

WASTE MANAGEMENT STRATEGY

Tiger Developments Ltd

Proposed Student Accommodation
Carmoor Road, Manchester

November 2022

Report control

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1 Introduction

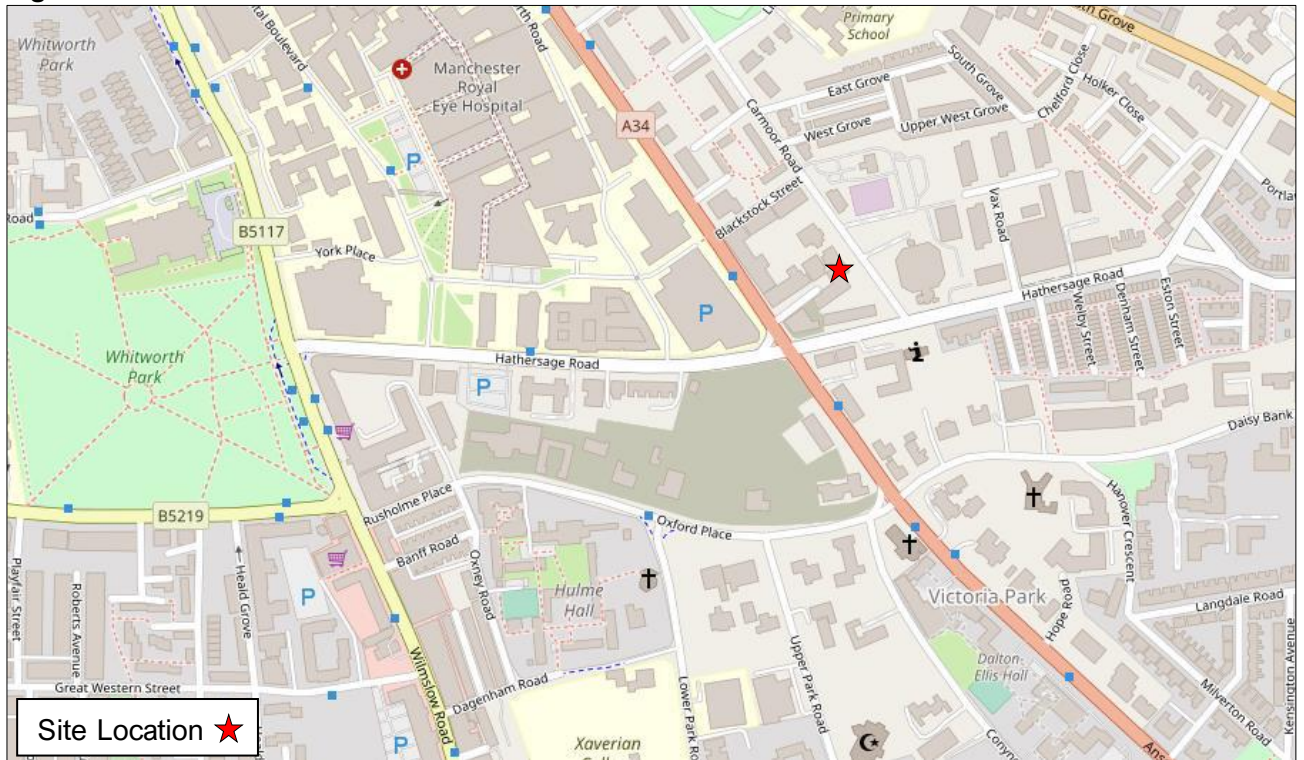
Background

- 1.1 Vectos has been appointed by Tiger Developments Ltd to provide a Waste Management Strategy in support of a full planning application for a sui generis accessible Purpose-Built Student Accommodation (PBSA).
- 1.2 The site is located within the jurisdiction of Manchester City Council (MCC) who act as both the planning and highway authority.

Development Site and Location

- 1.3 The site is located in a mixed use area approximately 2.8 kilometres south of Manchester City Centre. Carmoor Road borders the site to the east, with the A34 Upper Brook Street running to the west of the site.
- 1.4 The proposed development comprises the demolition of existing buildings and construction of Purpose-Built Student Accommodation, with 172 units accommodated in 61 apartments as follows:
 - 6x 4 Bed Cluster apartments;
 - 10x 5 Bed Cluster apartments;
 - 7x 6 Bed Cluster apartments;
 - 3x 7 Bed Cluster apartments; and
 - 35x Studio Flats.
- 1.5 The site's location is shown in **Figure 1.1**.

Figure 1.1: Site Location



Scope of Report

1.6 The report is structured as follows:

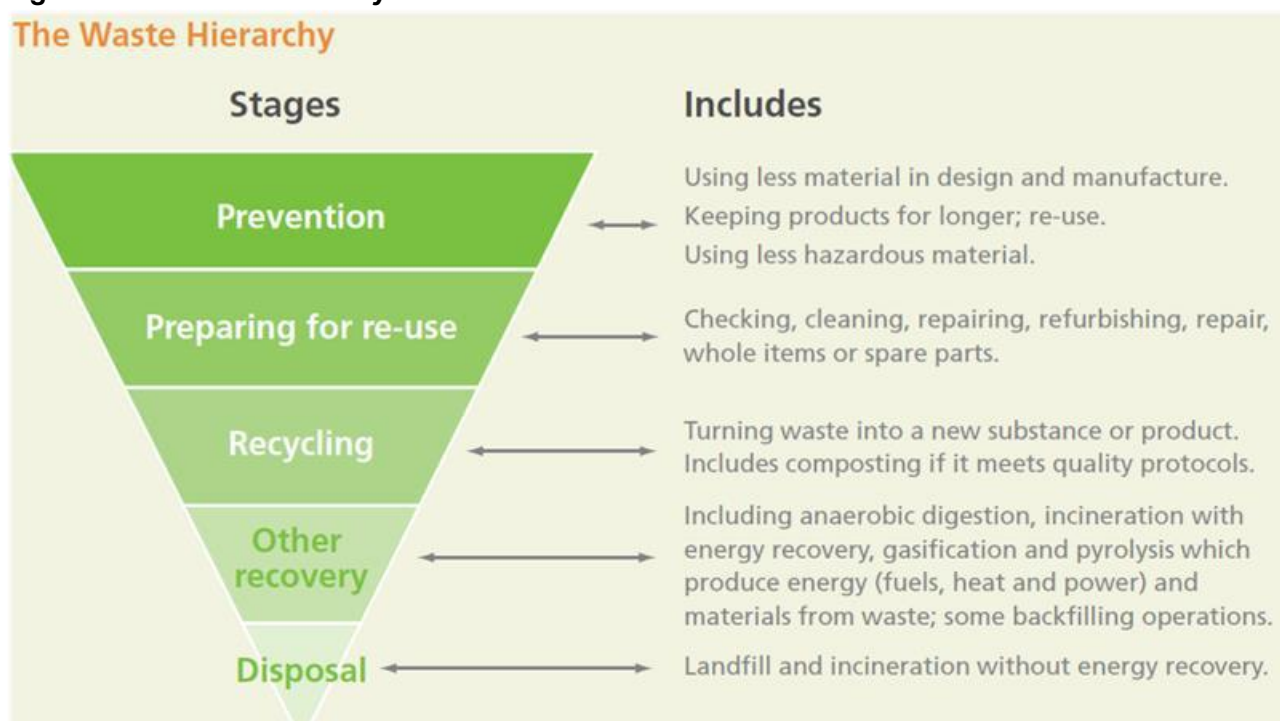
- Section 2 – provides background in regard to both national and local waste management policy;
- Section 3 - details the proposed development's waste assumptions and forecast waste streams based on GD04 guidance;
- Section 4 – provides information regarding the proposed development's waste storage;
- Section 5 – outlines the refuse collection and access arrangements, along with waste transfer routes; and
- Section 6 – presents a summary and conclusion to the strategy.

2 Policy Context

National Waste Guidance and Considerations

- 2.1 Central Government's strategy for minimising waste generation and its transfer to landfill is most simply described according to the 'Waste Hierarchy' as shown in **Figure 2.1**.

Figure 2.1: Waste Hierarchy



- 2.2 Further to that outlined in **Figure 2.1**, to achieve high recycling rates, it is stated 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.
- 2.3 In accordance with Section 34 of the Environmental Protection Act 1990, on-site management of the development 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.
- 2.4 The Waste England and Wales (Amendment) Regulations 2012 has introduced changes and updates that affect both waste producers and waste management companies alike. 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 for the site can help meet the Government's aspirations.
- 2.5 On-site management have the responsibility to ensure the internal and external areas are kept clean and to move the bins in coordination with the occupiers. In regard to hygiene, the refuse stores will therefore be kept clean and will be subject to appropriate ventilation.

- 2.6 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; and
 - 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.
- 2.7 To demonstrate compliance with regulations, a Waste Transfer Note is required when waste is collected by the Waste Carrier, which may be provided electronically. Many carriers are also able to provide Environmental Reports to inform on the waste management performance. If 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.
- 2.8 The Waste Management Strategy described in this document sets out the regulations and guidance for the management of waste and subsequent waste streams for recycling, forecast waste generation, refuse container provision, refuse collection frequency and the strategy of transferring waste to the refuse store's anticipated collection point.
- 2.9 In accordance with Section 34 of the Environmental Protection Act 1990, the Managers of the apartments 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.
- 2.10 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 in different waste streams.

Local Waste Guidance

- 2.11 As outlined, the development falls within the administrative boundary of Manchester. Manchester City Council has published guidance 'GD04' on the waste management strategies to maximise the amount of waste that is recycled and ensure a good design of refuse stores.
- 2.12 The document aims to provide a practical guide to minimum standards to assist in planning and designing systems the storage and collection of refuse and for recycling facilities in both domestic and commercial properties. The guidance pays due regard, but is not limited to, the aforementioned Environmental Protection Act 1990.
- 2.13 GD04 states that to achieve high recycling rates, it is stated 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.
- 2.14 With the policy context behind waste management explained, the following section forecasts the expected waste generation of the proposed development with due regard paid to the aforementioned national and local guidance.

3 Waste Forecasts

Introduction

- 3.1 This section of the report sets out the waste forecast of the proposed development. The waste forecast assumptions have based on the guidance contained in Manchester City Council's GD04 document, as described in Section 2.

Waste Forecast Assumptions

- 3.2 The assumptions used in forecasting the likely waste volumes are derived from Manchester City Council's GD04 document on 'Waste Storage and Collections for New Developments', published in September 2017 (Version 6).
- 3.3 Using Manchester City Council's GD04 guidance document for residential apartment use, the calculation for residential waste storage requirement is shown below:

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

- 3.4 Applying this calculation to the number of apartments proposed equates to the following weekly waste generation:

Weekly Waste = 61 x 110 = 6,710 Litres

Forecast Waste Streams

- 3.5 Using guidance from Manchester City Council, British Standards BS5906:2005 and WRAP (Waste & Resources Action Programme), the forecast of general waste and recyclables by volume is now given. This is presented in **Table 3.1**.

Table 3.1: Forecast Waste Streams

	General Refuse	Pulpable	Co-mingled	Organic	Total
Waste Stream Proportion	47%	23%	23%	7%	100%
Litres per week	3,154	1,543	1,543	470	6,710

- 3.6 As shown in **Table 3.1**, the proposed development is expected to generate a total of 6,710 litres of waste per week. Based on the expected recycling proportions for residential waste, it is anticipated that 3,154 litres of waste per week will be general, with 3,086 litres of waste per week being recyclables and 470 litres per week organic waste.

4 Waste Storage

Introduction

- 4.1 With the weekly waste forecast set out, this section of the report details the storage space proposed in the context of the required weekly waste generation.

Storage Requirement

- 4.2 Based on the weekly forecast provided in **Table 3.1**, the resultant waste container provision for a weekly Manchester City Council collection regime is presented in **Table 4.1**.

Table 4.1: Waste Container Requirement

	General Refuse	Pulpable	Co-mingled	Organic	Total
Eurobin lifts per week	3	2	2	0	7
240ltr bin lifts per week	0	0	0	2	2

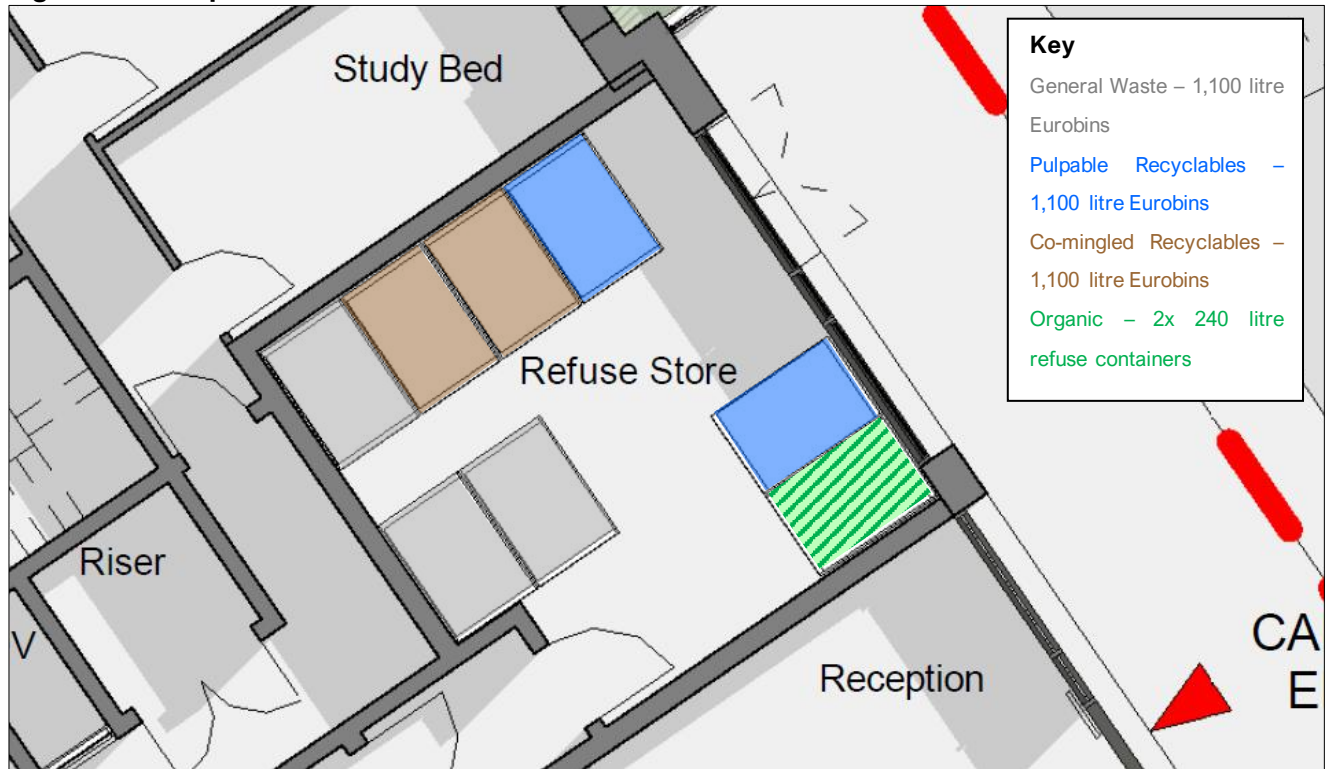
**Note: Eurobins have a capacity of 1,100 litres*

- 4.3 As shown in **Table 4.1**, in order to store the expected waste generated by the proposed development, a total of 7 Eurobins (1,100 litres) will be required, alongside 2 bins that will store organic waste (240 litres).

Refuse Store Location and Size

- 4.4 The dimensions of the refuse containers and where containers are to be stored at the proposed development are now detailed. These are set out as per the guidance contained in Manchester City Council's adopted GD04 document.
- 1,100 litre Eurobin – 1,575mm x 1,190mm floor space required; and
 - 240 litre refuse container – 780mm x 940mm floor space required.
- 4.5 As per Manchester City Council's GD04 guidance, 0.43m² of refuse storage space per apartment is required. This will result in the required storage space of 26.23m². The proposed development's refuse store has a floor area of 29.6m² meeting GD04's requirement.
- 4.6 The refuse store will be located on the ground floor and will be enclosed, with the provision of doors. As noted, the refuse storage area will include space for manoeuvring and the doors / clearance are designed to be compliant with the 1.3m measurement provided in GD04 (including door width).
- 4.7 The refuse stores would include CCTV and have access controls to avoid abuse and antisocial behaviour.
- 4.8 As shown in **Figure 4.1**, the proposed refuse store will accommodate enough space to provide x3 general waste 1,100 litre Eurobins, along with 2x 1,100 litre Eurobins for both pulpable and co-mingled recyclables. There will also be sufficient space to store x2 240 litre organic refuse containers based on a weekly collection regime.

Figure 4.1: Proposed Refuse Store



- 4.9 As shown in **Figure 4.1**, the refuse store will store the required containers needed to store all waste streams. Organic waste will be stored in x2 240 litre bins with ample space available to store them, shown.
- 4.10 The 4 waste streams will be independently accessible by refuse collection crews, given that they will normally be accessing these at different times, as per the guidance contained in GD04.
- 4.11 It is also noted that permanent signage will be placed in the refuse store promoting recycling and outlining what should be placed in each refuse container.

Waste Proforma

- 4.12 As per the guidance contained in GD04, a Waste Proforma has been completed for the application and is provided in **Appendix B**.

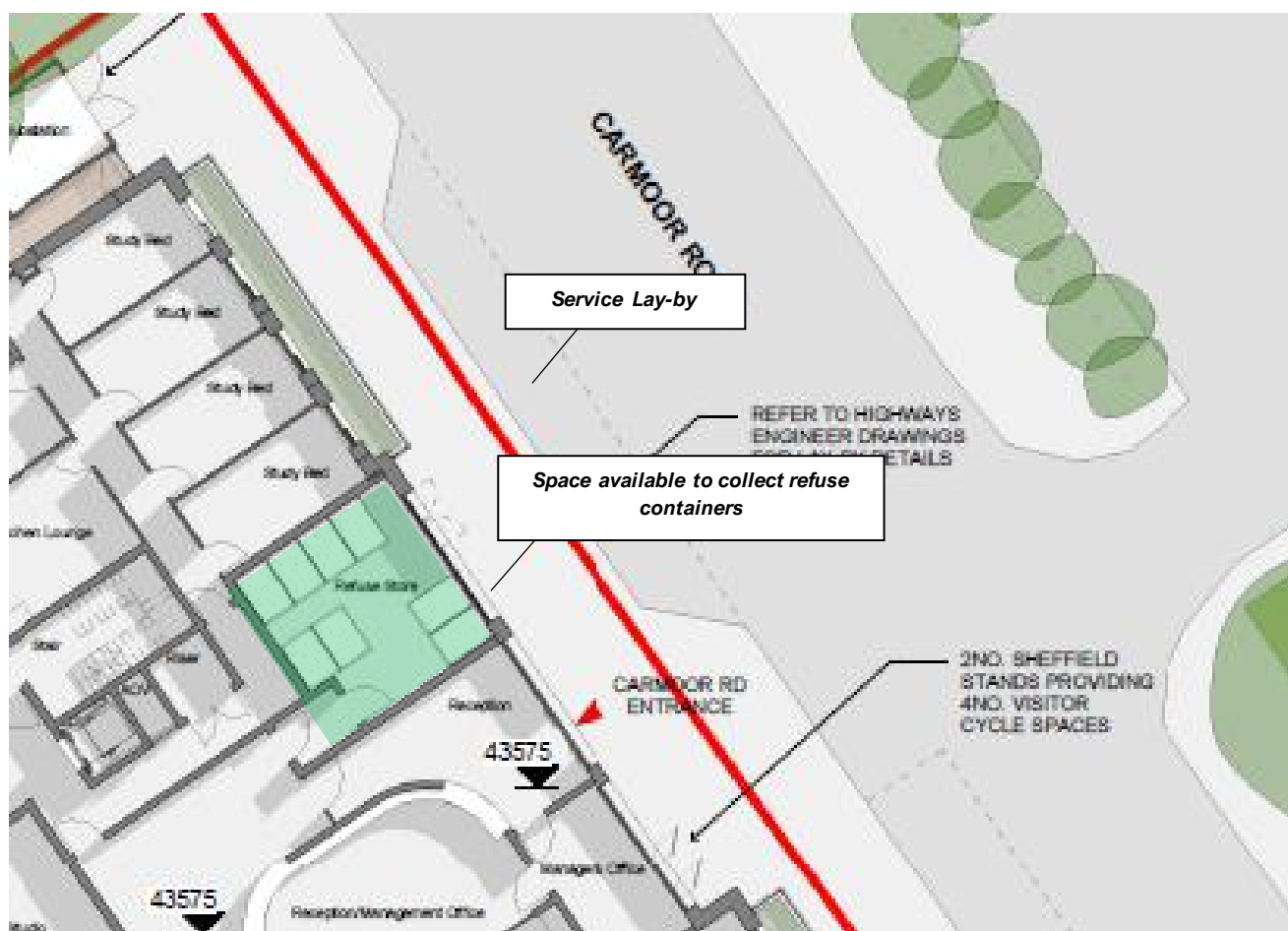
Figure 5.2: Internal Waste Transfer Route



External Waste Transfer Route

- 5.8 The waste transfer route from the ground floor refuse store to the collection point will be minimal. The distance between the refuse store access door and the service layby is approximately 3 metres. On-site management will therefore be on hand to leave refuse containers at the collection point immediately before they are emptied by MCC waste operatives and they will also be on hand to wheel them back to the refuse store once the collection has been completed. This strategy will minimise the amount of time refuse containers are left on street.
- 5.9 It is also noted that there will be sufficient space for pedestrians to walk past refuse containers when they are lined up against the building frontage prior to collection.
- 5.10 The external waste transfer route described in shown in **Figure 5.3**.

Figure 5.3: External Waste Transfer Route



- 5.11 As shown in **Figure 5.3**, the external waste transfer route will be minimal and there will be sufficient space available to temporarily store refuse containers against the building's frontage immediately prior to collection. As noted, they will then be returned to the refuse store by on-site management immediately after collection has taken place.

Lift Breakdown Strategy

- 5.12 In the event of the lift breaking down, a Management Plan will be put in place by the site's management service. This will involve waste being carried down to the ground floor refuse store by a member of the concierge service who will collect waste at a rate of around once every 2 days during the period that the lift is being repaired.

6 Summary and Conclusion

Summary

- 6.1 Vectos has been appointed by Tiger Developments Ltd to provide a Waste Management Strategy in relation to a proposed residential development off Carmoor Road, Manchester.
- 6.2 This Waste Management Strategy has provided information on the estimated volumes and types of waste produced by the development, along the size and location of waste and recycling stores, and how the waste will be delivered to these areas.
- 6.3 It has been demonstrated that adequate refuse storage can be provided, along with a suitable refuse collection regime based on the proposed development's waste forecast.
- 6.4 Both refuse and servicing activity will be undertaken with minimal impact on the surrounding highway network.

Conclusion

- 6.5 It is concluded that the waste management and refuse collection proposed is appropriate for this scale of development and that servicing and waste collection can be undertaken in an efficient manner.

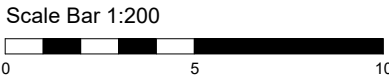
Appendices

Appendix A

Proposed Site Layout



Level 00 Plan
1 : 200



NOTES:

No dimensions to be scaled from drawings. All dimensions to be checked on site prior to manufacture.

This drawing is to be read in conjunction with all relevant Structural Engineers and Mechanical & Electrical Engineers drawings and specification. Any discrepancies between drawings and site conditions are to be reported to the contract manager.

Areas are approximate and can only be verified by a detailed dimensional survey of the completed building. Any decisions to be made on the basis of these predictions, whether as to project viability, pre-letting, lease agreements or otherwise, should include due allowance for the increases and decreases inherent in the design development and building processes. Existing buildings may present anomalies in relation to surveyed/drawn plans that may also affect the stated areas. All areas are subject to Town Planning and Conservation Area Consent and detailed Rights to Light analysis.

Copyright of this drawing and all the information it contains is vested in Lechler Hayes Ltd and no licence or assignment of any kind has been, or is, granted to any third party whether by provision of copies or original or otherwise unless agreed in writing.

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Lechler Hayes Architects

Client:

tigerdevelopments

B

A

REVISIONS				
P01	18.11.22	Planning submission.		
Rev.	DATE	DESCRIPTION		APPD

I

Project		Carmoor Road for Tiger Developments Ltd		
Title		Level 00 Plan		
Status	Sheet size	Project No.	Drawing No.	Rev.
PLANNING	1:200 @ A1	2205	LHA-20-00-DR-A-PL-010	P01

Appendix B

Completed MCC Waste Proforma

Appendix E Proforma for Planning Applications



Planning Application – Waste Management Strategy

Planning Application Number: *To be confirmed once the application is submitted*

Date Submitted: *Proforma submitted in November 2022*

Estimated volumes/m² required by the development

Low Rise Domestic

Waste Types	Capacity Required (litres)	Number of bins required per household	Confirm what is to be provided
General refuse	140 / 240	1 x wheeled bin	<i>Not applicable as the development proposed more than 10 apartments.</i>
Pulpable Recycling	140 / 240	1 x wheeled bin	
Mixed Recycling	140 / 240	1 x wheeled bin	
Garden Waste	140 / 240	1 x wheeled bin	
Food Waste	23	1 x 23 litre caddy	

High Rise Apartment Developments

	Yes/No – how much space has been provided?
0.43m ² has been provided per apartment for the container space. Space to manoeuvre and access containers individually has also been provided so that each container can be accessed and removed for collection individually.	<i>61 apartments are proposed, equating to a refuse storage provision of 26.23m². The refuse store proposed for this application accommodates a total floor area of 29.6m² meeting GD04's requirement.</i>

Commercial Development

Please state the number of bins you propose, showing calculations when appropriate.

The number of refuse containers proposed to serve the development is as follows:

	General Refuse	Pulpable	Co-mingled	Organic	Total
<i>Eurobins (1,100 litre)</i>	3	2	2	0	7
<i>240 litre refuse containers</i>	0	0	0	2	2

The provision of refuse containers outlined above has been based on GD04's requirement for residential apartment use (weekly waste in Litres = The number of properties in the development multiplied by 110 litres). This equates to 6,710 litres per week for 61 apartments.

Using guidance contained in British Standards BS5906:2005 and WRAP, the forecast of general waste and recyclables by volume is as follows:

	General Refuse	Pulpable	Co-mingled	Organic	Total
<i>Waste Stream Proportion</i>	47%	23%	23%	7%	100%
<i>Litres per week</i>	3,154	1,543	1,543	470	6,710

The refuse containers proposed are therefore considered appropriate.

Has / will a contract be obtained with a licensed waste carrier?



Mixed Use Developments

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

Not applicable for this application

Internal Stores (Residential and Commercial)

Please provide details of internal stores / segregation of waste and recycling.

The Waste Management Strategy that this Proforma is appended to focusses on the segregation of waste. It has done so in order to decipher recyclables from the total waste generated by the development.

The refuse store will accommodate segregated waste streams, with no need to divide commercial and residential waste as the development is for Purpose-Built Student Accommodation.

As shown in the table above, waste will be segregated into general, pulpable, co-mingled and organic streams, with waste deposited into each applicable refuse container.

General, pulpable and co-mingled waste will be stored in 1,100 litre Eurobins, as per the guidance contained in GD04, with organic waste stored in 240 litre refuse containers.

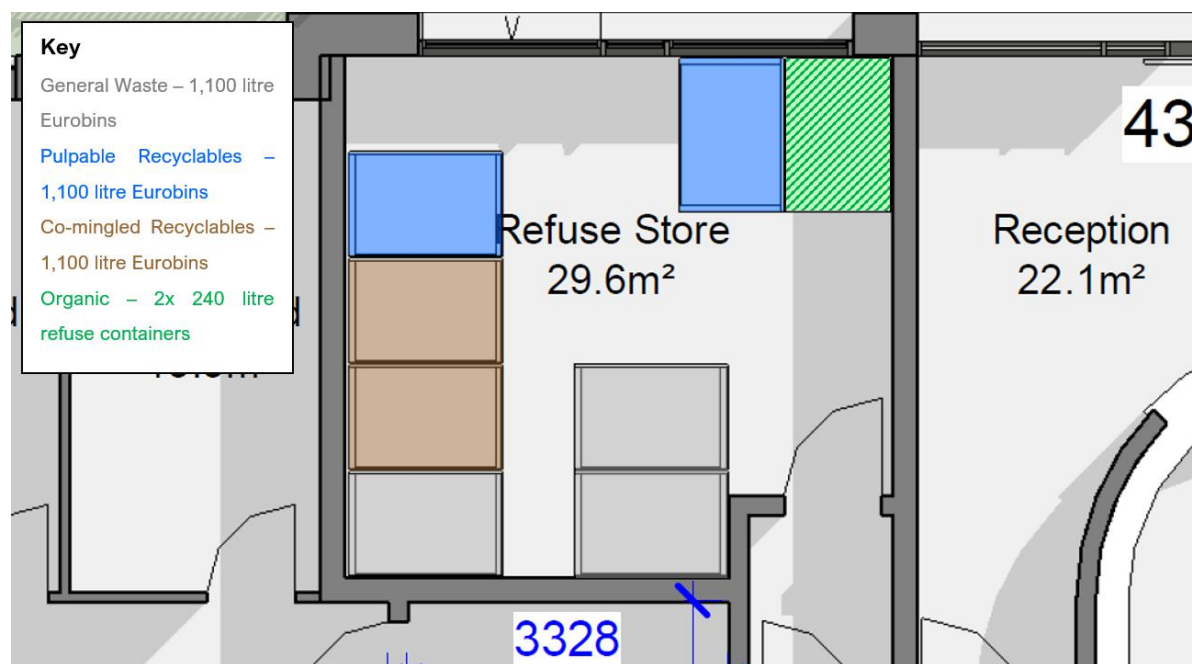
The container sizing will be as per the guidance contained in GD04 and as such will be as follows:

- 1,100 litre Eurobin – 1,575mm x 1,190mm floor space required; and*
- 240 litre refuse container – 780mm x 940mm floor space required.*

Storage Areas for Waste Containers (Residential and Commercial)

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

The refuse store will be located in the ground floor and will be able to store the required number of Eurobins and 240 litre refuse containers, as now shown.



The 4 waste streams stored in the refuse store will be independently accessible by refuse collection crews, given that they will normally be accessing these at different times, as per the guidance contained in GD04.

Ensure all bins in the store are accessible	☒
Ensure recycling facilities are as easy to access as general refuse	☒

Please confirm details of waste store ventilation and hygiene / cleaning proposals

Ventilation

It will be ensured that the internal refuse store will be appropriately ventilated.

Hygiene

Refuse containers will be of appropriate construction, kept in sound condition, and will be easily cleaned / disinfected. Adequate facilities will be used for storing and disposing waste. The refuse store will be managed in a way that enables them to be kept clean. Waste will be disposed of in a hygienic and environmentally-friendly way, in accordance with legislation. The waste will therefore not be a direct or indirect source of contamination (e.g. touching surfaces that food is prepared on, or attracting pests).

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.

Residents will take waste from their respective apartment cluster to the ground floor refuse store using the internal waste transfer routes demonstrated. On-site Management will ensure this strategy works day to day and as such will be responsible for ensuring the refuse store is accessible on collection days. They will also wheel the various refuse containers to the adjacent collection point on collection days.

It is expected that both refuse and servicing activity will be undertaken outside of peak hours in order to minimise the noise impacts towards surrounding land uses.

Waste and servicing activity at the site is not expected to generate a significant volume of trips. Trips that do occur will also be 'linked' trips as they will typically be made by vehicles making other delivery trips in the area.

Please ensure that you have attached:

Detailed plans of waste stores – <i>Yes, please see the Waste Management Strategy.</i>	☒
Location plans showing stores – <i>Yes, please see the Waste Management Strategy</i>	☒
Location plans showing the proposed collection point and the route the collection vehicle will take - <i>Yes, please see the Waste Management</i>	☒

Please ensure that you have completed this form in accordance with our GD04 Waste Storage and Collection Guidance for New Developments – Yes, this has been ensured along with the Waste and Servicing Strategy.

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