (BAT) Conclusions for waste treatment, under Directive 2010/75/EU of the European Parliament and of the Council', from the Official Journal of the European Union' last updated 17th August 2018;
- Biological waste treatment: appropriate measures for permitted facilities, last updated 25th November 2024;
- Non-hazardous and inert waste: appropriate measures for permitted facilities - Guidance - GOV.UK (last updated 1 August 2023);

- Chemical waste: appropriate measures for permitted facilities - Guidance - GOV.UK (last updated 18 November 2020;
- Noise and vibration management: environmental permits – GOV.UK (last updated 31 January 2022).

2.0 POTENTIAL SENSITIVE RECEPTORS

2.1 Overview

2.1.1 A sensitive receptor search was carried out of the surrounding area within a 1km radius of the site boundary using Defra's Magic Maps website[1] and the sensitive receptors identified are listed below in Table 1 and also shown on the Sensitive Receptor Plan drawing ref. 5827-CAU-XX-XX-DR-V-1800. The approximate distance to each receptor is measured from the site permit boundary.

2.2 Sensitive Receptors

2.2.1 The site is within a semi-rural and residential location, with the closest human receptors to the site being the users of the River Aire walking trail, users of the Aire and Calder Navigation Canal and Lock, and users of Stocking Lane. These receptors are all located less than 10m north of the site boundary, with the exception of the A645, Weeland Road, which abuts the southern boundary of the site, and provides access to the site. In addition, the Aire and Calder navigation walk commences 90m south of the site boundary. There are no hospitals located within 1km of the site, however De Lacey High School and Little Acorns Nursery are both located over 900m southwest of the site.

2.2.2 The nearest residential receptors to the site are houses in the residential area of 148 Weeland Road, located 290m SE of the site and Low Green, situated 384m west of the site. The majority of the area located west of the site within the 1km radius is residential. These areas include Fernley Green Close (481m WNW), Springfields Avenue (485m WSW), Marsh End (501m WNW), Broomhill (559m SW), Lamb Inn Road (581m W), and The Croft (873m WNW). Knottingley cemetery is located 822m southwest of the site boundary, and Knottingley RUFC is located 453m west-northwest of the site boundary.

2.2.3 Fernley Green Industrial Estate is located 187m west of the site, comprised of business including Delta MOT and Service Centre Ltd, Beepers Ltd, Allied Glass Group Ltd, Hirst Boatbuilders Ltd, A1 Building Supplies Ltd, and Gillian and Baines Ltd. These are, however, industrial, and commercial receptors and less sensitive to noise. However, it should be noted that the Brick Box Ltd also operates from Fernley Green Industrial Estate and provides children's party services (located 364m NW from site boundary).

2.2.4 A search of the surrounding area using the DEFRA Magic Maps website has established there are no National Nature Reserves (NNRs) within 1km of the site: the closest is Humberhead Peatlands NNR, over 24km southeast of the site. According to the EA Conservation Screen Report (included in Appendix 1 of this report) there are 2 Local Wildlife Sites (LWS), up to 2 protected species and 2 protected habitat within 2km of the site.

2.2.5 There are no Sites of Special Scientific Interest (SSSIs), Special Areas of Conservation (SACs), Special Protection Areas (SPAs), Local Nature Reserves (LNRs), National Nature Reserves

[1] DEFRA Magic Maps 2022: https://magic.defra.gov.uk/MagicMap.aspx

(NNRs), Ramsar sites or Areas of Outstanding Natural Beauty (AONBs) within 2km of the site. The closest SSSI is located over 7km to the northwest of the site. The closest AONB is The Nidderdale AONB located over 50km to north-northwest of the site.

2.2.6 The receptor search radius in relation to the permit boundary is shown below in **Figure 2:**

Table 1: Summary of Sensitive Receptors within 1km radius of the permit boundary

Ref.	Receptor	Land use	Distance from site
A	Occupiers of Fernley Green Industrial Estate	Commercial / Industrial	187m
B	Residents of Fernley Green Close	Residential	481m
C	Residents of Marsh End	Residential	501m
D	Residents of Low Green	Residential	384m
E	Residents of Springfields Avenue	Residential	485m
F	Residents of Lamb Inn	Residential	581m
G	Residents of Broomhill Avenue	Residential	559m
H	Users of A645 Weeland Road	Commercial	<10m
I	Users of River Aire Walking Trail	Recreational	<10m
J	The Croft	Residential	873m
K	Alex Pol Trans Ltd	Commercial / Industrial	264m
L	Occupiers of Industrial Units	Commercial / Industrial	231m
M	Club members of Knottingley RUFC	Recreational	453m
N	Users of Aire and Calder Navigation Walk	Recreational	90m
O	Caddick Construction Ltd	Commercial / Industrial	320m
P	OneCT Manufacturing Park	Commercial / Industrial	634m
Q	Users of Stocking Lane	Commercial	<10m
R	Little Acorns Nursery	School	900m
S	De Lacey High School	School	1000m
T	Occupiers of the house on 148 Weeland Road	Residential	290m

2.2.7 Neighbouring dwellings and businesses are likely to be the most sensitive receptors to noise nuisances. Good relationships with neighbouring residents, landowners and businesses are essential in order to anticipate potential problems and avoid them, where possible, before official complaints are made. The Operator will ensure the following:

- All the neighbours know how to contact the site if they consider noise to be a problem.
- That any complaints are recorded and that problems, where possible, are dealt with promptly.

Figure 2: 1km radius from the site boundary (approx. permit boundary in red)

2.3 Meteorological Setting

2.3.1 Fugitive emissions of dust, litter, odour and noise from the site are likely to be affected by local weather conditions, in particular by wind direction. Wind statistics observed from Normanton weather station, the closest weather station actively recording wind statistics, are considered to be representative of the typical conditions at the site (Figure 3 below).

2.3.2 Based on the data recorded daily between April 2013 and March 2026 on the Windfinder.com[2] website, the most dominant wind direction will be from the west-southwest towards the east-northeast. With reference to the Sensitive Receptor Plan ref. 5827-CAU-XX-XX-DR-V-1800, predominant annual wind conditions are likely to blow towards the Willow Garth Nature Reserve and the River Aire to the northeast.

[2] Wind & weather statistics Normanton - Windfinder

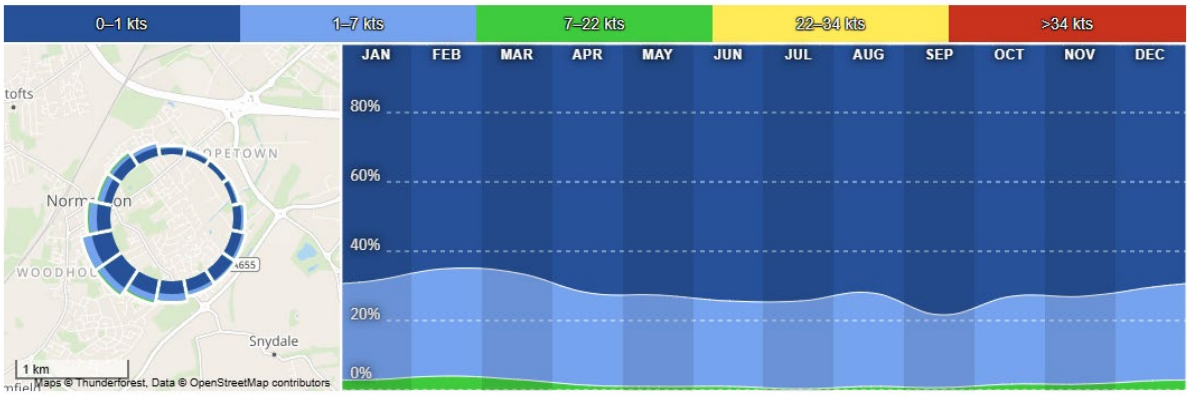


Figure 3: Normanton weather station wind statistics – average wind direction & strength 2013-2026.

3.0 NOISE SOURCES & PROCESSES

3.1 Noise Impact Assessment (NIA)

3.1.1 FCC Recycling (UK) Limited commissioned Axis to undertake an environmental noise impact assessment to evaluate the likely significant environmental effects of noise and vibration on the identified nearest sensitive receptors following the commencement of the proposed new activities at the Knottingley Waste to Resource Facility, located off Weeland Road, Knottingley, WF11 8DZ.

3.1.2 The assessment (included **Appendix 1** of this report) describes the methods used to assess the effects, the existing sound climate and the evaluation of future baseline sound levels in the vicinity of the Site. It also highlights the sources of information used in the noise impact assessment.

3.1.3 The Site was assessed against the current baseline which includes permitted noise sources in the area around the Knottingley Waste to Resource Facility and it suggests that in the absence of adding new activities to the Site, the baseline levels will not change due to the influence of existing ambient noise from existing local noise sources.

3.1.4 The sound survey and baseline methodology undertaken at NSR (i.e., noise sensitive receptor) in the vicinity of the Site was to ascertain existing representative background and residual sound levels. The aim of the sound survey was to:

- Identify the existing baseline sound levels for use as a reference for background and residual sound levels in the assessment of impacts related to the demolition, construction and operation of the Knottingley Waste to Resource Facility.
- Enable the assessment baseline to be established and understand the effects of permitted developments on the future baseline; and
- Characterise the nearest NSR or noise sensitive sites.

3.1.5 The existing baseline sound survey was undertaken at the fixed locations (listed below) which was considered to provide representative baseline sound levels:

- Position NMP1 (off Weeland Road) – Southeast of the Site (grid reference: 451584 423677);
- Position NMP2 (off Common Lane) – Southwest of the Site (grid reference: 451162 423476);
- Position NMP3 (off Weeland Road) – West of the Site (grid reference: 450860 423756);

- Position NMP4 (Marsh Lane) – Northwest of the Site (grid reference: 450913 424081).

3.1.6 The sources of noise and vibrations anticipated from the proposed additional activities are discussed in detail under the following headings:

Operational Phase Noise Effects – Plant

3.1.7 In terms of the potential noise characteristics of the proposed activities at the Site, the following noise criteria were applied in the assessment:

- Tonality;
- Impulsivity; and
- Intermittency.

3.1.8 Based on the above criteria, it was concluded that with the proposed noise mitigation strategy and controls of specific plant selection and design there is no character penalty required. See the Noise Impact Assessment report in **Appendix 1** of this report for further details.

3.1.9 According to BS4142: 2014+A1:20195, the rating level (which includes a +3dB noise character allowance) relative to the assessment baseline noise would indicate ***negligible*** impact magnitude at receptors, where the impact significance would be ***neutral*** level of effect. The effects would be ***not significant***.

3.1.10 In relation to the IEMA guidelines 13 (which considers the increase in existing residual noise and therefore the context of the impact), it can be seen that the magnitude of the impact during daytime periods shows that there is a change of up to +0.3dB in noise level, which indicates a ***negligible*** impact. The predicted level of effect that would be experienced by residential receptors would therefore be a ***neutral*** level of effect in relation to this guidance.

3.1.11 According to BS4142: 2014+A1:20195, the rating level relative to the assessment baseline noise indicates a ***negligible*** impact magnitude. The operational noise impacts from the facility are therefore considered to represent a ***neutral*** level of effect and ***not significant***. As the result does not show a low impact according to BS4142, additional noise mitigation measures are therefore not required.

3.1.12 In relation to the IEMA guidelines 13, it can be seen that the magnitude of the impact during night-time periods shows that the change in noise level ranges between +0.1dB and +0.2dB LAeq which indicates ***negligible*** impact**.** The predicted level of effect would therefore be ***neutral*** for all NSRs in relation to this guidance

Operational Road Traffic Noise

3.1.13 The Transport Assessment considers the assessment year 2030 for the traffic demand from the new activities at the Site for these periods compared to a 'Do-nothing' scenario. **Table 7.19** in the Noise Impact Assessment report provide details of the noise impact due to the

increased traffic flow along the local road network based on a daytime and evening/night-time period maximum demand for Site as provided within the Transport Assessment.

3.1.14 Based on an operational HGV period assessment during the daytime period, the increase in noise level is between +0.2dB L_{A10} to +0.5dB $L_{A10,12hrs}$ The impact magnitude is shown to be ***negligible*** and a ***neutral*** level of effect in respect of traffic movements relative to the nearest local road network and at nearest residential properties. In terms of the DMRB8 LA111 guidance, in relation to short-term effects an increase of <3dB(A) is minor and <1dB(A) is negligible.

3.1.15 There would be minimal HGV movements during the evening and night-time operational period. Between 1900 and 2100 hours there would be 1 two-way HGV movement per hour and 6 two-way HGV movements between 0500 to 0700 hours.

3.1.16 Based on an operational HGV period assessment during the daytime period, the increase in noise level is between +0.1dB $_{LA10,12hrs}$ to +0.2dB $_{LA10,12hrs}$. The impact magnitude is shown to be ***negligible*** and a ***neutral*** level of effect in respect of traffic movements relative to the nearest local road network and at the nearest residential properties. In terms of the DMRB8 LA111 guidance, in relation to short-term effects an increase of <3dB(A) is minor and <1dB(A) is negligible.

Operational Phase Vibration Effects

3.1.17 In terms of operational vibration, the type of fixed and mobile plant being used on Site would inherently produce vibration levels lower than the movement of HGVs, and therefore based on the separation distance to NSR would produce zero vibration. The impact would be ***negligible*** and a ***neutral*** level of effect.

3.1.18 Conclusively, during the demolition and construction period there would be a variety of noise sources in use at different stages, and their associated activities would vary from day to day. The highest noise levels relative to the nearest receptors are likely to occur during piling and infrastructure activities. The peak noise activities do not normally occur over long periods of time and best practicable means would be employed to control the noise being generated. It is concluded that the increase in construction noise with the implementation of mitigation measures, using best practicable means, is likely to result in an impact magnitude classification of ***negligible to slight*** and a ***neutral to minor*** level of effect.

3.1.19 The assessment of impact on existing residential areas from any increase in road traffic noise during the daytime construction or operational stage of the Proposed Development shows no significant change in noise levels and therefore there is likely to be a ***negligible*** impact at receptors and ***neutral*** level of effect and ***not significant****.*

3.1.20 In terms of ground-borne vibration during the demolition/construction or operational period, there would be a ***negligible*** impact and ***neutral*** significance at the nearest residential receptor and well within guidance limits for nuisance and cosmetic damage and ***not significant****.*

3.1.21 The assessment of cumulative impacts from other permitted or proposed development in the local area is shown to produce a ***negligible to slight*** impact and a ***neutral to minor*** level of effect and ***not significant.***

3.1.22 In summary, no significant noise effects have been identified by the noise assessment in relation to construction or operation of the Proposed Development noise or plant vibration. **Table 7.23** in the Noise Impact Assessment report summarises the predicted effects of the construction, and operations of the development.

3.2 On-Site Noise Sources - Site Operations

3.2.1 It is anticipated that noise levels from the proposed waste activities will have a low impact at the nearest residential receptors. Low noise impact is especially true for operations that will take place within buildings, including waste storage and processing, which make up the majority of the activities. The enclosed operations tend to generate a low hum noise, and the buildings help to attenuate the noise levels.

3.2.2 Based on the site layout and the proposed waste operations, the significant operational on- site sources comprise:

- Truck deliveries, vehicle/HGV movements on site and access route;
- HGV Loading/unloading vehicles (vehicle movements including reversing, loading and unloading operations), tankers will discharge liquid wastes into pipes, hence less noisy;
- Pumps, motors, blowers, etc;
- Forklift trucks;
- Roller shutter doors in the respective waste processing buildings;
- Scrubber fans;
- Heat exchangers;
- Air blast coolers;
- Compressors;
- Aeration system located inside bioreactors or tanks;
- Gas or electric boiler engines, etc.
- Material movement by CAT 950 loading shovel or similar within buildings;
- RDF preparation building – shredders, mobile plant, tipping of waste in storage bays, forklift trucks entry and exit via roller shutter doors (this is generally applicable to the proposed activities), including Waste Processing 01 and 02, where the shredders will be used for reducing bulk material or segregate packaging from contents prior to further processing);
- Forklift truck to deliver waste from reception to the relevant waste processing building.

3.2.3 Further detail of the proposed activities is provided in site layout plan Drawing Ref 5827-CAU-XX-XX-DR-V-1804.

3.2.4 The proposed traffic routes around the site are shown on drawing ref. 5827-CAU-XX-XX-DR-V-1811

3.2.5 Noise levels as detailed in the NIA are as follows:

Table 2: Description of Noise Emitting Processes

Noise Source	Building Reference	Operational Time of Day	Assumed Noise Level LAeq,T dB [night-time]	Treatment
AHU stack exit	5,8,11(2),13,14 & 15	Day/Night	70 @ 1m	Silencer
Stack exit	7	Day/Night	70 @ 1m	Silencer
Reactor units	14 (19 off)	Day/Night	68 @ 1m	Design
Pumps	11 (22 off)	Day/Night	60 @ 1m	Design
Pumps	12 (16 off)	Day/Night	50 @ 1m	Design
Tanker Discharge	12 (1 per hour)	Day	88 @ 1m	-
Tanker Delivery	6 per hour	Day	70 @ 10m	-
AHU Stack body	5,8,11(2),13,14 & 15	Day/Night	75 @ 1m	Cladding/Design
Package Waste rec.	5	Day [night]	75 (inside) [65]	Cladding
Storage building	6	Day [night]	75 (inside) [40]	Cladding
Waste Recovery	7	Day [night]	75 (inside) [65]	Cladding
Extractor hoods	7 (roof)	Day/Night	70 @ 1m [70]	Design
Package Waste building	8	Day [night]	80 (inside) [65]	Cladding, Shredder Electric/ Hydraulic type
Package Waste rec.	9	Day [night]	75 (inside) [40]	Cladding
Acid/Alkaline	11 (3)	Day/Night	70 (inside)	Cladding
Acid/Alkaline tanker	11	Day	88 (inside)	Cladding
Liquid Waste/Leachate	12	Day/Night	80 (inside)	Cladding
Waste Dryer	13	Day/Night	75 (inside)	Cladding
Heavy Metal	14	Day/Night	70 (inside)	Cladding
Storage Building	15	Day [night]	75 (inside) [65]	Cladding
Storage Building	16	Day [night]	75 (inside) [40]	Cladding
Storage Building	17	Day[night]	75 (inside) [40]	Cladding

3.2.6 The Site has multiple operations, some of which operate 24/7, however the main reception times for waste receipt are:

- From **6.00am** to **10:00 pm,** Monday to Saturday;
- **CLOSED** on Sundays, with limited operations during Bank Holidays.

3.2.7 The Site has an existing car park, of which a new pedestrian access to the car park and crossing is being proposed. Vehicular access will be via the site main entrance accessed on Weeland Road on the southern boundary.

3.2.8 There is one proposed vehicle reception area located after the weighbridge on the right, providing 6 spaces. This is where incoming deliveries will be held for a short time for documentation/verification purposes prior to being directed to the designated waste processing building. Manoeuvring space is provided in the respective areas for traffic management.

3.2.9 Depending on the type of waste and proposed waste treatment activities, wastes will be delivered to the site in covered/sheeted containers, drums, skips/RORO skips. There are three proposed tanker off-loading bays around the Leachate and Aqueous Waste treatment area.

3.2.10 It is proposed that all HGV arrival and departure movements are via the site's main entrance on the concrete road located at the southern boundary of the Site.

3.2.11 The Operator has advised that waste reception will occur during operating hours. It is proposed that the facility operates as per **Section 3.2.6** above. Overall, the assessment concludes that the noise impact of the site operations would have no impact at the nearest residential receptors, and that operational traffic generated by the proposed new waste activities would have negligible noise impacts on off-site receptors.

3.2.12 The proposed processing activities/operations will typically be during the daytime operating hours, and some equipment will run 24 hours.

3.2.13 Activities associated with the site operation outside the core hours (19:00-07:00), include:

- Housekeeping – machine movements;
- End of shift inspections, refuelling plant, maintenance/servicing;
- Occasional HGV movements, articulated HGVs exchanging an empty trailer for a preloaded trailer; and,
- Pre-start inspections, greasing machines, maintenance/servicing, pumps, motors, blowers, etc. associated with the aerobic effluent treatment and reverse osmosis plants that will run 24 hours;
- Pumps blowers running 24/7.

3.3 Off-Site Noise Sources

3.3.1 The Fernley Green Industrial Estate is located 187m west of the permit boundary, operating as industrial and commercial businesses, including the Brick Box Ltd, which operates from Fernley Green Industrial Estate and provides children's party services, located 364m NW from permit boundary. There is the potential for these business operations and associated vehicle movements that could give rise to noise emissions.

3.4 Overview of Site Layout and Processes

3.4.1 Noise can only cause an impact when it is perceived at a receptor site. This NMP has identified that the key opportunities for noise releases are anticipated to be:

- When wastes are delivered to, and removed from, site.
- When waste products are loaded and unloaded.
- When the waste processing occurs.
- When materials are moved around site or between storage areas/bays.
- When wastes are being shredded or crushed (e.g., shredding of packaged waste using a shredder or drum crushing apparatus).

3.4.2 The impacts of any noise released by the proposed new activities will be linked to the receptors listed in **Table 1** above. The receptors are more likely to be impacted upon by noise in the following conditions:

- Prevailing wind direction is towards receptors;
- Local weather conditions. Warm still weather will contribute to the perceived noise at receptors; and
- Cumulative impacts. It is anticipated that cumulative impacts will be minimal. The site is not in an area dominated by facilities which may cause additional noise.

3.4.3 The impacts of noise from the proposed new activities are anticipated to be minimal, given the nature of the operation and the location within an industrial setting. However, this will be confirmed regularly with monitoring and communication with neighbours.

3.4.4 The proposed new activities to be carried out at the site are as follows:

- **Refuse Derived Fuel (RDF) Preparation** - processing of non-hazardous industrial wastes into RDF fuel for Energy from Waste (EfW) facilities inc. shredding and storage.
- **Packaged Waste Processing –** including sorting, washing, shredding, drum crushing and storing of drums.
- **Leachate and Aqueous Wastes Treatment -** the physico-chemical and biological treatment of landfill leachate and similar aqueous wastes in a biological treatment plant and two reverse osmosis plants, with treated effluent discharged to sewer or surface water as appropriate, which will include stripping of ammonia from wastes and the recovery of ammonia as an aqueous solution.
- **Physical and physico-chemical Treatment of Aqueous & Inorganic Wastes, Solids and Sludge -** the physico-chemical treatment of solid and liquid wastes so as to facilitate recovery or disposal, the drying of solid and sludge wastes so as to facilitate recovery or disposal; including mixing, blending, separating, washing, filtering, precipitating out, filter pressing, drying, storing. **Also, inspection, storage, and processing (e.g., dismantling and sorting, separation, bulking or shredding)** of hazardous and non-hazardous materials for recovery.

- **Metals and Inorganic Salts Recovery** – pH adjustment, precipitation reactions, separation of precipitated solids and storage for recovery of the precipitated solids; with the remaining liquid effluent either being treated on site or being removed for treatment at a suitable facility.
- **Temporary Storage of Hazardous and Non-Hazardous containerised/palletised wastes.**
- **Discharge of treated effluent to surface water** (river) from leachate and aqueous wastes treatment.
- **Discharge of uncontaminated site surface water run-off to surface water** (river).

3.4.5 Some of the proposed additional activities will be operated in a phased approach, for example, the installation of the leachate and aqueous wastes treatment process is phased so that the RO (reverse osmosis) units may be installed and the concentrate produced, subject to ammonia recovery, with the resulting wastewater available for biological treatment or tankered from site to a suitable treatment plant. Alternatively, if ammonia solution is desired not to be produced, the biological process can be used to treat RO concentrate without the ammonia removal.

3.4.6 Further detail of proposed activities is provided in site layout plan Drawing Ref 5827-CAU-XX-XX-DR-V-1804.

4.0 NOISE CONTROL MEASURES

4.1 Overview

4.1.1 This section details the control measures and routine noise monitoring that will be undertaken on site to mitigate and monitor noise from the proposed new waste activities. The control measures set out in this NMP are commensurate with the noise potential of the site operations.

4.1.2 Further mitigation from the proposed site operations is highlighted within the Noise Impact Assessment included in **Appendix 1** of this document.

4.2 Management of Noise

4.2.1 Management measures to control noise release at the site will include:

- **Reducing the loading/unloading time on site**. Minimal handling of wastes and minimising drop heights will ensure that noise is minimised. If the Site Manager considers noise to be causing a disturbance, they will investigate and log this as an incident, using the appropriate forms from the Integrated Management System and will take corrective action. Site staff will liaise with the drivers/deliveries/hauliers with a view to minimising noise emissions relating to delivery and unloading of waste material, where applicable.

- **Unanticipated noises**. Any unexpected noise generated on-site shall be recorded at source, date and time and corrective action taken.

- **Containment and abatement**. Waste processing and storage will be undertaken inside enclosed buildings/units, which will minimise the majority of noises produced from site operations.

4.3 Site Specific Control Measures

4.3.1 The following site-specific control measures will be implemented:

- Adhere strictly to the operating hours of the site;
- All plant and equipment should comply with recommended noise emission limits. Also, equipment such as the pumps, scrubber fans, compressors and heat exchangers that may generate noise will be selected to be of low noise generating potential, positioned and operated in a manner that will minimise the impact of noise on any off-site receptors, including giving consideration to noise control when purchasing and installing new equipment;
- Ensure machinery is regularly well maintained to reduce the potential of noise generating from malfunctioning or faulty parts;
- The use of visual or low-noise alternatives to audible alarms at the site (such as on fixed plant), where appropriate;

- Avoid unnecessary horn usage and revving of engines by drivers;
- Switch off equipment and engines when not required (including auto shut off will be employed to minimise unnecessary run time);
- When hiring or procuring plant, select plant and equipment which is of low noise generating potential where possible. For example, compressors should be sound-reduced models with sealed acoustic linings, and pneumatic tools should be fitted with manufacturer specified silencers or mufflers;
- Machinery to be fitted with SMART bleepers or white noise reversing alarms to reduce the impact and travelling-distance of noise;
- Where reasonably practicable, select quieter working methods should there be a suitable alternative with a lower noise impact, such as lowering drop heights of equipment, etc;
- Keep internal haul routes well maintained and free of potholes, and restrict site speed limits to minimise noise from moving plant and vehicles;
- Minimise drop heights of materials, particularly external to buildings, where possible;
- Operatives should be trained to employ appropriate techniques to keep site noise to a minimum and should be effectively supervised to ensure that best working practices in respect of noise reduction is followed;
- Appropriate housekeeping including closing doors and windows of buildings housing operational waste processing equipment to minimise noise emissions.

4.3.2 The site layout has been designed by the operator to minimise noise impacts on nearby receptors, including considering the heights and orientations of the proposed waste processing and storage areas (i.e., buildings) to reduce the amplification of noises in certain directions.

4.3.3 The new waste processing and storage activities will be undertaken within enclosed buildings which will attenuate noise considerably and limit noise emissions reaching receptors from the processing areas and other areas of site.

4.3.4 All plant and machinery will be maintained following the manufacturer's specifications, to ensure the smooth and effective running of the plant and to detect and fix any faults or defects which may increase noise or vibration emissions. All mobile plant and equipment are maintained in accordance with manufacturers specifications and are serviced at least annually or per the recommended maintenance schedule for that plant or equipment.

4.3.5 Mobile plant and equipment (e.g., forklifts) and site infrastructure are checked daily as part of daily site checks. Anything that is found damaged or identified as defective during the site inspection will be reported to site management and fixed or replaced as soon as practicable.

4.3.6 Trained operators of mobile plant and equipment (e.g., forklift drivers) will undertake checks of the plant/equipment at the start of every shift and ensure that any problems are rectified prior to using the equipment to prevent noise emissions from defective moving parts.

4.3.7 Any malfunction or breakdown leading to abnormal noise emissions during site operations will be dealt with promptly and operations will be modified or suspended until normal working conditions can be restored.

4.3.8 All site staff and contractors will receive a site Induction covering noise and vibration awareness and how to report noise and vibration emissions.

4.3.9 Any new/replacement plant will be selected to meet all legislation and statutory guidance on minimising noise levels and maintained to reduce noise emissions where possible.

4.4 Appropriate Measures /Best Available Techniques

4.4.1 Table 3 provides actions and procedures which will be in place to achieve appropriate measures/ best available techniques:

Table 3: Actions and procedures which will be in place to achieve appropriate measures / best available techniques (BAT)

Activity which produces noise	Operational Hours / days	Control measures (Appropriate Measure / BAT)	Potential Contribution to overall impact	Action taken if outside optimum process parameters
Waste Shredders	07:00 – 19.00; Mon to Sat	Located within a building. Doors will be kept closed. Plant will be operated by trained staff and maintained in line with the manufacturer's recommendations. Noise levels will be a consideration in purchasing new equipment with quieter models used where cost effective. Daily visual inspection, yearly full mechanical inspections, trained staff using equipment. Regular toolbox sessions on standard procedures. Regular site walks by site mangers checking on procedures.	high	Cease operation and investigate reasons for elevated sound levels.
Forklift truck	07:00 – 19.00; Mon to Sat	White noise reversing alarms to be used on forklift trucks instead of tonal "beep"	medium	investigate reasons for elevated sound levels.
Scrubber fans	24hrs per day	Regularly inspected and maintained as per manufacturers specifications to reduce noise from worn parts.	low	investigate reasons for elevated sound levels.
Roller shutter doors	07:00 – 19.00; Mon to Sat	Regularly inspected and maintained as per manufacturers specifications to reduce noise from worn parts.	low	investigate reasons for elevated sound levels.
Heat exchangers	24hrs per day	Plant will be operated by trained staff and maintained in	low	investigate reasons for elevated sound levels.

		line with the manufacturer's recommendations. Noise levels will be a consideration in purchasing new equipment with quieter models used where cost effective.		
Air blast coolers	24hrs per day	Plant will be operated by trained staff and maintained in line with the manufacturer's recommendations. Noise levels will be a consideration in purchasing new equipment with quieter models used where cost effective.	low	investigate reasons for elevated sound levels.
Compressors	24hrs per day	Plant will be operated by trained staff and maintained in line with the manufacturer's recommendations. Noise levels will be a consideration in purchasing new equipment with quieter models used where cost effective.	low	investigate reasons for elevated sound levels.
Aeration system located inside bioreactors or tanks;	24hrs	Located inside bioreactors or tanks; Plant will be operated by trained staff and maintained in line with the manufacturer's recommendations. Noise levels will be a consideration in purchasing new equipment with quieter models used where cost effective.	low	investigate reasons for elevated sound levels.
Material movement by CAT 950 loading shovel or similar	07:00 – 19.00; Mon to sat	Mostly operating within a building. Doors will be kept closed when not in use. Plant will be operated by trained staff and maintained in line with the manufacturer's recommendations. Noise levels will be a consideration in purchasing new equipment with quieter models used where cost effective. Daily visual inspection, yearly full mechanical inspections, trained staff using equipment. Regular toolbox sessions on standard procedures.	medium	investigate reasons for elevated sound levels.

5.0 MONITORING & ACTION PLAN

5.1 Overview

5.1.1 To ensure that the noise control measures set out in **Section 4.0** are being effective, the Operator will ensure routine noise monitoring is undertaken as part of daily site checks and that communication with potential receptors is maintained.

5.1.2 This Noise Management Plan forms part of the site's Integrated Management System (IMS) and will be reviewed and updated accordingly. The IMS includes procedures for managing external complaints. The application of these procedures for handling noise complaints are detailed in Section 6.

5.2 Routine Noise Monitoring

5.2.1 The IMS includes a range of monitoring and recording procedures, including the following activities, which are regularly undertaken to ensure continuous improvement:

- Daily site checks by the Site manager (or deputy);
- Site audits conducted by the company's management;
- Site audits and inspections by the Environment Agency and other regulators.

5.2.2 All site personnel will be responsible for reporting any noise problems immediately to the site manager (or deputy).

5.2.3 Noise monitoring on site will be undertaken by trained site personnel specifically trained to listen out for noise, which may be extended to outside the site perimeter following a substantiated noise complaint and the noise monitoring would be in the direction of the complaint.

5.2.4 On a daily basis, routine noise monitoring will be undertaken as part of daily site checks whilst the site is operational. All routine noise monitoring and the monitoring results will be recorded as per management system procedures. Proposed monitoring at or beyond the permit boundary are shown on drawing Noise and Dust Monitoring Plan

5.2.5 If elevated noise levels are identified during the daily site checks, the Site Manager (or deputy) will attempt to identify the source of the elevated noise, for example:

- Off-site sources such as traffic;
- Local industrial operations (on neighbouring sites or in the local vicinity);
- Site operations.

5.2.6 If the elevated noise levels are considered to possibly be attributed to site operations, then the steps detailed in Section 5.3 below will be followed.

5.3 Additional Noise Monitoring

5.3.1 Additional noise monitoring on- and off-site will be undertaken following any noise complaints received at the site, or if site staff identify any potential concerns around noise during site checks or at any other time during operational hours. Additional noise monitoring may also be undertaken by site staff if there are any significant changes to operations that could give rise to noise (e.g. new or different plant or machinery) such as checking for noise outside permit boundary whilst the new plant is operational.

5.3.2 Noise monitoring will be undertaken by site staff trained to listen out for noise where applicable, including how to use hand-held noise monitors that can record both instantaneous noise (right at that moment) and for longer period of time (such as over the course of 5 minutes), whichever the Operator deems appropriate. The training of site staff will be conducted by a qualified acoustic consultant in the use of hand-held monitors and noise perception techniques. All training will be recorded in accordance with the IMS.

5.3.3 Monitoring points for noise on-site will be around the site, targeting noisiest operations, and off-site immediately outside the site perimeter, particularly between active site operations and the closest sensitive receptors. See Noise and Dust Monitoring Plan ref. 5827-CAU-XX-XX-DR-V-1810 for the location of the monitoring points.

5.3.4 If a complaint(s) is received, and it is substantiated, then noise monitoring will also be undertaken as soon as possible after receiving the complaint when the site operations are nosiest, such as during active tipping in waste storage areas or shredding within the Waste Processing 03 building. Noise monitoring will aim to be undertaken at the same time of day during normal operations as when the complaint was recorded.

5.3.5 Background noise levels will also be recorded at the time (e.g. when there is a lull in active operations or when they have been stopped). If required, off-site monitoring may also include monitoring for noise directly at the closest sensitive receptor location and determining whether the noises are intrusive at this location above background levels (which are stated in the Noise Impact Assessment).

5.4 Noise Action Plan

5.4.1 Elevated levels of noise may be identified either by receipt of a noise complaint from a third party suggesting that there is excessive noise from the site, or by detection of noise as a result of the routine monitoring by site personnel. This section details the contingency measures in place to identify the source of elevated noise levels, bring noise levels back under control and minimise their impact.

5.4.2 If noise is detected to be an issue at the site during routine noise monitoring, or if a noise complaint is received and this is judged to be a moderate or unacceptable noise impact, then the Site Manager and Management Team will be informed immediately, and corrective actions will be determined and implemented.

5.4.3 Additional on-site noise monitoring and potentially off-site noise monitoring at nearby sensitive receptors may be undertaken where deemed necessary by Site Management to determine the cause of the noise and the impact on nearby sensitive receptors.

5.4.4 The Operator recognises that persistent noise can be a concern for neighbours and particularly for residential areas. Every complaint is a trigger for management to take action to investigate the cause of a complaint.

5.4.5 The site will have a legible signboard giving contact details for the Environment Agency and the Operator. These numbers can be used to make a complaint. All complaints will be treated seriously by the Operator and recorded.

5.4.6 As part of any noise complaint investigation, the Site Manager will ensure that:

- The complaint is investigated to identify the cause, and if necessary, this may involve direct communication with the complainant;
- In the event of elevated noise being detected, the source of the noise will be identified and if required, the activity stopped until control measures can be implemented. If the noise is due to the presence of 'abnormal' on-site activity, then this is assessed and if necessary, preventive action is taken that will prevent a reoccurrence of the same problem;
- The complainant will be contacted and given information on the investigations conducted and actions taken as appropriate;
- All complaints are reported to the Site Manager, recorded on the FCC EcoOnline database and discussed at site meetings;
- If the investigation indicates that the complaint has not been justified, this will be clearly recorded on the incident report. All complaints will be logged.

5.5 Elevated Noise Levels

5.5.1 If any elevated levels of noise are identified, the following procedure will be implemented:

- The Site Manager will investigate the source of the noise and carry out a range of checks at the identified source of the elevated levels if it is found to be operating within the site. As part of these checks, the site manager will consider the need for quantitative noise monitoring around the site and at nearby receptors.
- The results of any noise monitoring will determine whether the site is causing an unacceptable impact at the receptor(s) in question.
- Site operations creating the unacceptable noise impact will be reduced to acceptable levels or cease operations until the reasons for elevated sound levels are ascertained and remediated.

- The Site Manager will then ensure that the relevant plant is being operated to the manufacturer's specification, and within the requirements of this management plan and ensure that any improvements required to minimise the noise levels are made.
- Further monitoring will be undertaken to ensure that improvements are effective and if necessary, remedial action will continue until noise levels are deemed acceptable. This may include the replacement of any equipment identified as the cause of the unacceptable noise levels, if remedial measures prove ineffective.

5.5.2 If operational failings are identified, the re-training of employees will take place to ensure that all employees operate to the required standards. If the failings are identified as part of the operating techniques, then the problem will be raised as part of the review of control measures and the Management System.

6.0 COMPLAINTS REPORTING

6.1 Engagement with the Community

6.1.1 As part of this Noise Management Plan, engagement with the local community will be undertaken.

6.1.2 Typically, any complaints received at the site are likely to be through the Environment Agency or Local Authority, although the operator is willing to deal directly with the complainants and where necessary the following can be implemented:

- Information can be provided to the local community (via the Local Authority) regarding the point and method of contact for the site in the event that noise from the site has been detected or they want to discuss any activities at the site;
- Complainants can be advised that any complaints/concerns will be addressed immediately following identification/notification and contingency action measures implemented;
- Complainants can be advised of any corrective action and a follow up call carried out by the Site Manager if required.

6.1.3 Where it is confirmed that the complaint has been made to the Operator only, the EA will be notified by email, together with the findings and any actions taken as a result of the complaint.

6.1.4 The primary point of contact at the site for complaints and liaison with the local community is the Site Manager, who will ensure that the recording, investigation and close-out of any complaints is undertaken as described below and in accordance with integrated management system procedures. Typically, feedback for noise complaints will be provided to the complainant by the Site within 48 hours of receiving the complaint.

6.2 Reporting of Complaints

6.2.1 In the event of a noise complaint being received by the Local Authority, the complaint is passed to the Operator for investigation and recorded. Each complaint record will include the following information:

- Date and time of complaint;
- Extent of complaint;
- Meteorological conditions at time of complaint;
- The complainant's contact details including name and contact telephone;
- Name of person filling out the details;
- Action taken to resolve complaint or investigate complaint further;
- Depending on the severity, the complaint can be escalated to senior management for even further investigation if necessary.

6.2.2 Any complaints received directly by the site or via the regulatory bodies, will be recorded as per the 'IMS-PRO-017 Environment Incident Near Miss Complaint and CAR or CAS Reporting Procedure'. If required, noise monitoring at the location of the complaint and on-site will be undertaken to determine the extent and location of the noise and the source of the noise. If necessary, monitoring will also be carried out at the nearest sensitive receptors to the site and the monitoring results recorded.

6.2.3 Where it is confirmed that the complaint has been made to the Operator only, the EA will be notified by email, together with the findings and any actions taken as a result of the complaint.

6.2.4 If a number of complaints are received at the site for noise, then the matter will be escalated and a further review of the site operations, cause of the noise and remedial actions will be carried out by Site Management or their nominated deputy. If necessary, site operations will be stopped, where appropriate, in order to allow for noise emissions to cease and possible causes to be identified. All complainants will be informed of actions taken and whether this has improved the situation.

6.3 Management Responsibilities

6.3.1 Any significant noise emissions occurring with the potential to travel beyond the site boundary will be reported to the Site Manager/designated person who will be responsible for investigating the cause and taking immediate action to minimise further emissions.

6.3.2 Site management (or designated persons) will also be responsible for daily checks of noise which will be carried out as part of their normal operational procedures. In particular, this is in relation to:

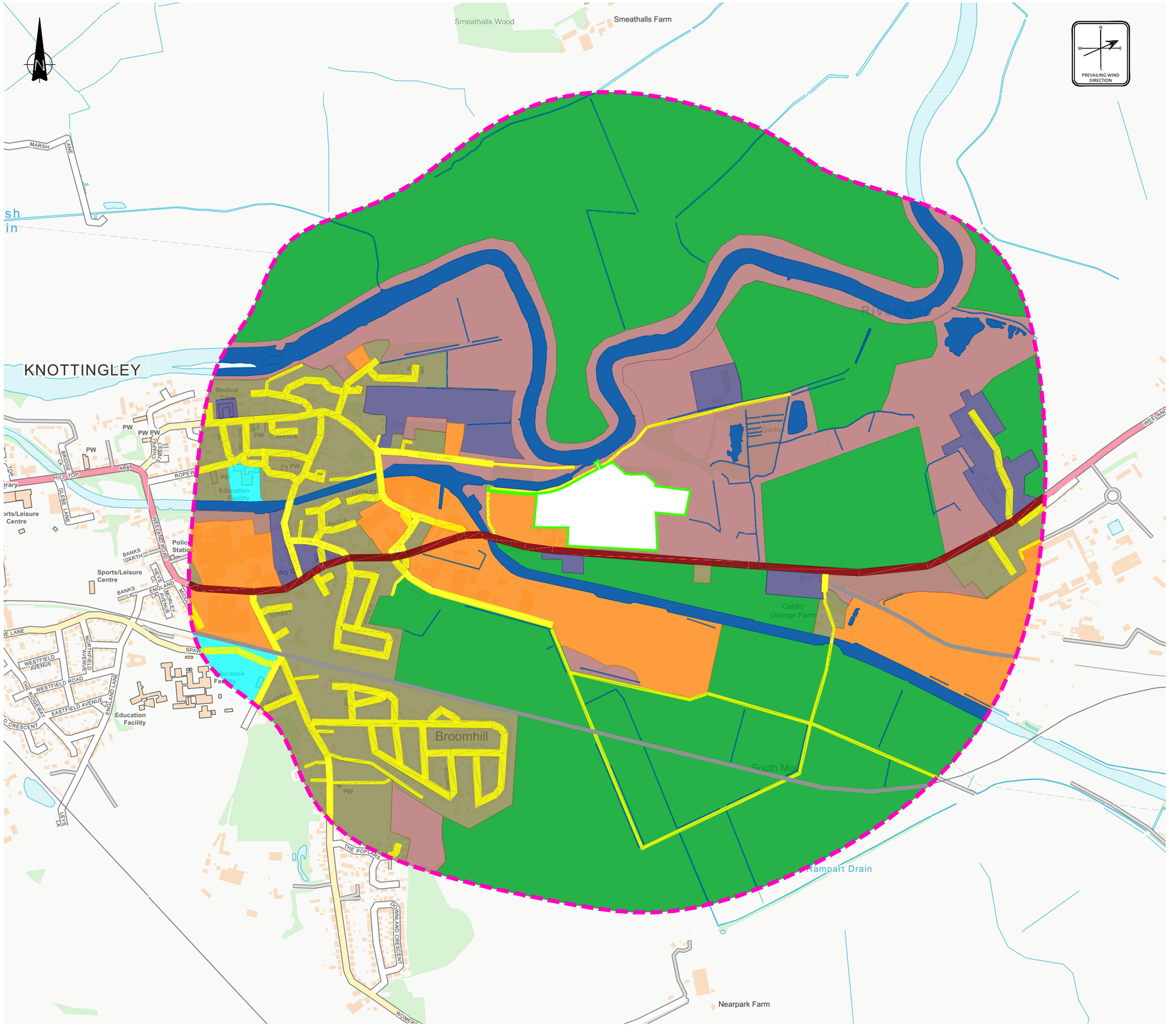
- Any part of the site where movement of vehicles or operation of mobile plant may generate excessive noise;
- Transport and handling of material on-site.

6.3.3 If a complaint regarding noise emissions is received, this will be recorded and any corrective and preventative actions also will be recorded.

6.3.4 Complaints will be handled by the Site Manager, who will ensure that the recording, investigation and close-out of any complaints is undertaken as described above and in accordance with management procedures.

DRAWINGS

5827-CAU-XX-XX-DR-V-1800	Sensitive Receptor Plan
5827-CAU-XX-XX-DR-V-1804	Site Layout Plan
5827-CAU-XX-XX-DR-V-1810	Noise and Dust Monitoring Plan
5827-CAU-XX-XX-DR-V-1811	Traffic Movements



LEGEND

- PERMIT BOUNDARY
- 1000m OFFSET
- SURFACE WATER
- WOODLAND / SCRUBLAND
- COMMERCIAL / LEISURE
- EDUCATIONAL FACILITY
- INDUSTRIAL
- RESIDENTIAL
- MAJOR ROAD
- MINOR ROAD
- RAIL

REV					
P03	LEGEND UPDATED	EJD	JC	JC	06.08.25
P02	PERMIT BOUNDARY UPDATED	EJD	JC	JC	09.07.25
P01	ISSUED FOR INFORMATION	EJD	ER	ER	16.04.24
REV	MODIFICATIONS	BY	RE	AP	DATE

PURPOSE OF ISSUE: FOR INFORMATION

STATUS: S2

CLIENT: FCC Environment

PROJECT:

KNOTTINGLEY WASTE TO RESOURCE FACILITY

TITLE:

SENSITIVE RECEPTOR PLAN

DESIGNED BY	DRAWN BY	REVIEWED BY	AUTHORISED BY
EJD	EJD	ER	ER

DATE	SCALE @ A3	JOB REF:	REVISION
16.04.2024	1:10000	5827	P03

DRAWING NUMBER: 5827-CAU-XX-XX-DR-V-1800

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RIVER AIRE

DISCHARGE

STOCKING LANE

TRUNDLES LANE

Surface Water Storage

Waste Processing 07

INT 01

EP07

P07-ZP-01

Sewer Connection

Effluent

Waste Processing 02

EP02

P02-ZP-01

Waste Storage 02
(packaged only)

S02-ZS-01

General Storage 01

GS1-OS-01

General Storage 02

GS1-ZS-02

Packaged
Waste
Offloading
Area

Tanker
Holding
Area

Waste Processing 06

INT 02

EP26

EP06

EP16

P06-ZP-11

P06-ZP-21

P06-ZP-31

Surface Water Storage

INT 03

Waste Processing 03

EP03

P03-ZP-01

Waste Storage 01

S01-OS-01

Reception
Area

EP05

Diesel

EP11 EP01

Waste Processing 01

P01-ZP-01

Weighbridge

Waste Processing 05

P05-ZP-01

EP08

B01-ZP-01

EP18

B01-ZP-02

Boiler Complex

MANOEUVRING

FIRE TANK

SUB

SUB

PUMP HOUSE

YE Equipment
Transformer

Switchroom

Weighbridge

Switchroom
Transformer
YE Equipment

Offices and Labs

EP14

EP24

EP04

INT 04

P04-ZP-01

WEELAND ROAD

Gas Main

Water Main

Waste Processing 04

Water Main

NOTES

1. DO NOT SCALE FROM THIS DRAWING, WORK FROM FIGURED DIMENSIONS ONLY. ALL DIMENSIONS ARE IN METRES AND ALL LEVELS ARE IN METRES ABOVE ORDNANCE DATUM UNLESS NOTED OTHERWISE.

2. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTS, ENGINEERS AND SPECIALIST DRAWINGS AND SPECIFICATIONS.

LEGEND

- OWNERSHIP BOUNDARY
- PERMIT BOUNDARY
- H — HYDRANT

REV	MODIFICATIONS	BY	RE	AP	DATE
P03	LEGEND AMENDED	EJD	JC	AS	06.08.25
P02	HYDRANTS ADDED TO DRAWING	EJD	JC	AS	28.07.25
P01	ISSUED FOR INFORMATION	EJD	JC	AS	10.07.25

CLIENT: FCC Environment

PROJECT: KNOTTINGLEY WASTE TO RESOURCE FACILITY

TITLE: PERMIT BOUNDARY PLAN

PURPOSE OF ISSUE			STATUS
FOR INFORMATION			S2
DESIGNED BY	DRAWN BY	REVIEWED BY	AUTHORISED BY
EJD	EJD	JC	AS
DATE	SCALE @ A1	JOB REF:	REVISION
10.07.2025	1:750	5827	P03

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2. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTS, ENGINEERS AND SPECIALIST DRAWINGS AND SPECIFICATIONS.

LEGEND

- OWNERSHIP BOUNDARY
- PERMIT BOUNDARY
- BUILDINGS
- ND — NOISE AND DUST MONITORING LOCATION

REV	MODIFICATIONS	BY	RE	AP	DATE
P01	ISSUED FOR INFORMATION	EJD	JC	AS	21.04.26

CLIENT: FCC Environment

PROJECT: KNOTTINGLEY WASTE TO RESOURCE FACILITY

TITLE: NOISE AND DUST MONITORING PLAN

PURPOSE OF ISSUE	STATUS
FOR INFORMATION	S2

DESIGNED BY	DRAWN BY	REVIEWED BY	AUTHORISED BY
EJD	EJD	JC	AS

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DRAWING NUMBER: 5827-CAU-XX-XX-DR-V-1810

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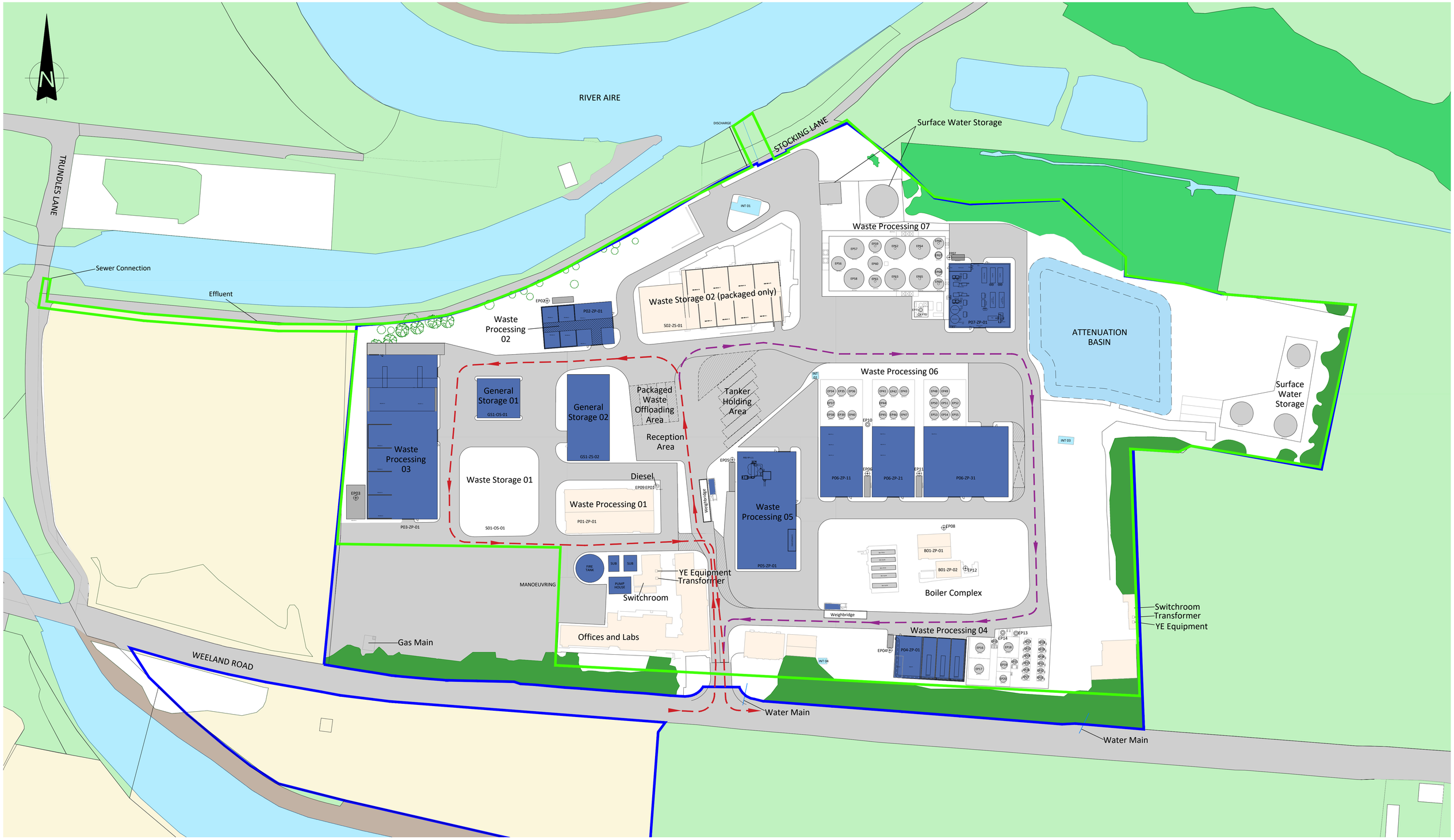

NOTES

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2. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTS, ENGINEERS AND SPECIALIST DRAWINGS AND SPECIFICATIONS.

LEGEND

- OWNERSHIP BOUNDARY
- PERMIT BOUNDARY
- TRAFFIC MOVEMENT (LEFT LOOP)
- TRAFFIC MOVEMENT (RIGHT LOOP)

REV	MODIFICATIONS	BY	RE	AP	DATE
P01	ISSUED FOR INFORMATION	EJD	JC	AS	22.04.26

CLIENT: FCC Environment

PROJECT: KNOTTINGLEY WASTE TO RESOURCE FACILITY

TITLE: TRAFFIC MOVEMENT PLAN

PURPOSE OF ISSUE	STATUS
FOR INFORMATION	S2

DESIGNED BY	DRAWN BY	REVIEWED BY	AUTHORISED BY
EJD	EJD	JC	AS

DATE	SCALE @ A1	JOB REF:	REVISION
22.04.2026	1:750	5827	P01.01

DRAWING NUMBER: 5827-CAU-XX-XX-DR-V-1811

DRAFT

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APPENDIX 1

Noise Impact Assessment and Model Files

Caulmert
engineering environmental planning

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