

Forshaw Land and Property Group

**VICTORIA HOUSE
MANCHESTER**

Waste Management Strategy

VN81191

January 2020

4th Floor Oxford Place, 61 Oxford Street, Manchester M1 6EQ

Tel: 0161 228 1008 www.vectos.co.uk

Company no. 07794057

Registered address: Vectos North Limited, 4th Floor Oxford Place, 61 Oxford Street, Manchester, M1 6EQ



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Contributor	Elliot Read	Initialled:	ER
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Review By	Gareth Davis	Initialled:	GD
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1 INTRODUCTION

1.1 Background

- 1.1.1 This Waste Management Strategy has been prepared by Vectos in support of an application by Forshaw Land and Property Group for a proposed residential apartment development along with ancillary commercial ground floor uses at Victoria House, located off Great Ancoats Street, Manchester.
- 1.1.2 The Proposed Development will comprise the erection of a 23-storey apartment building comprising 177 residential units. This is complemented by ancillary commercial land uses comprising a flexible retail unit and a resident's gym (A1/A2/A3/A4 & D2), together with associated access and landscaping.
- 1.1.3 This strategy firstly sets out the development proposals, before providing the policy context and guidance that apply to waste management at Victoria House. It goes on to predict the volume of waste generated and allocates that to the various waste streams generated by both residential and commercial uses. It then describes the proposed refuse storage provision, the frequency of collection and the route that waste will take from occupier to waste collection point.

1.2 Site Location

1.2.1 The site is located off Great Ancoats Street between Longacre Street and Epworth Street as shown below in **Figure 1.1** and **Figure 1.2**.

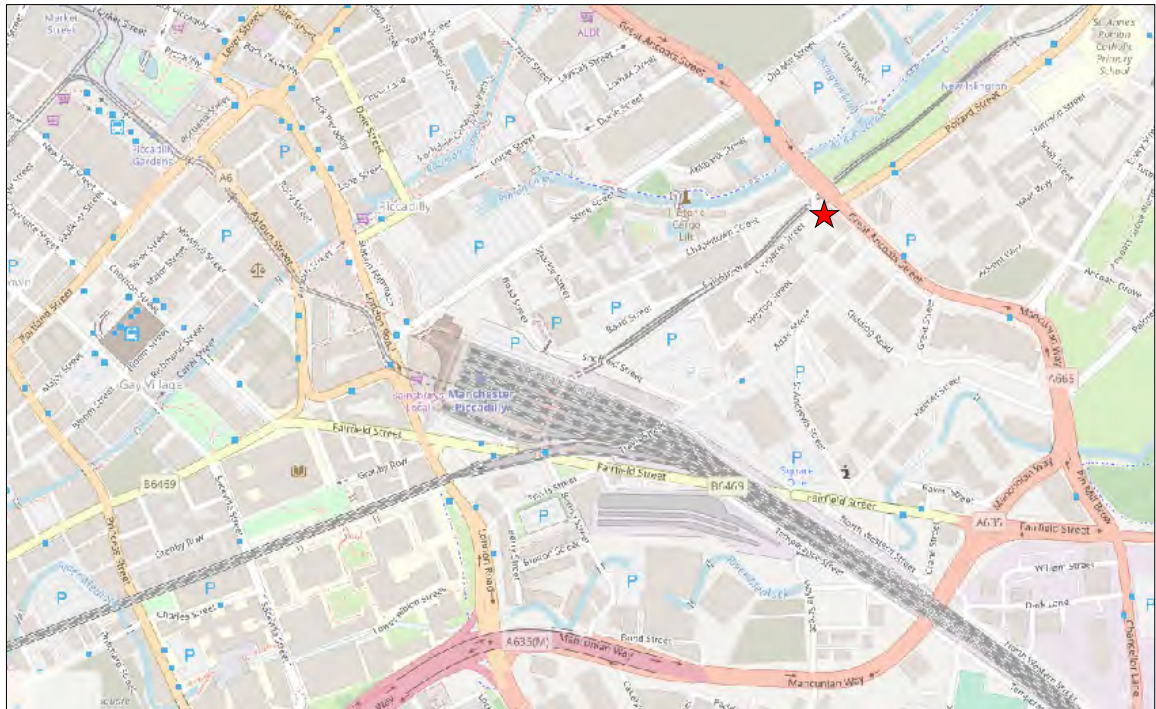


Figure 1.1 Site Location (Strategic Context)



Figure 1.2 Site Location (Detail)

1.3 Development Proposals

1.3.1 A summary of the development proposals at Victoria House is provided below:

- Residential Apartments – (comprising of 177 units)
 - 59 x 1 Bed Apartments
 - 113 x 2 bed Apartments
 - 5 x 3 bed Apartments
- Ancillary A1/A2/A3/A4 Unit 161m²
- Resident's Gym 120m²

1.3.2 The ground, first and second floor layouts are shown in **Appendix A**.

1.3.3 It can be seen that the ground floor layout includes a residential entrance foyer with access to lifts and entrances to the retail unit and resident's gym. There is then one large refuse store of 114m² for the storage of waste generated by the residential apartments.

1.3.4 At first floor level there is a cycle store and on the second-floor flexible amenity space with access to a rooftop garden is provided.

2 WASTE MANAGEMENT STRATEGY

2.1 Introduction

- 2.1.1 The Waste Management Strategy set out in this document establishes the Regulations and Guidance for Waste Management, the various waste streams for recycling, the forecast waste generation, the refuse store provision, collection frequency and the strategy of transferring waste from the bin store to the collection point.
- 2.1.2 The development falls within the City of Manchester and Manchester City Council (MCC) have published guidance 'GD04' on the waste management strategies to maximise the amount of waste that is recycled and the design of bin stores.
- 2.1.3 To achieve high recycling rates, it states that all refuse should be separated at source and stored off the highway in purpose-built refuse stores minimising the distance to collection thus reducing the opportunity for spillage.
- 2.1.4 In accordance with Section 34 of the Environmental Protection Act 1990, the managers of the serviced apartments and the retail & commercial units have a legal 'Duty of Care' to ensure that waste is securely stored and disposed of legally. The most convenient way to achieve this is by using a registered waste carrier.
- 2.1.5 The Waste (England and Wales) (amendment) Regulations 2012 has introduced changes and updates that affect both waste producers and waste management companies alike. These include the need to separate waste paper, metal, plastic and glass into different waste streams.
- 2.1.6 Another change will be the obligatory use of SIC codes in all documentation relating to waste management services and a compulsory commitment from waste producers to adhere to the waste hierarchy as described in **Figure 2.1** overleaf.

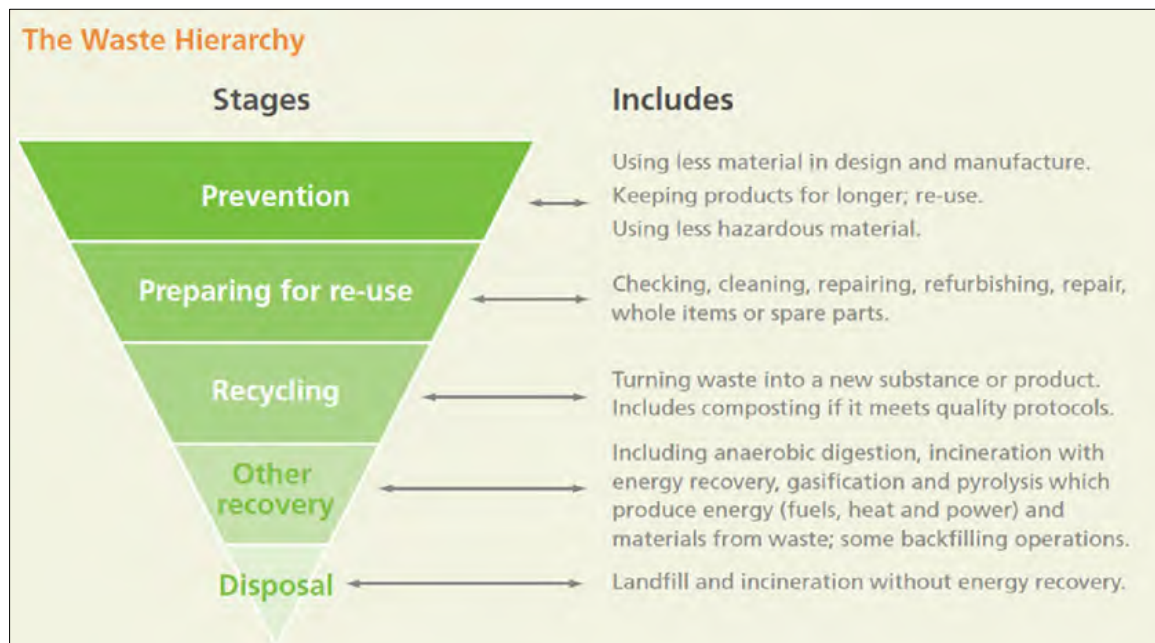


Figure 2.1: Waste Hierarchy

- 2.1.7 To demonstrate compliance with regulations, a Waste Transfer Note is required when waste is collected by the waste carrier. This may be provided electronically. Many carriers are also able to provide environmental reports to inform on the waste management performance.
- 2.1.8 If there is a large volume of food waste generated by a commercial unit on the ground floor, then this waste needs to be covered by the Animal By-Products (Enforcement) (England) Regulations 2011. If that is the case and the volumes of waste are greater than 20kg then such waste needs to be stored in a labelled container and collected by a licensed carrier and records kept.
- 2.1.9 Interventions are needed in all stages of the process to minimise waste going to landfill. The minimisation of waste and recycling interventions by occupiers and the management company can help meet the Councils and government's aspirations.
- 2.1.10 All new developments must meet the requirements of Part H6 of the Building Regulations 2000 (solid waste storage) which states:
- Adequate means of storing solid waste shall be provided;
 - Adequate means of access should be provided for people in the building to the place of storage, and, from the place of storage to a collection point agreed by the waste collection authority.

2.2 Waste Streams

2.2.1 In Manchester, residential developments typically have four waste streams for collection. In this case there is a Waste Chute with a Tri-Separator which reduces the waste streams to 3. These waste Streams are described below with the food waste combined with the general waste stream.

Pulpable Recycling (Paper/Cardboard/Tetrapak etc)



Mixed Recycling (Glass/Cans/Plastics)



Food Waste



General Waste – All Other Waste

2.3 Waste Transfer and Storage

2.3.1 The Waste Management Strategy will be as follows:

Residential Waste

2.3.2 Residents or their cleaners would take the waste from their apartment bins to the refuse chute lobby on their floor. They would select the type of waste stream: General & foodwaste, Pulpable, Mixed Recyclables and that would be directed to a tri-separator on the ground floor. This would be collected in 1100 litre Eurobins beneath the tri-separator and when full those bins would be swapped over for empty bins by the on-site management team.

2.3.3 Waste generated in the resident's gym or the flexible retail unit would be ultimately the responsibility of the on-site management team and they would transfer the waste to the relevant waste chute. An example of a waste chute is provided in **Figure 2.3**.



Figure 2.3: Three Way Waste Chute Panel

2.3.4 Bins in the refuse store would be monitored and the area kept clean by the on-site management team.

Commercial Waste

2.3.5 The occupier of the flexible retail unit will store waste within their own demise and will transfer waste to the collection point(s) prior to collection. This will be adjacent to the refuse store's entrance on Longacre Street. The resident's gym will also be ancillary to the residential units and is therefore not expected to generate waste of its own other than a small number of plastic bottles.

3 WASTE FORECASTS

3.1 Waste Forecast Assumptions

3.1.1 As outlined, the development at Victoria House will consist of:

- Residential Apartments – (comprising of residential 177 units)
 - 59 x 1 Bed Apartments
 - 113 x 2 bed Apartments
 - 5 x 3 bed Apartments
- Ancillary A1/A2/A3/A4 Unit 161m²
- Resident's Gym 120m²

3.1.2 The assumptions used in forecasting the likely waste volumes are derived from MCC's guidance document GD04 on waste storage and collections for new developments (version 6 September 2017).

3.1.3 MCC's refuse storage requirements for both residential and commercial land use are now described.

3.2 Residential Waste

3.2.1 The calculation for residential waste storage requirements and what will be required for the development proposals are shown below:

Weekly Waste in Litres = The number of properties in the development multiplied by 110 litres

3.2.2 Applying this to the development provides the following weekly waste generations:

Victoria House Residential = 19,470 litres per week

3.3 Ancillary Commercial Waste

3.3.1 The retail unit could be flexible. As a robust scenario, it is assumed that the space would be occupied by a café unit. The weekly waste generation for this unit would therefore equate to 75 litres per cover per week for what is assumed to be around 80 covers. The expected waste generation of this use is set out below:

75 litres x 80 covers
Weekly Waste in Litres = 6,000 litres

3.3.2 As outlined earlier, the resident's gym will be ancillary to the residential units and therefore waste generated by this use is expected to be accommodated in one or two small internal bins that will store plastic bottles.

3.4 Forecast Recyclables

3.4.1 Using guidance from MCC and WRAP we can forecast the recycling waste streams which is given in detail, including the assumptions, in **Table 3.1** below.

Residential Waste Type	(%) Volume of Waste generated	Waste Generated (litres per week)
Pulpable	23%	4478
Mixed	23%	4478
General Waste (<i>inc Food</i>)	54%	10514
Residential Total	19,470 litres per week	
Restaurant /Cafe Waste Type	(%) Volume of Waste generated	Waste Generated (litres per week)
Pulpable	22%	1320
Mixed	28%	1680
Food Waste	40%	2400
General Waste	10%	600
Restaurant/Cafe Total	6,000 litres per week	

Table 3.1: Waste Streams

3.5 Refuse Storage Requirements

3.5.1 The residential refuse store is 114m² and can hold 34 x 1100 litre Eurobins including three that sit below the tri-separator waste chute. The allocation of bins in the refuse store is shown below in **Figure 3.1**.

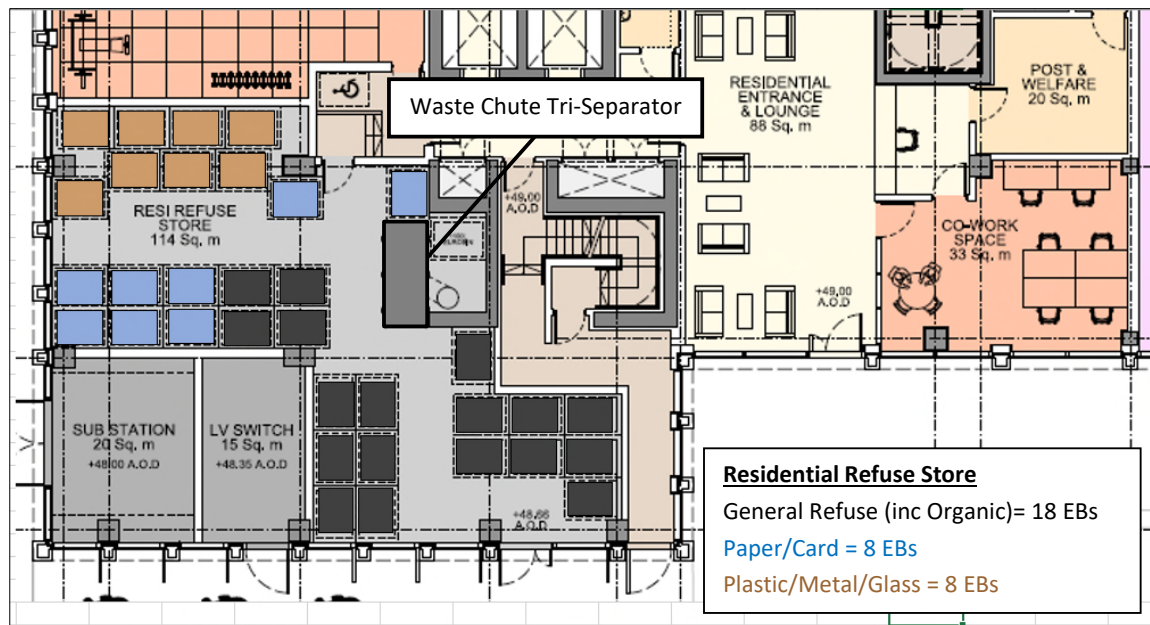


Figure 3.1: Bin Allocation to Waste Streams

3.5.2 The residential refuse store will not be accessible by the public and will be maintained and kept clean by the site management company. As such, it will have a water supply to help facilitate that. The refuse store will also be mechanically ventilated to remove odours. The floor and walls of waste store will be constructed and finished in materials that are impervious and easily kept clean. The refuse storage area will include space for manoeuvring and the doors are designed to be wider than the 1.3m minimum. The refuse store will also include CCTV and have access controls to avoid anti-social behaviour.

3.5.3 The refuse store's floor area exceeds MCC's GD04 guidance for a provision of 0.43m² of refuse storage area per apartment, plus access/manoeuvring space, as shown below:

- GD04 Requirement (0.43m² x 177 apartments) = 76m²
- Refuse Store Provision = (76m² + 38m² manoeuvring space) = 114m²

3.6 Frequency of Collection

3.6.1 Considering the above calculations, the frequency of collection for residential apartment waste is a fortnightly collection of General Waste, with an alternate fortnightly collection of recyclable waste.

Residential

General Waste (inc Food Waste)	Fortnightly Collection (18 x 1100 litre Eurobins)
Pulpable Waste	Fortnightly Collection (8 x 1100 litre Eurobins)
Mixed Recyclables Waste	Fortnightly Collection (8 x 1100 litre Eurobins)

3.7 Refuse Collection Route

3.7.1 The primary location for servicing is expected to occur along Longacre Street adjacent to the western elevation of the building. On collection day the strategy will be for site management staff to wheel the bins out to the waste collection point on Longacre Street at the collection time as agreed with the waste collection company. The route would be step free and with no gradient in excess of 1:20. This route is shown in **Figure 3.2**. Bins would be returned to the Bin Store immediately after collection.

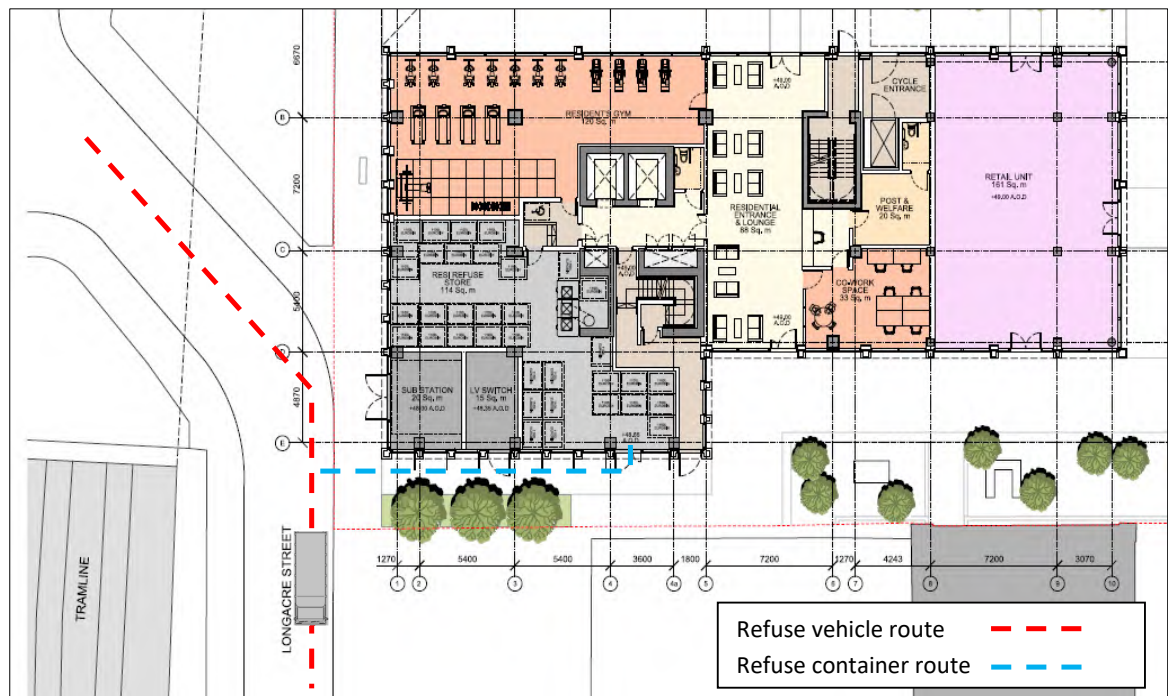


Figure 3.2 Refuse Collection Route

3.7.2 MCC require that a Waste Pro-Forma be prepared to support the planning application. This has been completed and is presented in **Appendix B**. This document forecasts the waste generated and also describes the routes to get the bins from the basement stores to the collection point.

4 SUMMARY & CONCLUSIONS

4.1 Summary

- 4.1.1 This document sets out the Waste Management Strategy for the Proposed Development of Victoria House.
- 4.1.2 This strategy has described the servicing strategy for the Building and the Waste forecast calculations. The Waste Management Strategy has been summarised in **Appendix B** and follows the Proforma for Planning Applications as given in MCC Guidance GD04.
- 4.1.3 Victoria House is a development of 177 apartments and commercial space in the form of flexible retail unit and a resident's gym on the ground floor. The residents will deposit waste in a waste chute from their floor separated into three waste streams with a tri-separator at the bottom. It is anticipated that the food waste will be incorporated into the general waste stream.
- 4.1.4 The Waste Management Strategy has been prepared with reference to the MCC Guidance GD04, British Standard 5906-2005 as well as the forecasts from WRAP for commercial land uses. Consideration has also been given to the National Regulations on Recycling, Storage and the Duty of Care for producers and handlers of waste. The strategy will be compliant with all aforementioned guidance.
- 4.1.5 The strategy incorporates provision for recycling into the different waste streams. The volume of waste generated has been calculated and the frequency of collection in line with MCC guidance with alternate fortnightly collections of general refuse and recyclables.
- 4.1.6 The monitoring of bin capacity, cleanliness and the transfer of bins between bin stores and on street for collection will be managed by the on-site management team.
- 4.1.7 The retail unit and resident's gym will store its waste in their own demise and then bring that waste to the collection point on Longacre Street prior to collection. Here there are expected to be daily or every other day collections for these waste streams and collections would be made by a commercial waste operator.
- 4.1.8 If the commercial unit prepares food, then they may have to comply with the requirements of the 'Animal By-Product' Regulations (Defra 2011). This would have implications for the types of containers and collections made depending on the nature of the waste.

4.2 Conclusion

- 4.2.1 It is concluded that the proposed forecast deliveries, waste management and refuse collection accords with planning policy and is appropriate for this scale of development. Servicing and waste collection have also been demonstrated to be undertaken in an efficient manner.

APPENDICES

APPENDIX A

PROPOSED GROUND, FIRST AND SECOND FLOOR LAYOUTS

GREAT ANCOATS STREET



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Rev. Date. Description

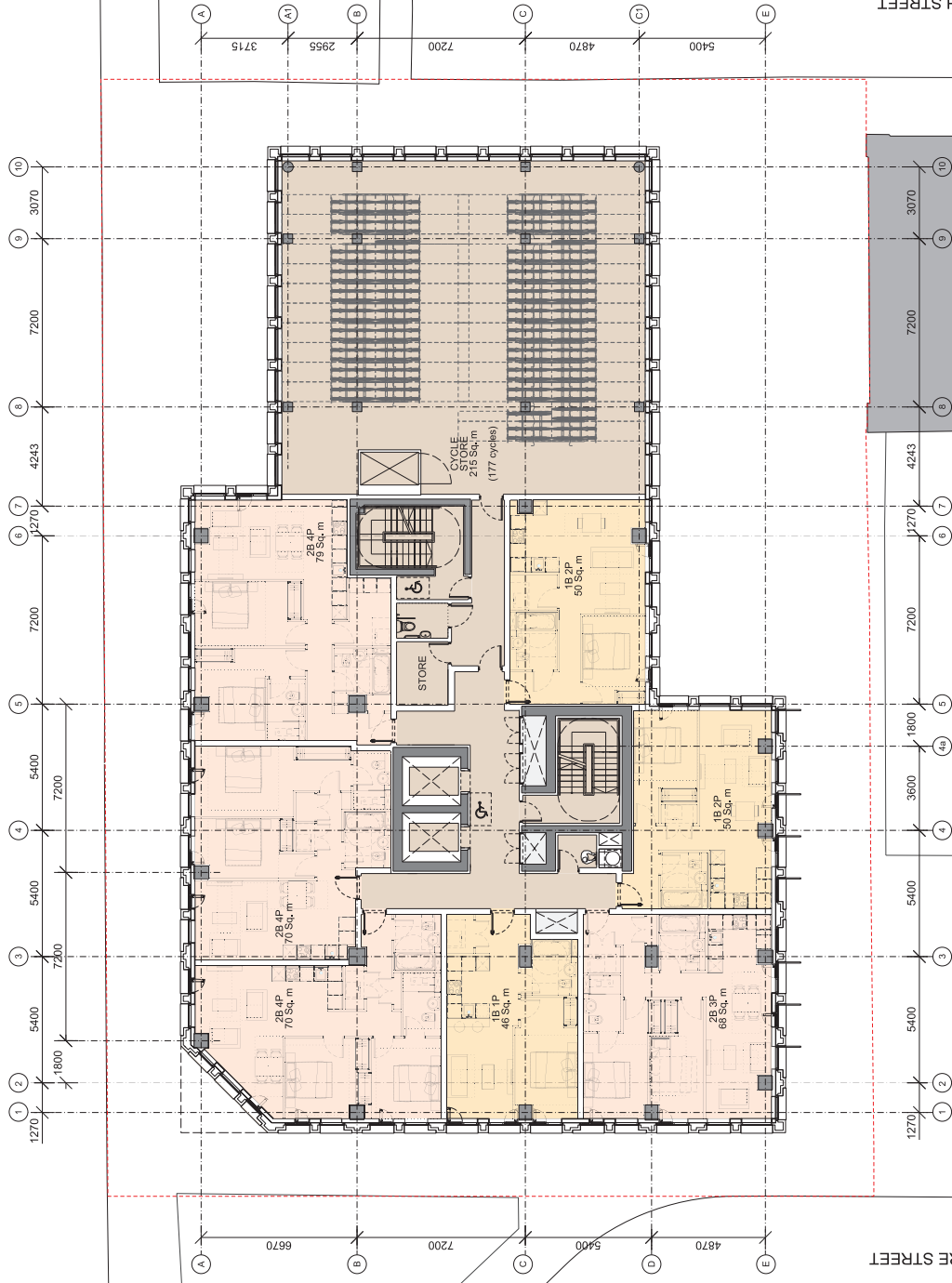
Rev.	Date	Description
01	10/12/22	Rev. 1: Initial

Project: TB
Victoria House

Ground Floor Plan

Scale	1:100 @ A1	Date	JAN 2020
Drawn By	10122	Check By	10122
Project No	10122-A-B5D9-G300-P-00-003	Revision	00

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NOTE:

Year	Number of people (thousands)
1995	0.5
1996	1.0
1997	1.5
1998	2.0
1999	3.0
2000	5.0



NORTH

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Project Title
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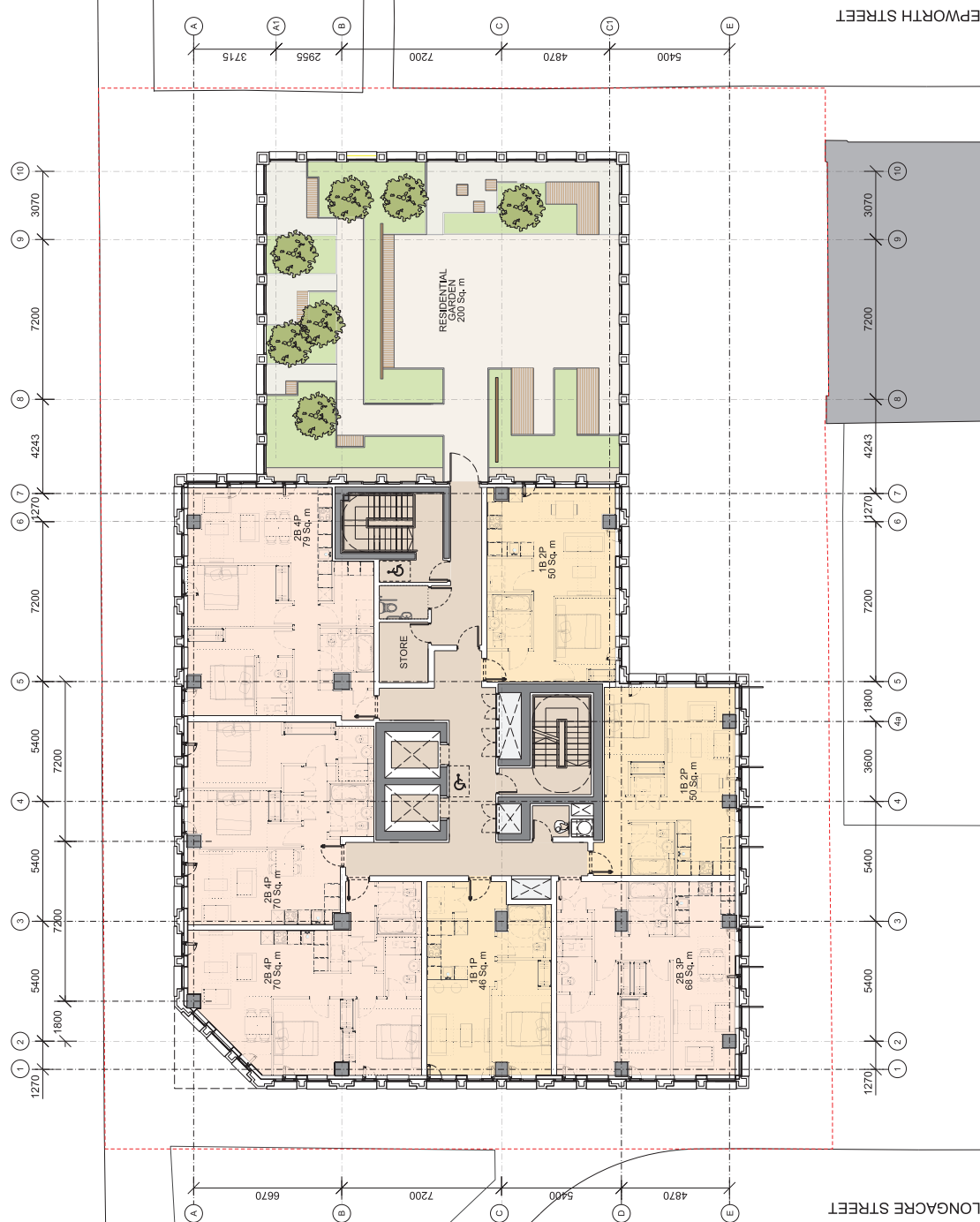
Drawing Title
LEVEL 01 PLAN

Job No 10122	Scale 1:100 @ A1	Date JAN 2020
Drawing No 10122-A-B5D9-G200-P-01-003		Revision 00

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MANCHESTER
Plaza, 4 Cornhill S
Manchester M15 4RQ
+44 (0)161 835 2345
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Project Title
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Job No	Scale	Date
10122	1:100 @ A1	JAN 2020
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simpsonhaugh

MANCHESTER
Broadway, 1st Floor
Manchester M4 1BE
+44 (0)161 605 2345
www.simpsonhaugh.com

LONDON
15 Abchurch Lane
London EC4N 3DF
+44 (0)20 7649 4000
info@simpsonhaugh.com

APPENDIX B
MCC GD04 PROFORMA

VICTORIA HOUSE - WASTE PROFORMA

1.1 Introduction

- 1.1.1 This Waste Proforma has been prepared by Vectos in support of the planning application by Forshaw Land and Property Group for a proposed residential apartment development, along with ancillary commercial ground floor uses at Victoria House. The site is located off Great Ancoats Street, Manchester.
- 1.1.2 The document has been prepared in accordance with Manchester City Council's GD04 guidance on waste provision and storage and provides accompanying information to the Waste Management Strategy.
- 1.1.3 The proposed development will comprise the erection of an apartment building comprising of 177 residential units. This is complemented by an ancillary flexible retail unit and resident's gym (A1/A2/A3/A4 & D2), together with associated access and landscaping.
- 1.1.4 The following report demonstrates the estimated volumes and types of waste produced by the development along with information regarding storage areas.



MANCHESTER CITY COUNCIL

Planning Application – Waste Management Strategy

Planning Application Number: To be confirmed

Date Submitted: To be confirmed

Estimated volumes and types of waste produced by the development

Low Rise Domestic N/A

Waste Types	Capacity Required (litres)	Number of Bins required	To be provided ?
General refuse	240	1 x 240 litre bin	☐
Pulvable Recycling	140 / 240	1 x 140 litre bin 1 x 240 litre bin	☐ ☐
Mixed Recycling	140 / 240	1 x 140 litre bin 1 x 240 litre bin	☐ ☐
Garden Waste	240	1 x 240 litre bin	☐
Food Waste	23	1 x 23 litre caddy	☐

High Rise Apartment Developments

N = Number of Apartments Block A = 177

Waste Types	(V) Volume of Waste Generated	Capacity Required (litres)	Number of Bins required	Number of Bins proposed by applicant
General refuse	$V = N \times 110$	$V = 8,497$	$V / 1100 = 18$	18
Pulvable Recycling	$V = N \times 55$	$V = 4,248$	$V / 1100 = 8$	8
Mixed Recycling	$V = N \times 55$	$V = 4,248$	$V / 1100 = 8$	8

The development will have a Waste Chute with a tri-separator, therefore the foodwaste is incorporated into the General Waste

Please state number and capacities of bins you propose, showing calculations where appropriate. Please ensure collection frequencies are included.

Waste Assumptions

Residential

Under Manchester City Council's GD04 guidance, the calculation for residential waste storage requirements is as follows:

Weekly Waste in Litres = the number of properties in the development multiplied by 110 litres.

Ancillary Retail

Given that retail space will be flexible, as a robust assessment it has been assumed that the retail unit will be a restaurant/cafe (A3) and for robustness we have therefore assumed that this will serve 80 covers.

Residential Waste Forecast

Under Manchester City Council's rule of thumb, the calculation for residential waste storage requirements and what will be required for the development proposals are shown below:

Weekly Waste in Litres = The number of properties in the development multiplied by 110 litres.

Applying this to the development provides the following weekly waste generation:

GD04 Waste Forecast (110 litre per Apartment per week = 19,470).

Restaurant (A3)

Based on a total floor area of 161m², the unit is expected to serve approximately 80 covers.

Waste generation has been calculated by applying a factor of 75 litres per cover per week. Applying this to the commercial use provides the following weekly waste generation:

80 covers x 75litres = 6,000 litres of waste per week.

Forecast Recyclables

Using guidance from MCC and WRAP we can forecast the recycling waste streams by volume as given below.

Residential Waste Type	(%) Volume of Waste generated	Waste Generated (litres per week)
Pulpable	23%	4478
Mixed	23%	4478
General Waste (<i>inc Food</i>)	54%	10514
Residential Total	19,470 litres per week	
Restaurant /Cafe Waste Type	(%) Volume of Waste generated	Waste Generated (litres per week)
Pulpable	22%	1320
Mixed	28%	1680
Food Waste	40%	2400
General Waste	10%	600
Restaurant/Cafe Total	6,000 litres per week	

Frequency of Collection

Given the scale of development it is proposed that the following collections would be made:

Residential

General Waste (inc Food Waste)

Fortnightly Collection

18 x 1100 litre Eurobins

Pulpable Waste

Fortnightly Collection

8 x 1100 litre Eurobins

Mixed Recyclables Waste

Fortnightly Collection

8 x 1100 litre Eurobins

Has / will a contract be obtained with a licenced waste carrier?	Y
--	----------

Mixed Use Developments

Are the stores for residential and commercial separate from each other?	Y
---	----------

Internal Stores

Residents would have their own internal waste bins. This will be designed for at least 3 waste streams.

The retail premises would have a minimum of 3 waste bins (General, Pulpable & Mixed Recyclables) within its own demise with additional bins depending on its operations.

If the retail unit accommodates a restaurant then the occupier would have 3 waste bins (General Pulpable & Mixed Recyclables) plus a food waste bin.

Residents or their cleaners would take the waste from their apartment bins to the refuse chute lobby on their floor. They would select the type of waste stream: General & food waste, Pulpable, Mixed Recyclables and that would be directed to a tri-separator on the ground floor.

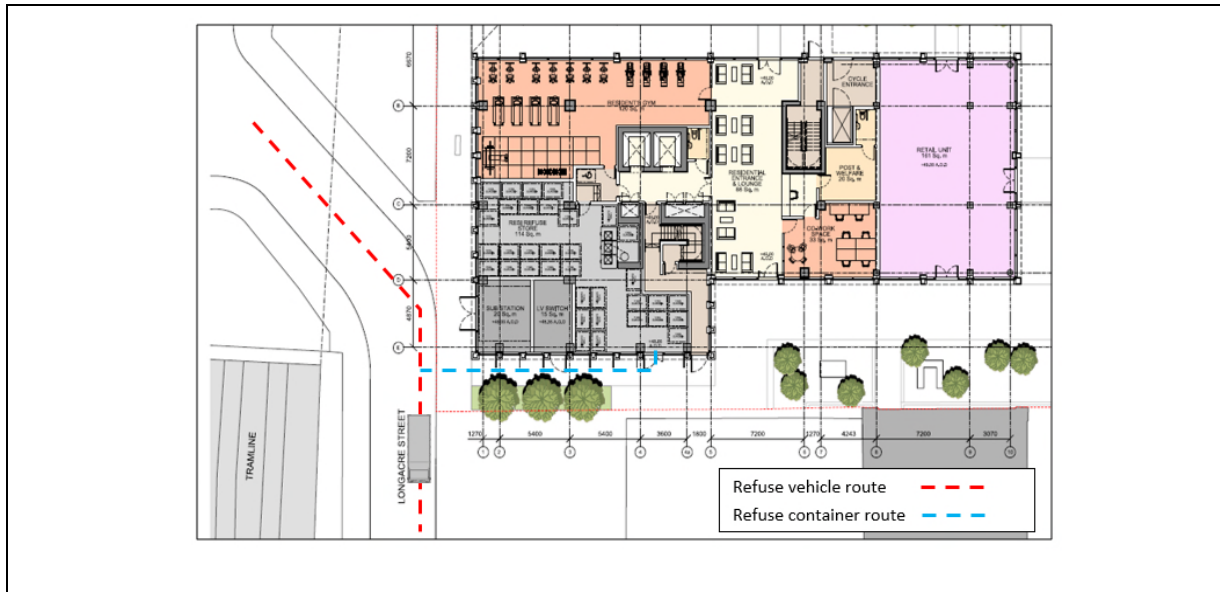
This would be collected in 1100 litre Eurobins beneath the tri-separator and when full those bins would be swapped over for empty bins by the on-site management team.

The retail occupier would store their waste within their own demise before transferring this to the retail refuse store. This waste will be transferred onto the street on collection day.

On collection day the strategy will be for the site management staff to wheel the bins out to the waste collection point off Longacre Street at the collection time as agreed with the waste collection company.

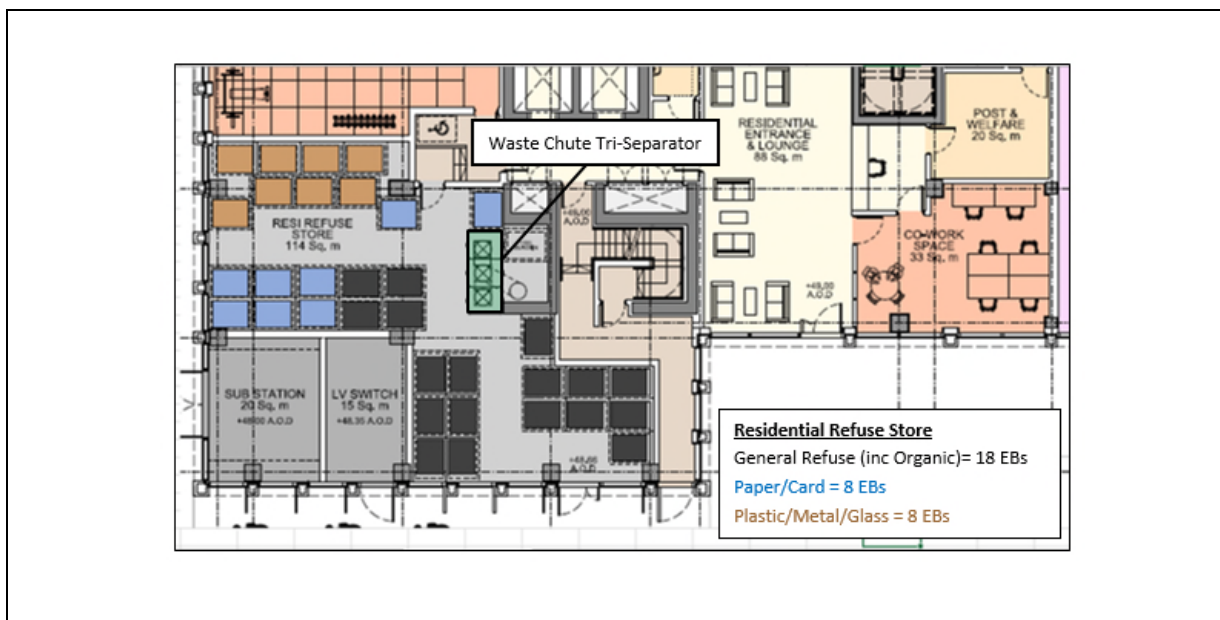
The route taken to move the waste from the bin stores to the collection point is now given. Bins would be returned to the refuse store immediately after collection.

The resident's gym will generate only minimal levels of waste and is considered ancillary to the residential apartments. As such, it will store waste in small bins designed to accommodate plastic bottles.



Storage Areas for Waste Containers

Please provide details of container stores, attaching plans if appropriate.



Are all bins in the store accessible?	Y
Are recycling facilities as easy to access as general refuse?	Y
Has consideration been given to ventilation and hygiene?	Y

Please provide details of who will be responsible for placing the bins at the collection point and returning them to the store / property promptly e.g. resident / management company

The Management Company has overall responsibility. The transfer may be undertaken by the Refuse Collection operators, on-site management or the restaurant/retail staff. The refuse containers would be taken out immediately prior to and returned immediately after collection.

Please ensure that you have attached:

Detailed plans of waste stores	Y
Location plans showing stores	Y
Location plans showing the proposed collection point and the route the collection vehicle will take	Y

Please ensure that you have completed this form in accordance with our Guidance document: GD04 Waste Storage and Collection Guidance for New Developments