AC ENVIRONMENTAL CONSULTING

# Noise & Vibration Management Plan

**Eurokey Recycling Ltd**

Unit 1, Linthorpe Way, Kettering, NN14 1EZ

**April 2021**


**Eurokey Recycling Ltd**

Ref: EK.PT.NVMP.2004

AC Environmental Consulting Ltd,

Environment House,

Werrington Road,

ST2 9AF

| Reference & Revision | Issue | Prepared | Approved |
|---|---|---|---|
| **EK.PT.NVMP.2004** | First Issue | LS | DA |
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| | | | |
| | | | |

# CONTENTS

# 1. INTRODUCTION

This is the noise and vibration management plan for the Eurokey Recycling Ltd site located at Unit 1, Linthorpe Way, Kettering, NN14 1EZ.

This noise and vibration management plan details noise levels, mitigation measures, monitoring, communication, and complaint procedures.

The objective of this plan is to provide a framework for site activity noise and vibration management to ensure that noise and vibration levels do not impact on neighbouring buildings.

## 1.1 Contact Details

| Role | Name | Organisation | Phone | Email |
|---|---|---|---|---|
| Environmental Adviser | D. Alcock | AC Environmental | 01782 308444 | david@ac-environmental.co.uk |
| Public Complaint | Compliance Manager | Eurokey Recycling Ltd | 07872 198295 | mark@eurokeyrecycling.com |

The Environmental Advisor and Site Manager will be responsible for ensuring that this noise and vibration management plan is correctly implemented.

All site personnel will be required to read and sign the noise and vibration induction form provided in Section 12. If required, specific training will be provided for site personnel.

## 1.2 Overview

The site is located within the industrial Cransley Park, which is bordered by open fields to the north, south and west, with the town of Kettering to the east. The A43 runs along the south of the Park and the A14 runs to the east between the Park and the town of Kettering.

The site It is the intention that Unit 1 be used specifically as a plastic waste recycling facility operating in two phases. Phase one will occur between 2021 and 2022 where the site will accept an annual tonnage of 30,000 tonnes per annum. After the first year, phase two will commence and the site will accept up to 75,000 tonnes per annum. Waste is delivered to one of the six roller shutter doors on the eastern façade of Unit 1 and will then undergo processing including the shredding of plastic to feed onto a series of conveyors and screens which will then be stored, the use of optical sorters for sortation, and balers for the baling of plastics.

Once processed, the waste is stored either in a storage bay within the Unit or in one of the 5 trailers in the external yard. There will be only 5 trailers in the designated area shown on Drawing Ref: 200601E101 at any one time. No hazardous waste is accepted or stored on site.

The site will accept deliveries of waste between the hours of 08.00 – 17.00 Monday to Saturday, and the site will be operational to process waste 24 hours Monday to Saturday.

## 1.3 Site Activities and Equipment

The site layout is designed to ensure freedom of movement. Waste is brought onto site by third party vehicles. The site will accept deliveries of waste between the hours of 08.00 – 17.00 Monday to Saturday, and the site will be operational to process waste 24 hours Monday to Saturday. Upon arrival, the waste vehicles will drive over the weighbridge located at the site entrance prior to delivering the waste to one of the six roller shutter doors at the loading dock on the eastern façade of the Unit building. The waste is then immediately sorted and segregated predominantly by machinery and with the assistance of mobile plant and stored in one of the assigned storage bays prior to processing or one of the bunkers prior to baling. Mobile plant on site consists of electric and diesel forklift trucks. Prior to baling by the automatic conveyor system, waste is stored in temporary bunkers that can hold up to 1.5 tonnes of waste at any one time in loose stockpiles. All stockpiles within the Unit will be separated either by a 6m separation distance or by a firewall.

All processing of waste occurs indoors within the Unit and consists of shredding of plastic to feed onto a series of conveyors and screens which will then be stored, the use of optical sorters for sortation, and balers for the baling of plastics. The Unit also contains the plant storage area and an office block to the north of the building.

Once processed, the waste is stored either in a storage bay within the Unit or in one of the 5 trailers in the external yard. There will be only 5 trailers in the designated area shown on Drawing Ref: 200601E101 at any one time. Waste is stored in the trailers for only a matter of hours prior to being removed from the site.

## 2. CRITERIA

For industrial sources of noise, BS4142:2014 – Rating Industrial Noise Affecting Mixed Residential and Industrial Areas is normally referenced. This British Standard describes a method for assessing whether a specific sound may have an adverse impact.

The Standard requires that the ambient noise (*totally encompassing sound in a given situation at a given time, usually composed of sound from many sources near and far*) including the "specific" sound from the source in question is measured in terms of the equivalent continuous sound level LAeq, which is then corrected for the residual sound (total LAeq excluding the "specific" sound).

A correction for character is made if "*a tone, impulse or other characteristic occurs*" and for intermittency, as shown below.

| **Commercial/industrial** | **Perceptibility** | | |
|---|---|---|---|
| **noise characteristic** | **Just perceptible** | **Clearly perceptible** | **Highly perceptible** |
| **Tonality** | +2 | +4 | +6 |
| **Impulsivity** | +3 | +6 | +9 |
| **Intermittency** | 0 | +3 | +3 |
| **Other sound characteristics** | 0 | +3 | +3 |

The final figure, including any character correction is known as the Rating level.

This Rating Level is then compared with the measured background [LA90] level. The greater this difference the greater the likelihood of "adverse impact" (See Notes 1 & 2 from BS4142:2014 below).

*"NOTE 1*

*a) Typically, the greater this difference, the greater the magnitude of the impact.*

*b) A difference of around +10 dB or more is likely to be an indication of a significant adverse impact, depending on the context.*

*c) A difference of around +5 dB is likely to be an indication of an adverse impact, depending on the context*

*d) The lower the rating level is relative to the measured background sound level, the less likely it is that the specific sound source will have an adverse impact or a significant adverse impact. Where the rating level does not exceed the background sound level, this is an indication of the specific sound source having a low impact, depending on the context.*

*NOTE 2*

*Adverse impacts include, but are not limited to, annoyance and sleep disturbance. Not all adverse impacts will lead to complaints and not every complaint is proof of an adverse impact."*

It can be seen from Section 3.3 above that the conclusions to a BS4142 assessment also depend on the context and Section 11 of the British Standard states:

*"Where the initial estimate of the impact needs to be modified due to the context, take all pertinent factors into consideration, including the following...*

*3) The sensitivity of the receptor and whether dwellings or other premises used for residential purposes will already incorporate design measures that secure good internal and/or outdoor acoustic conditions, such as:*

*i. facade insulation treatment;*

*ii. ventilation and/or cooling that will reduce the need to have windows open so as to provide rapid or purge ventilation; and*

*iii. acoustic screening."*

The Noise Impact Assessment Ref: Eurokey Kettering 01 that was undertaken in April 2021 revealed the predicted noise levels from the internal and external operations that would be experienced by the nearest residential properties. The nearest residential properties are located to the south of the site; approximately 110m from the Unit and 170m from the loading bay.

During the time that the Noise Impact Assessment was undertaken, the site was not yet in use. The noise levels have been calculated based on previous noise assessments that were completed for the original planning permission Ref: KET/2015/0911 which was granted in 2015.

The anticipated noise levels predicted to be experienced by the nearest residential housing from the internal operations at the site are 92dBA. It is crucial to note that the building is expected to provide -30dBA of noise reduction, and therefore, with distance correction added, the nearest residential housing would experience 37dBA from the internal operations (92 – 30 – 25 = 37dBA). The anticipated

noise levels predicted to be experienced by the nearest residential housing from the external yard operations would be between 38 to 47dBA at a distance of 170m.

## 3. VIBRATION

BS 6472-1:2008 *Guide to evaluation of human exposure to vibration in buildings*. Vibration sources other than blasting provides the best available information on the application of methods of measuring and evaluating vibration in order to assess the likelihood of adverse comment.

## 4. HOURS OF OPERATION

The site's operating hours are as follows:

Monday – Saturday: 24 hours

Bank Holidays: 24 hours

Sundays: Closed

The site's waste delivery acceptance hours are as follows:

Monday – Saturday: 08.00 – 17.00

Bank Holidays: 08.00 – 17.00

Sundays: Closed

## 5. SOURCES OF NOISE

The BS4142 assessment Ref: Eurokey Kettering 01 highlighted that the nearest residential properties are located approximately 110m from the Unit and 170m from the loading bay. The assessment detailed that a typical lower night-time level is around 40dBA from the 2005 data from the original planning permission. The data from 2015 from the previous planning permission was then also considered due to the likely increase in traffic, which the 2015 data reflected. The assessment used 40dBA for the impact calculations for night-time levels as a worst case scenario, and 52dBA for daytime levels.

During the time that the Noise Impact Assessment was undertaken, the site was not yet in use. The noise levels have been calculated based on previous noise assessments that were completed for the original planning permission Ref: KET/2015/0911 which was granted in 2015.

The anticipated noise levels predicted to be experienced by the nearest residential housing from the internal operations at the site are 92dBA. The anticipated internal noise levels were based on the proposed plant noise data that was provided by the client. It is crucial to note that the building is expected to provide -30dBA of noise reduction, and therefore, with distance correction added, the

nearest residential housing would experience 37dBA from the internal operations (92 – 30 – 25 = 37dBA). The anticipated noise levels predicted to be experienced by the nearest residential housing from the external yard operations would be between 38 to 47dBA at a distance of 170m. Again, the anticipated external noise levels were based on the forklift truck noise data that was provided by the client.

The assessment highlighted that they key source of noise at the location of the site is road traffic. When the survey was undertaken, the A43 which runs along the south of the site, was noticeably busy between the hours of 6am and 7am on a Saturday. This indicates that it will be significantly busier on weekdays, and therefore producing higher noise levels. The A43 noise levels will have a masking effect on the noise produced by the site. The nearest residential housing is located on the A43.

The assessment concludes that the internal plant noise levels and the electric forklift truck movements are considered to be of a low impact on the nearest residential properties. It is crucial to note that the forklift trucks may be out of the line of sight of the residential properties which will further reduce the risk of noise pollution. The diesel forklift trucks are predicted to be of low impact to the nearest residential properties during the daytime. However, at night there is an increased risk of them having an adverse impact.

To mitigate the adverse impacts on the nearest residential housing located 110m from the Unit, night-time activities must be regulated, and doors and windows should remain closed amongst additional mitigation measures detailed in Table 5.1 below. Further detail on how to mitigate adverse noise impacts on the nearest residential properties is given in Section 8.

Table 5.1 Sources of Noise

| Ranking | Activity | Mitigation |
|---|---|---|
| **1** | Internal plant | All internal plant operations will be enclosed within the building and have anticipated noise level of 92dBA on the nearest receptor. The building itself however will provide -30dBA of noise attenuation. With distance correction considered (25dBA) the resultant noise level from the internal plant will be 37dBA.<br>Windows and doors will remain shut at all times deemed appropriate. Site management will patrol the site daily to enforce this. The loading bay roller shutter doors will only remain open when accepting deliveries. |

| | | |
|---|---|---|
| **2** | External plant | The predicted noise levels from the external yard operations would be between 38 to 47dBA at a distance of 170m from the residential housing. The electric forklift trucks will be of low impact; however, the diesel forklift trucks may have an adverse impact at night.<br>Diesel forklift trucks will not be used after 11pm. External yard activities will also be reduced beyond 11pm. The site will not accept deliveries after 5pm Monday – Saturday which will contribute to the reduction of noise at night-time on site. |
| **4** | Deliveries of Waste | Vehicles accessing site are restricted to 5mph at all points within the site. This speed limit is communicated to staff through induction training and reinforced via toolbox talks. Visiting drivers have site induction training annually which includes the speed limit requirement and the reasons for this.<br>Waste will not be dropped or tipped. It will be lifted from the articulated lorries in the loading bay using the forklift trucks and placed into the bays or bunkers within the Unit prior processing.<br>Waste deliveries will only occur within the stated hours of 08:00 – 17:00 Monday – Saturday. |
| **5** | Site Traffic | Site speed limit of 5mph introduced and to be strictly enforced.<br>Progressive repairs to surfaces are undertaken to reduce vibration of plant and noise from metal/metal impacts on vehicles.<br>Visiting drivers are to be inducted and site staff to be informed of the requirements. Staff to be trained via toolbox talks. Site management shall monitor traffic speeds and resulting noise and strictly enforce the speed limit.<br>Waste delivery traffic will only occur within the stated hours of 08:00 – 17:00 Monday – Saturday. |

## 6. POTENTIAL RECEPTORS

Due to the site being located on a purpose built industrial estate in a rural location, there is one noise sensitive receptor in the form of residential housing in the general vicinity of the site. The residential properties are located approximately 110m from the Unit, and 170m from the loading bay to the

south. The location of the sensitive receptor in relation to the Unit is shown in Figure 6.1 below using a green dot.

The anticipated noise levels predicted to be experienced by the nearest residential housing from the internal operations at the site are 92dBA. It is crucial to note that the building is expected to provide -30dBA of noise reduction, and therefore, with distance correction added, the nearest residential housing would experience 37dBA from the internal operations (92 – 30 – 25 = 37dBA). The anticipated noise levels predicted to be experienced by the nearest residential housing from the external yard operations would be between 38 to 47dBA at a distance of 170m.

Figure 6.1 Sensitive Receptors


There are additional residential properties to the east within 0.5-1km of the site in Kettering. There is also Hall Meadow Primary School located to the south east of the site. The aforementioned properties are considered at a sufficient distance such that detailed assessment is not required.

## 6.2 Noise Monitoring Locations

The noise monitoring positions are located at the residential properties to the south of the site on the A43, and within and around the Unit. Due to the site being located on a purpose built industrial estate in a rural location, there are no other sensitive receptors in the immediate area.

## 6.3 Vibration Monitoring Locations

Due to the nature of the operations on site, the vibration monitoring locations are the same as the noise monitoring locations mentioned above.

## 6.4 Vibration

It is not anticipated that ground-borne vibration will be an issue.

# 7. SITE DESIGN

The site layout is designed to ensure freedom of movement. Waste is brought onto site by third party vehicles. The site will accept deliveries of waste between the hours of 08.00 – 17.00 Monday to Saturday, and the site will be operational to process waste 24 hours Monday to Saturday. Upon arrival, the waste vehicles will drive over the weighbridge located at the site entrance prior to delivering the waste to one of the six roller shutter doors at the loading dock on the eastern façade of the Unit building. The waste is then immediately sorted and segregated by hand and with the assistance of mobile plant and stored in one of the assigned storage bays prior to processing or one of the bunkers prior to baling. Prior to baling by the automatic conveyor system, waste is stored in temporary bunkers that can hold up to 1.5 tonnes of waste at any one time in loose stockpiles. All stockpiles within the Unit will be separated either by a 6m separation distance or by a firewall.

All processing of waste occurs indoors within the Unit and consists of shredding of plastic to feed onto a series of conveyors and screens which will then be stored, the use of optical sorters for sortation, and balers for the baling of plastics. The Unit also contains the plant storage area and an office block to the north of the building.

Once processed, the waste is stored either in a storage bay within the Unit or in one of the 5 trailers in the external yard. There will be only 5 trailers in the designated area shown on Drawing Ref: 200601E101 at any one time. Waste is stored in the trailers for only a matter of hours prior to being removed from the site. There are shunt vehicles on site 24/7, therefore in the event of a fire, the fire can be contained within a single trailer as the trailer can be removed from the trailer storage area to the quarantine area immediately, where it is 6m away from other combustible stockpiles.

There will be water gate barrier deployment at each of the eight doors along the eastern façade of the Unit and along the site entrance for fire water containment or to protect the site from flooding. The site is surrounded by a steel mesh fence measuring 2.4m in height.

Further detail is shown on Drawing Ref: 200601E101 which is provided in Appendix 2.

# 8. MITIGATION

## 8.1 Noise Management Plan

It is crucial to minimise noise levels that have the potential to reach sensitive receptors by reducing the noise at its source, ensuring there is adequate distance between the source and the receiver, and using barriers between the source and the receiver. Due to the results from the Noise Impact Assessment Ref: Eurokey Kettering 01, nature of the site operations and location, the following general noise and vibration control measures have been implemented and will be monitored to ensure that staff carry out these measures at all times.

| Equipment/process | General noise control measures |
|---|---|
| **Mobile and fixed plant** | Only use required power and size of equipment. |
| **Mobile and fixed plant** | All waste processing plant will be operated within the Unit at all times. |
| **Mobile and fixed plant** | Diesel forklift trucks will not be used after 11pm. |
| **Mobile and fixed plant** | Engine exhausts shall be fitted with silencers. |
| **Mobile and fixed plant** | Operate equipment in a quiet and efficient manner. Waste will not be tipped or dropped, it will be picked up and placed by the forklift trucks. |
| **Mobile and fixed plant** | Plant shall not be left idling unnecessarily. |
| **Mobile and fixed plant** | All plant shall be inspected and maintained equipment. |
| **Mobile and fixed plant** | Endeavor to sequence work to provide respite periods. |
| **Mobile and fixed plant** | Schedule particularly noisy activities as late as possible in the morning and during hours when residents who work can be expected to be at work. Identify any particularly sensitive times for residents during consultation. |
| **Mobile and fixed plant** | Strictly enforce speed limits around site. Explain to staff the impact on noise of high speeds. Train staff on the requirements for strict compliance with this requirement via use of toolbox talks. |

| | |
|---|---|
| **Management** | Ensure that all plant is fitted with quiet, non-tonal reversing alarms. Any plant not so equipped shall be retro fitted with quiet non-tonal alarms. When plant is replaced choose plant with quiet, non-tonal reversing alarms, such as white noise alarms rather than high pitched bleepers. |
| **Management** | Yard activities will be curtailed after 11pm. |
| **Management** | Ensure all windows and doors are shut at all times deemed appropriate. The loading bay doors will only remain open when accepting waste. |
| **Management** | Construction noise and vibration management is included as part of site management practices and site training including site induction training. |
| **Management** | Instruct staff to keep building doors closed when not in use, reinforce this through training and take action to ensure the instruction is followed. |
| **Management** | There is a requirement that all staff will be provided with the information from this noise and vibration plan and will sign on receipt of the information. |
| **Management** | Routinely inspect surfacing for defects and damage and implement repairs as a matter of urgency to maintain smooth surface clear of large cracks and potholes. |
| **Management** | Management will hold regular toolbox talks / briefings on the subject. |
| **Site Traffic** | Waste deliveries will only be accepted during the stated hours of 08:00 and 17:00 Monday – Saturday. This will contribute to the reduction of noise production from external yard activities during the night-time. |

## 8.2 Purchasing

Future equipment purchasing policy will include consideration of the noise produced by equipment and the methods of work. Where a choice of methods or plant is available, the quieter will be chosen. Generally, manufacturers will include sound level output in the specifications of their equipment which site management will refer to.

Where vehicle-reversing alarms are used, because of their tone, site management will use adjustable or directional audible alarms in regard to future purchasing, or other alternative warning systems. For example, white noise alarms give a full spectrum of noise rather than a single tone, which is claimed to be as good as a single tone alarm at close range and at a distance it blends into the background. Reversing will be kept to a minimum.

## 8.3 Maintenance

Eurokey Recycling Ltd will ensure that regular and effective maintenance is carried out. This will contribute to greater efficiency in operation and reduce noise on site. Particular attention will be paid to mobile plant e.g. sufficient lubrication, the preventing of vibration from loose parts, engine noise and any acoustic enclosures.

## 8.4 Site Operations

It is crucial to note that there will be no waste tipping on site. Waste loads will be unloaded immediately upon arrival by the forklift trucks on site and then sorted and segregated by hand and with the assistance of mobile plant and stored in one of the assigned storage bays prior to processing or one of the bunkers prior to baling.

Where possible rubber or other suitable linings will be used to reduce the noise of impact where waste items are deposited (as identified by site management) e.g. into the trailers.

Within the constraints of efficient production, site management will limit the use of particularly noisy plant such as only using the trommel for half an hour rather than an hour. Also, site management will limit the number of items in use at any one time and starting plant and equipment one by one and switching off when not in use.

Site management will ensure that site staff avoid unnecessary revving of engines, reducing speed of vehicle movement, maintain roads to minimise vehicle noise; and pointing directional noise away from sensitive receptors where possible. Vehicle routes and surfaces will be kept smooth free from debris to prevent additional noise i.e. “crunching” and “cracking” as vehicles drive over the debris.

Site management will ensure that staff receive adequate information, instruction and training in regard to keeping levels of noise as low as possible on site with the use of screens, methods and avoiding impact. Site management will also use notices and signs to remind staff and visitors.

Training will be delivered through issuing site procedures, induction training and toolbox talks, and will include:

- Avoiding unnecessary revving of engines and switching off equipment when not required;

- Keeping internal routes well maintained;
- Avoiding impact noise;
- Avoiding reversing (reversing alarms);
- Utilising screens and barriers;
- Starting up plant and vehicles sequentially rather than all together.

## 8.5 Sequencing

The site manager will liaise with the local community to enable noisy operations to take place at times when they would have the least impact on the occupiers.

By implementing the above noise action plan and control methods, noise produced on site can be effectively managed and reduced.

# 9. MONITORING

Noise monitoring shall be conducted by the Site Manager on a daily basis. The monitoring will consist of a two stage process. In the first instance routine monitoring noise for noise will form part of the site inspection regime as described in the Site Management Plan and procedures.

- Site management will regularly patrol the site boundary and listen out for potentially problematic noise emanating from the site to ensure that the noise action plan is effective. Any additional action will be taken as necessary.
- Site management will regularly monitor the noise action plan below and ensure that staff are employing noise reduction techniques.

Noise monitoring will take place in response to a complaint and on 6 monthly intervals for a period of 2 years. Noise monitoring shall be carried out in accordance with the following plan.

1. Attended measurements by MIOA qualified acoustician in response to the issue and thereafter at further intervals to be determined in response to findings. Measurements will be LAeq 5 minute levels over 1 hour at 1m from the nearest façade for 2 years from the first measurement.
2. Sound level meter at a height of 1.2 to 1.5m at 1m from the façade – Cirrus Integrating Sound Level Meter (CR821B), Class 1 Group BS EN 61672-1:2003 (s/n C18361FE)) with windmuff. The meter will be calibrated before and after the measurements using a Cirrus calibrator type CR:551E (s/n 039816); the instrumentation will have been laboratory calibrated within the preceding 2 years.
3. Monitoring to occur during typical working hours.

4. Monitoring will be attended, and meteorological conditions will be logged.
5. Any 'pauses' for extraneous noise will be noted. Activities and events on site and off site will also be noted.
6. Report will note all information detailed above (electronic copy and hard copy if required)
7. Records of all incidents and monitoring shall be retained on-site and provided to the Waste Planning Authority and other regulatory bodies on request.

## 10. COMPLAINTS

The following procedure shall be followed for all noise complaints:

1. All noise and vibration complaints should be immediately directed to the Site Manager.
2. As soon as the complaint is received it will be recorded.
3. An initial response will be made and recorded. Depending on the nature of the complaint, the nature of the initial response could be to immediately cease the activity pending investigation. However, in some cases is might not be practicable to provide immediate relief. The complaint will be informed of actions taken. Contact details for the council will be available on site in case consultation with the Environmental Health Department is necessary.
4. Where the initial response does not address the complaint, further investigation, corrective action, and follow-up monitoring shall be undertaken as appropriate. The compliant and council will be informed of actions taken.
5. All actions will be recorded, and the complaint will then be closed.

## 11. DOCUMENTATION

A construction noise and vibration management file will be established. This document will be updated to identify who managed it and the location of the physical file and any copies. The construction noise and vibration management file will contain:

- Site survey summary sheet.
- Survey reports.
- Specialist contact details.
- This Noise & Vibration Management Plan and any revisions.
- Noise and vibration survey results.
- Complaints.

# 12. CONSTRUCTION NOISE & VIBRATION INDUCTION

1. There are a number of isolated residential areas in close proximity to the site. To ensure there is no adverse impact, all staff will be responsible for good noise and vibration management.
2. When arriving at work, please drive slowly on site and keep revs to a minimum. Keep stereos off and do not slam doors.
3. No shouting or swearing on site, either walk over and talk to somebody or use a radio/phone.
4. Be careful with tools and equipment. Place them down and do not drop them. Reduce “drop heights” to a minimum.
5. Do not drag materials on the ground. Place them down when you arrive at the work area.
6. Equipment and vehicles should not be left running when not in use.
7. When loading trucks try not to drop material from a height. Load softer material at the bottom.
8. Noise enclosures should always have all doors/hatches closed when the equipment is in use.
9. Locate mobile equipment away from residents.
10. All equipment is to be well maintained.
11. No noisy works shall be conducted outside the permitted hours.
12. If you see anything/anyone making unnecessary noise and vibration, then stop it/them immediately. If the source cannot be stopped then report it to the site manager.
13. It is essential that good relationships are maintained with the local community. Any queries from members of the public should be responded to politely and referred to the site manager. Staff shall assist the public to contact this person. Staff shall not enter into debate or argue with members of the public.
14. No potentially noisy work is to be conducted until all staff involved in the task have read or been provided with the information in this plan and signed the Noise & Vibration Management Plan induction form provided in Appendix 1.

# 13. SUMMARY

This Noise & Vibration Management Plan has been produced on behalf of Eurokey Recycling Ltd in order for the site to meet the requirements of an reassure the Environment Agency that the potential for noise produced from the onsite operations is mitigated and controlled in every possible way. The aim is to be granted an Environmental Permit to operate a plastic waste recycling facility in accordance with the Environment Agency guidelines.

The Noise & Vibration Management Plan aims to control any potential sources of noise impacts on the surrounding receptors, including several that are sensitive. All possible mitigation measures have been identified for each individual source of noise on site.

The Noise & Vibration Management Plan will be reviewed annually to ensure it is up to date or following a noise incident caused by the ineffectiveness of the plan.

# APPENDIX 1 – NOISE & VIBRATION INDUCTION FORM

*I HAVE READ AND UNDERSTAND FULLY MY RESPONSIBILITIES IN ASSISTING WILLSHEE'S SKIP HIRE LTD WITH IMPLEMENTING THIS NOISE AND VIBRATION PLAN:*

| Name | Sign | Date |
|---|---|---|
| | | |
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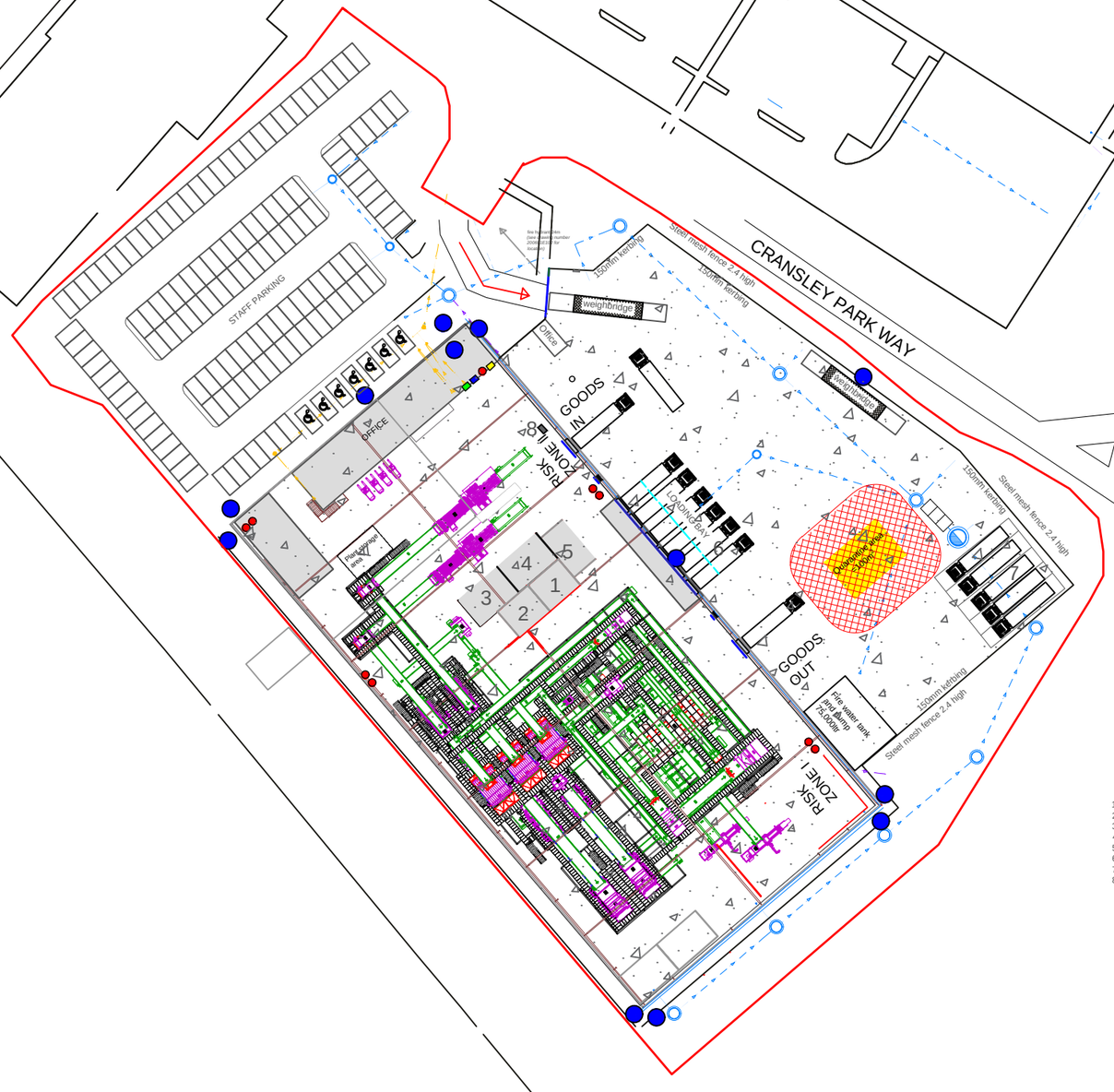
# APPENDIX 2 – DRAWING REF: 200601E101




Concrete surface

Permit Boundary

CCTV locations

Three stage interceptor

Foul water

Surface water gully

Storm drains

AFFF Fire Extinguisher

PPE Storage

Watergate Storage

Watergate deployment

Spill kit

Quarantine area (showing a 6m buffer zone)

AC ENVIRONMENTAL
Environment House
Werrington Road
Stoke-on-Trent
ST2 9AF

N

Proposed Flow Control Chamber

Proposed Class 1 Full Retention S (Product T B C)

1. Plastic storage - 6 x 7 x 4 = 168m³
2. Plastic output - 6 x 7 x 4 = 168m³
3. Plastic output - 9 x 6 x 4 = 216m³
4. Plastic output - 9 x 6 x 4 = 216m³
5. Plastic storage - 9 x 5 x 4 = 180m³
6. Loading bay - 6 x 110m³ = 660m³
7. Storage bay - 5 x 110m³ = 550m³
8. Metal storage box - .865 x 1.495 x .860 = 600ltr

| REV | DATE | DETAIL |
|---|---|---|

CLIENT

EUROKEY

SITE

Unit 1,
Linthorpe Way,
Kettering,
NN14 1EZ

PROJECT

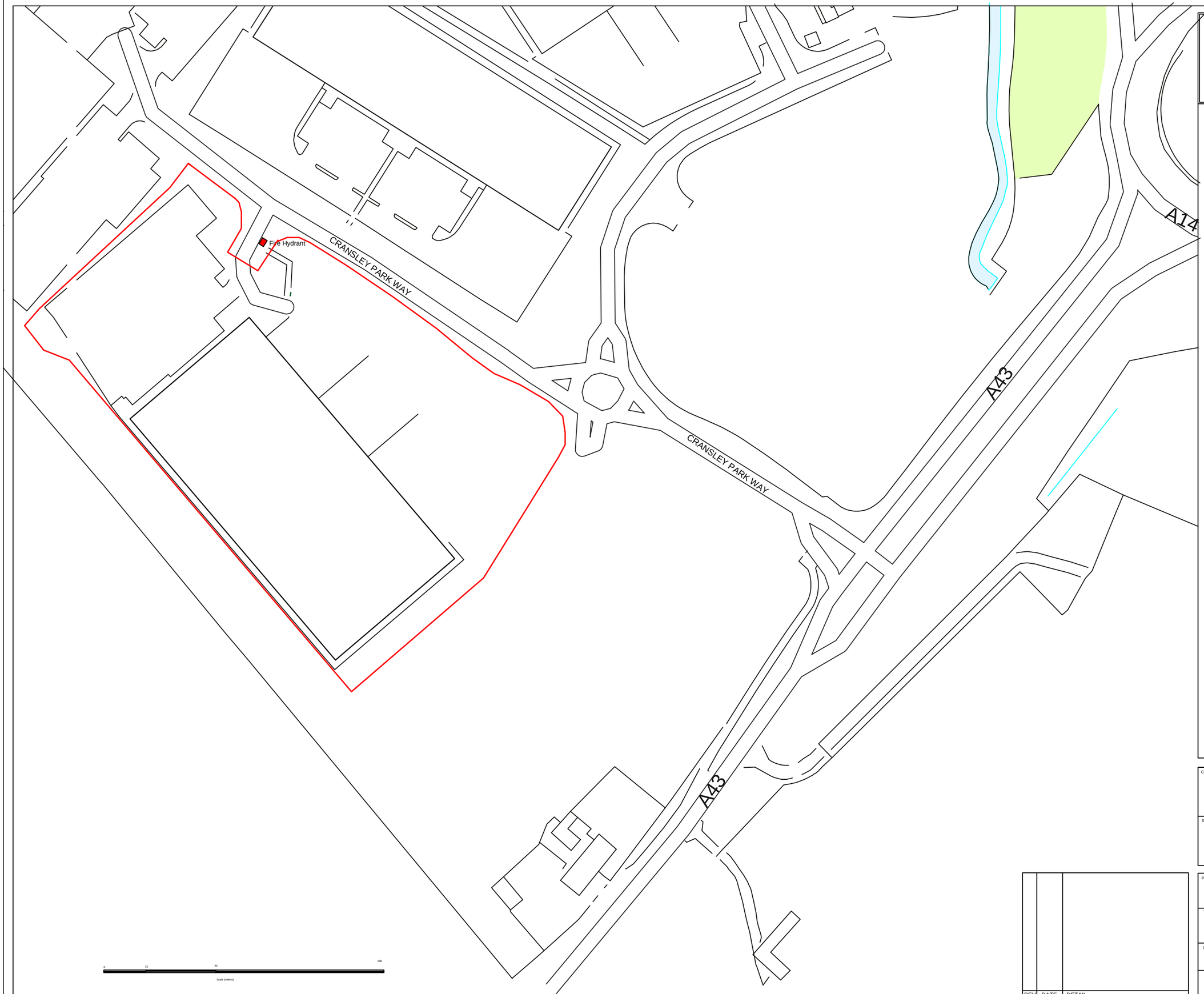
PLANNING APPLICATION

TITLE

SITE LAYOUT PLAN

| SCALE @A3 | DATE | DRAWN BY | CHECKED BY |
|---|---|---|---|
| 1:1000 | May 2021 | T Kearns | D Alcock |
| | DRAWING NO | | REVISION |
| | 200601E201 | | |

# APPENDIX 3 – SITE LOCATION




AC ENVIRONMENTAL
Environment House
Werrington Road
Stoke-on-Trent
ST2 9AF

Planning Boundary

CLIENT
EUROKEY

SITE
Unit 1,
Linthorpe Way,
Kettering,
NN14 1EZ

| REV | DATE | DETAIL |
|---|---|---|

PROJECT
PLANNING APPLICATION

TITLE
SITE LOCATION PLAN

| SCALE @A3 | DATE | DRAWN BY | CHECKED BY |
|---|---|---|---|
| 1:1250 | | T Kearns | D Alcock |
| | DRAWING NO | | REVISION |
| | 200601E202 | | |