DESIGN AND ACCESS STATEMENT

32 HIGH STREET, WESTBURY BA13 3DH

(GROUND FLOOR AND BASEMENT)

CHANGE OF USE FROM EXISTING A2 (OFFICE) TO A3/A5 (RESTURANT AND HOT FOOD TAKE-AWAY)

INTRODUCTION

This paper is to support a planning application for the change of use of an empty office (Ex-BARCLAYS BANK PLC) to Restaurant and Hot Food take away at 32 High Street, Westbury. The function of this document is to demonstrate that such activity WILL NOT adversely affect the neighbouring amenity as proper treatment will apply to tackle all kind of negative impact of odour and noise emitting from the premises.

It will also analyse the details of the activity (Restaurant and Take away) , the dividing structures between the business and the neighbouring properties, and details of the extraction of odours related with the business.

Odour management plan is added in this assessment to explain the measures taken to mitigate any probable harm to amenity caused by the odours (ODOUR RISK ASSESSMENT attached, Appendix 1)

A. PROPOSAL

This application is to change the use of ground floor and basement, from an empty premises to a Restaurant and hot food take a way, There is a specific odour and noise management plan to mitigate the potential harm to the neighbouring amenities, the proposal of a change of use which is favourable within this High Street location.

There will be a canopy with duct and extraction system over cooking area, the preparation area will be at the back side of the shop. The HOT food Take a way will be either collected by the customer or use a delivery system.

B. VENTILATION AND EXTRACTION OF ODOURS

To manage the exhaust pollution properly, it will be split into two distinct phases:

1. The particulate phase, oil, smoke and grease particles
2. The gaseous phase or odour (use Carbon Filter to mitigate)

Contents

1. Description of Site & Site Plan Front View of Premises Site Plan View
2. Design & Visual Amenity
3. Impact of the Proposal
4. Access / Transport / Deliveries of Goods & Services
5. Activity / Opening Hours
6. Details of Kitchen Extraction Canopy
   Purpose of Extraction Canopy
   Minimum Ventilation Rate Requirements
   Drawings of Proposed System (by Dane Tec, Rayleigh)
   Proposed System Technical Specifications
   Maintenance Procedures
7. Odour Risk Assessment (by Air Quality Assessment Ltd)
8. Waste & Recycle Strategy
   Foul Drains & Grease Trap
   Waste & Recycling Bins
9. Pest Control? Pigeon Infestation

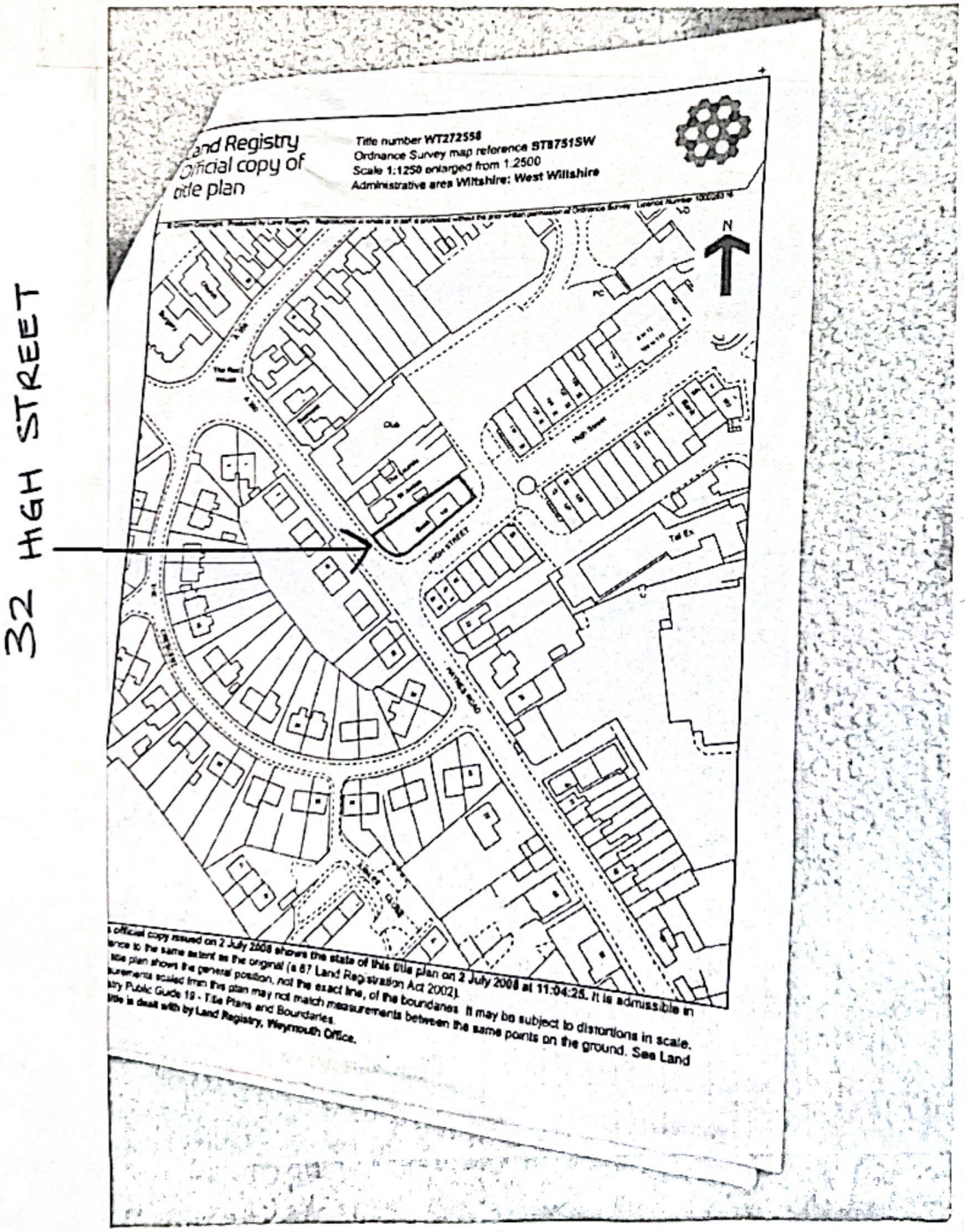
Appendices

Appendix A: 'Odour Risk Assessment' by Air Quality Assessments Ltd.

Appendix B: Helios Extractor Fan, Acoustic Jackets & Silencers Specifications.

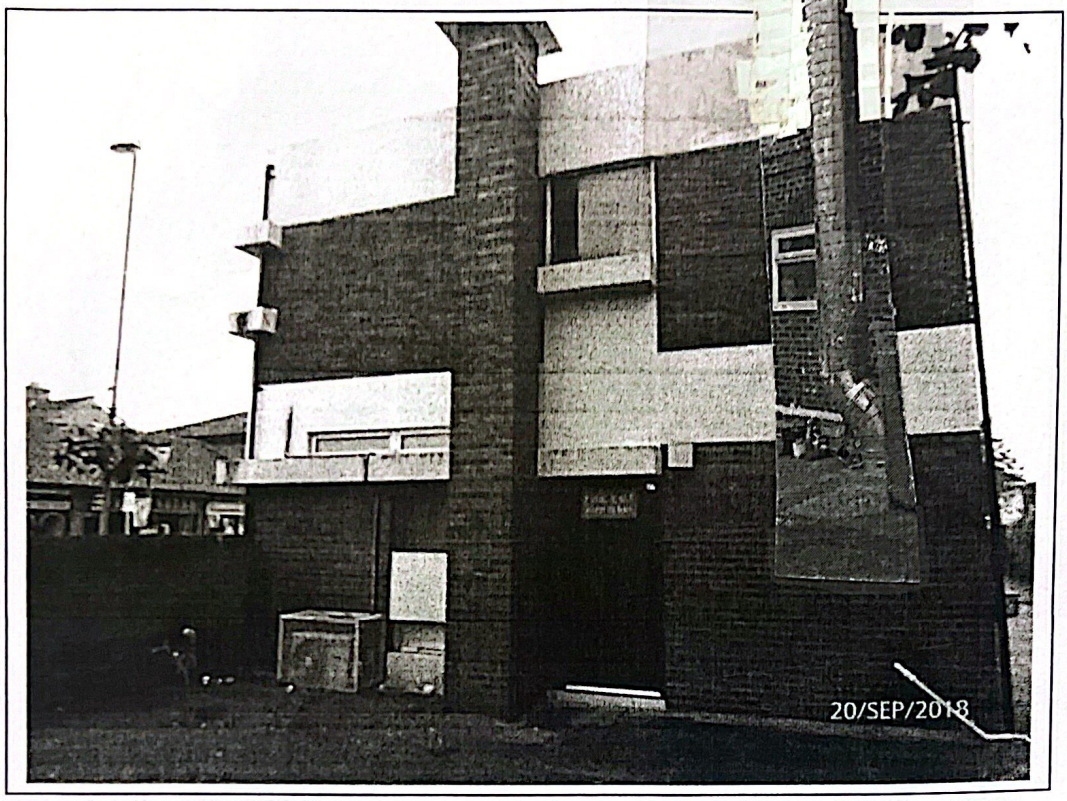
1. Description of Site Plan

The property 32 High Street was purposely built for BARCLAYS BANK, around 1960s with basement (approx.70 sq m), ground floor (approx. 80 sq m) and first floor (approx.70 sq m) with front main entrance and side entrance leading to 6/8 car parking spaces at the rear of the building.



32 HIGH ST WESTBURY

SIDE



FRONT VIEW



2. Design & Visual Amenity

The proposal is a change of use from A1/A2 to A3/A5.

When compared with the existing and surrounding properties, the proposed change of use would not be out of line with the characteristics of the neighbourhood. On the contrary, we feel that a new shopfront will be attractive and contribute to uplifting the parade.

There would be no impact with regard to any amenities nor would there be any overshadowing of the neighbours.

The location of the proposed ductwork/extraction canopy, which would be located at the rear of the building, would not be visible or interfere with the main street scene.

The proposed tip of the extraction flue would be at a height greater than 1 metre above the eaves, and adequately away from any windows. There are other examples of this type of extraction flues at the rear within the vicinity.

3. Impact of the Proposal

The site concerned was previously tenanted by a BARCLAYS BANK PLC using the site for Office Use A2.

The site has been remain empty since 2016, and as business on the high street is changing, it is apparent that the landlords are unlikely to find a tenant to occupy the premises for A2 Office Use.

There are one fast food premises and one Indian Restaurant in the vicinity of the premises. An upper class Restaurant and Take away will blend in quite well and we envisage that the town would welcome a good quality Chinese/Thai /Indian/ Mediterranean or any other cuisine.

The proposal would also help to create new jobs and will contribute and improve the night-time economy of the area.

4. Access / Transport /Deliveries of Goods & Services

A restaurant/take-away would have approximately 6-8 goods deliveries a week maximum, arranged during off-peak hours. There is an access-way to the rear of the premises which would the intended entry-way for deliveries.

There is adequate paid car-parking in the area within a minute's walk, as well a one-hour free car parking opposite the premises and roads surrounding.

The main custom of this type of business is in the evening when other shops will have closed/eased off.

6. Details of Kitchen Extraction Canopy

Noise and smells will be reduced by using the following extraction and ventilation system, which is designed to extract cooking smells away from any residential windows.

The extraction system is designed so that the noise will be kept below existing noise levels.

Purpose of Extraction Canopy

The objective of the extraction canopy within a commercial kitchen is to maintain the internal ambient environment:-

- At a safe and comfortable temperature
- Within a comfortable moisture level
- At a safe noise level that permits an appropriate level of communication

All of the above criteria would be met with the proposed design by Dane-Tec Ltd., Rayleigh, Essex.

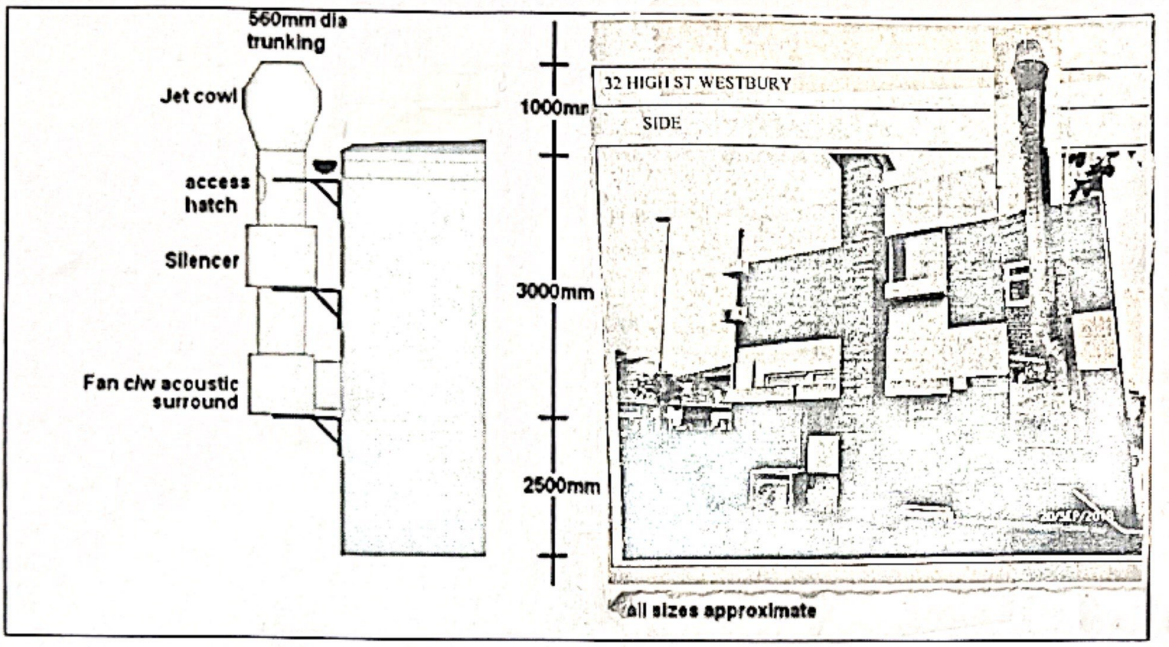
Minimum Ventilation Rate Requirements

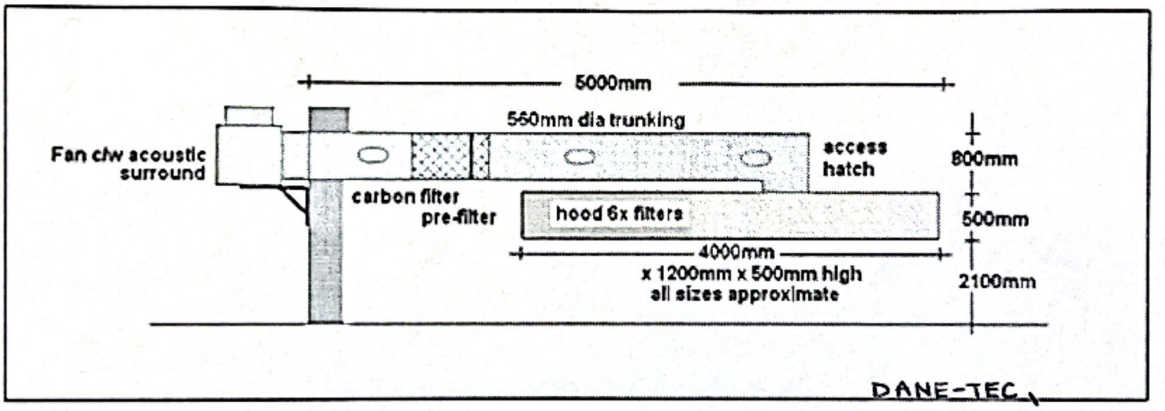
- An internal ambient temperature of 28 degrees Celcius max.
- Minimum humidity level – 70%.
- Internal noise level between NR40 – NR50.
- Dedicated make-up air system to be approx. 85% of the extract flow rate.
- Minimum air change rate of 40 per hour (based on canopy and general room extraction).

The principle function of a kitchen is to protect the working environment around the cooking process from soiled matter and flames, and to ensure that the working environment is tolerable and safe for people to work in.

An air flow should be created across the cooking process to capture the effluent created (heat, steam, fat, smoke and odour). Any vapours produced should be collected and contained by means of filters within the canopy and duct work, thus allowing clean air to be discharged.

A well designed kitchen should satisfy all the requirements.





Proposed System Technical Specifications

Canopy Size	4000mm x 1200mm x 500mm
Grease Filter	500mm x 500mm
Fan	**HELIOS GB T120**
Controller	Variable Speed
CARBON FILTER	PA 242424
Duct Size Externally	560mm
Ducting Colour	Galvanized Steel (Zinc)
Terminal Point	Velocity Cowl

Carbon Filters	Rated 0.2-0.4 sec residual time (See 'Odour Risk Assessment' by Air Quality Assessment Ltd.)

A velocity cowl will be installed at the termination point to ensure all efflux velocity from the terminus of the ducting will be greater than **15m/sec**.

Flexible connections will be installed between the fan and extract ducting.

Carbon filters, pre-filters and grease-filters will be located inside the building.

Although the extraction fan will be located outside the building, a Halios Acoustic Jacket around the extraction fan motor would be installed to attenuate noise breakout

Maintenance Procedures

- Remove and replace pre-filters - every 8-12 weeks depending on the volume of cooking.
- Dismantle and clean canopy fan and all ducting – yearly.
- Remove and replace carbon filters – every 6 months.

FUNCTIONALITY OF THE EXTRACTION SYSTEM (BS4142)

The extractor system will generate negative pressure in the restaurant, which will ensure that all odours are extracted to the rear of the property. This unit also generates estimated noise level of 39dB, which is lower than a normal conversation experienced from 3 metres away (approximately 60-65dB). It will still achieve 120 litres/second at medium performance levels air extraction. This unit also provides a high standard of general ventilation in line with the council environmental policy.

The extraction equipment will be controlled electronically only for business hours.

Since the unit will be located at the rear of the property with other existing extraction system of neighbouring uses in a courtyard and far away from the residential units above, it will not have any negative noise or odour impact.

DETAILS OF THE EXTRACTION & VENTILATION SYSTEM

Noise and smells will be reduced by using the following extraction and ventilation system, which is designed to extract cooking smells away from any residential windows. The extract system will be designed so that noise is kept way below the existing background noise levels, as the fan, carbon filters, silencer and odour control mechanism will be located inside of the building.

Proposed system:

- Extractor Fan: box fan: GB T120, Extraction rate: 3.9 m3/s
- Carbon Filter System : Sitesafe carbon filters to Achieve 3.9 (M3/s) + Dwell Time
- Controller: Variable Speed
- Noise Level: 39 dBA or less at 1 m from flue exit .
- Ducting Size Externally: 550mm
- Ducting Colour: Stainless Steel
- Termination Point: Jet Cowl To aid good dispersion of cooking fumes, the size of the fan motor must be adequate to ensure proper ventilation, the efflux velocity has been estimated to be between 10-15m/s and a velocity cowl will be installed at termination point to ensure an efflux velocity from the terminus of the ducting. Flexible connectors will be installed between fan and extract ducting, and also between the ducting in the building and the external flue. The flue will be mounted on anti-vibration mounts. The fan motor and carbon filters will be located inside of the building as further sound attenuation measures.

HELIOS GIGABOX EXTRACTION FAN

Box fan: GB T120 (450 MM DIAMETER GIGABOX CENTRIFUGAL FAN)

The GigaBox T120 types are suitable for the extraction of dirty, humid and hot air up to maximum 120 °C, such as extract air fan in commercial kitchens. Fans in exhaust air systems are designed and fitted so that they are easy to access, easy to control and easy to clean. It is possible to turn it off from inside the kitchen. The motor is located outside the flow line of the exhaust air. Connected extractor hoods can distinguish between solid and liquid components where possible. Passage of flame to the following components is prevented.

In the GigaBox T120 range, the motor is located outside the delivery flow and is separated from the impeller by a heat-insulated wall. The motor impeller unit can be removed without dismantling the ducting system.

Assembly of the shaped piece on exhaust side with

- GB T120 centrifugally above or at the side.
- GB T120 with easy-to-remove access panel.

Free-running high-performance centrifugal impeller with backward curved polymer blades (NG 250 made from steel) on a galvanised steel back plate, direct driven GB T120 with aluminium impellers. Energy- efficient with low noise generation. Dynamically balanced together with the motor according to DIN ISO 1940 T.1 – grade 6.3 or 2.5. IEC-standard motor or maintenance-free external motor protected to IP 54 or 44. Thermal overload protection through built-in thermal contacts. Suitable for continuous operation. Insulation class F. Ball bearings are lubricated for life.

Technical Specifications Ref- Extractor Fan GB T120

Voltage————240v
Motor Power———- 1 KW
Max. Duty ———- 7110 m3/hr
Motor Speed —— 1370 rpm
Full Load Curve —— 4.60 amps
Motor I.P ratings —- 54
Max. Temp———- 120 degree C
Sound Press. Breakout @ 4 metre —- 45 db

DESCRIPTION OF CARBON FILTERS

C.1.2 Sitesafe carbon filters:

Sitesafe carbon filters, these innovative carbon units measure 594x196x597mm directly replacing original carbon blocks whilst providing the same filter performance as an existing full-size cell. Their advantage is that they only weigh 18kg each against the 68kg of original blocks. This takes the strain out of fitting and servicing, allowing only one engineer to complete the task where two had been previously required. Sitesafe carbon filters use panels of activated carbon to remove the malodourous gases within the commercial kitchen extract duct through the process of chemical absorption.

- Carbon: PA242424
- Size :594x594x597
- Gross Weight :68.20kg
- Carbon Weight :50.00kg
- Rated Airflow :3600m³/hr
- Pressure Drop :120Pa

HELIOS SILENCERS AND FAN JACKET

Silencers

It is recommended to install one (1no.) acoustic silencer in the extract fan ducting (post-fan to atmosphere) such as the model detailed below or a similar silencer with equivalent acoustic performance. A Helios silencer (Model RSD 560x1200), or a silencer with equivalent acoustic performance, will provide the following levels of attenuation (dB) at each centre octave frequency band (Hz). Melinex lining should be provided to any silencer installed post extract fan.

125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz
6	10	19	19	16	13	10

Fan Jacket

It is recommended to install a Helios acoustic Jacket around the extract fan motor to attenuate noise breakout. The jacket will provide the following levels of attenuation:

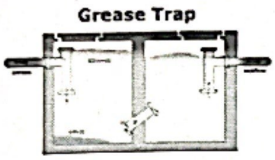
125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz
18	24	32	34	39	42	44

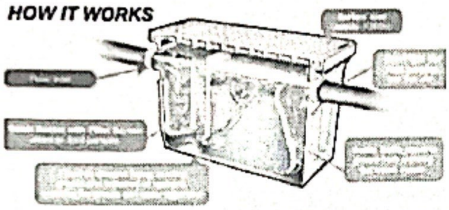
9. Waste & Recycle Strategy

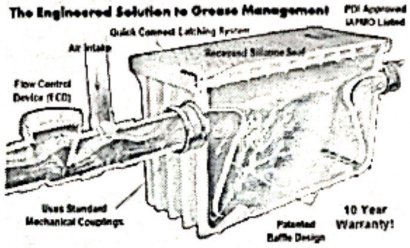
Foul Drains & Grease Trap

As per Building Regulations Approved Document Part H (2002), drainage for commercial hot food premises should be fitted with a grease separator adhering with PrEN 1825-1.

Foul drains are to be equipped with suitable size grease traps. Various types and sizes are available in the market.







We will discuss with the appropriate bodies (Council / Environmental Health Officer / Building Inspector) prior to installation of such grease trap.

8 Waste & Recycling Bins

The proposal will provide litter bins inside the building as well as the entrance to the building, and signs will be displayed to encourage the disposal of litter appropriately.

The proposal will store one waste and one recycle bin (1100 litres) at the rear of the premises, which is similar to other adjacent properties, and will follow the council procedures with regard to collection.

Bins will be fitted with a chain and lock system to prevent unauthorised persons from disposing of rubbish or accessing waste, as per image below.

