



MIX Manchester – Phase 1

Operational Waste Management Strategy

Airport City Limited Partnership

Sixth Floor, Olympic House, Manchester Airport, M90 1QX

Prepared by:

SLR Consulting Limited

Treenwood House, Rowden Lane, Bradford on Avon,
BA15 2AU

SLR Project No: 402.065887.00001

26 March 2026

Revision: Final

Revision Record

Revision	Date	Prepared By	Checked By	Authorised By
Draft	6 March 2026	TC	TG	TG
Final Draft	19 March 2026	TC	TG	TG
Final	26 March 2026	TC	TG	TG
	Click to enter a date.			
	Click to enter a date.			

Basis of Report

This document has been prepared by SLR Consulting Limited (SLR) with reasonable skill, care and diligence, and taking account of the timescales and resources devoted to it by agreement with Airport City Limited Partnership (the Client) as part or all of the services it has been appointed by the Client to carry out. It is subject to the terms and conditions of that appointment.

SLR shall not be liable for the use of or reliance on any information, advice, recommendations and opinions in this document for any purpose by any person other than the Client. Reliance may be granted to a third party only in the event that SLR and the third party have executed a reliance agreement or collateral warranty.

Information reported herein may be based on the interpretation of public domain data collected by SLR, and/or information supplied by the Client and/or its other advisors and associates. These data have been accepted in good faith as being accurate and valid.

The copyright and intellectual property in all drawings, reports, specifications, bills of quantities, calculations and other information set out in this report remain vested in SLR unless the terms of appointment state otherwise.

This document may contain information of a specialised and/or highly technical nature and the Client is advised to seek clarification on any elements which may be unclear to it.

Information, advice, recommendations and opinions in this document should only be relied upon in the context of the whole document and any documents referenced explicitly herein and should then only be used within the context of the appointment.



Table of Contents

Basis of Report	i
Acronyms and Abbreviations	v
1.0 Introduction	1
1.1 Document Content	1
2.0 The Development Proposals	2
2.1 The Application Site	2
2.2 Description of Proposed Development	3
3.0 Waste Policy Framework	5
3.1 Greater Manchester Joint Waste Development Plan Document	5
3.2 Greater Manchester Combined Authority Interim Recycling and Waste Plan.....	5
3.3 British Standards	6
3.3.1 BS5906: Waste Management in Buildings Code of Practice.....	6
3.4 Definitions of Waste	6
4.0 Ensuring Sustainable Waste Management.....	8
4.1 Waste Hierarchy.....	8
4.2 Circular Economy	8
4.3 Simpler Recycling.....	9
4.4 The Carbon Agenda	10
4.4.1 Climate Change Act and UK Carbon Plan	10
4.5 Other Sustainable Waste Management Initiatives	11
4.5.1 Compulsory Recycling.....	11
4.5.2 Variable Charging/ Pay As You Throw	11
5.0 Manchester City Council Waste Arrangements	12
5.1 Current Waste Management Performance	12
5.1.1 Waste Disposal Arrangements	12
5.2 Commercial Waste Arrangements.....	12
6.0 Waste Management System	13
6.1 Estimates of Waste Arisings	13
6.2 Commercial Waste Management	13
6.2.1 Waste Minimisation and Reduction	14
6.2.2 Waste Volumes and Storage Requirements	14
6.2.3 Vehicle Access and Presentation of Waste	24
7.0 Public Realm Waste and Other Wastes	28
7.1 Litter Waste	28



7.2	Landscaping Wastes	28
7.3	Hygiene Wastes	28
7.4	Confidential Paper Waste	28
7.5	Bulky Wastes	28
8.0	Conclusion.....	30

Tables in Text

Table 3-1	Waste Descriptions	6
Table 4-1	Waste Hierarchy.....	8
Table 5-1	MCC Current Waste Management Performance (Local Authority Collected Waste)	12
Table 6-1	Estimated Waste Arisings	13
Table 6-2	Waste Volume Arising Assumptions.....	14
Table 6-3	Mid Tech Units Bin Requirements	16
Table 6-4	Shared Amenity Unit Bin Requirements	18
Table 6-5	MSCP Commercial Unit Bin Requirements	19
Table 6-6	Outline Element Waste Volume Arising Assumptions ¹⁴	22
Table 6-7	Parcel A Indicative Waste Storage Requirements*	23
Table 6-8	Parcel B Indicative Waste Storage Requirements	23
Table 6-9	Parcel C Indicative Waste Storage Requirements	23
Table 6-10	Parcel D Indicative Waste Storage Requirements*	24

Figures in Text

Figure 2-1	Site Location Plan	2
Figure 2-2	Proposed Site Plan (with Development Parcel Identification)	3
Figure 2-3	Illustrative Masterplan	4
Figure 6-1	Plot A1 proposed bin store locations and sizes	15
Figure 6-2	Plot A2 proposed bin store locations and sizes	15
Figure 6-3	Plot A5 proposed bin store locations and sizes	16
Figure 6-4	Indicative Mid Tech Unit Bin Store Layout.....	17
Figure 6-5	Shared Amenity Units Layout.....	18
Figure 6-6	Indicative MSCP Commercial Unit Layout.....	19
Figure 6-7	MSCP Showers and Changing Room Area.....	20
Figure 6-8	Waste Movement from MSCP Showers / Changing Room to Shared Amenity Bin Store.....	21
Figure 6-9	Outline Element Masterplan	22



Figure 6-10 Swept Path Analysis of the Detailed Element and Parcel B, C & D of the Outline Element	25
Figure 6-11 Detailed Element Example RCV Servicing Arrangement.....	26
Figure 6-12 Swept Path Analysis of Parcel A	27

Appendices

Appendix A	Site Location Plan
Appendix B	Proposed Masterplan
Appendix C	Vehicle Tracking and Swept Path Analysis
Appendix D	MCC Waste Storage and Collection Pro Forma



Acronyms and Abbreviations

ACLP	Airport City Limited Partnership
AGMA	Association of Greater Manchester Authorities
BS	British Standard
DEFRA	Department for Environment, Food & Rural Affairs
EA	Environment Agency
EMT	Estate Management Team
F&B	Food and Beverage
FTE	Full Time Equivalent
GA	General Arrangement
GHG	Greenhouse Gas
GIA	Gross Internal Area
GMCA	Greater Manchester Combined Authority
GMP	Good Manufacturing Practice
LACW	Local Authority Collected Waste
MCC	Manchester City Council
MSCP	Multi Storey Car Park
OWMS	Operational Waste Management Strategy
PAYT	Pay As You Throw
RCV	Refuse Collection Vehicle
R&D	Research and Development
RMA	Reserved Matters Application
WCA	Waste Collection Authority
WDA	Waste Disposal Authority



1.0 Introduction

This Operational Waste Management Strategy (OWMS) has been prepared by SLR Consulting Limited, on behalf of Airport City Limited Partnership (ACLP) (the “Applicant”), to support the submission of a hybrid planning application for a science and technology research and manufacturing park, to be known as MIX Manchester, located to the north of Manchester Airport (the Proposed Development).

This OWMS is concerned with all wastes anticipated to be generated from the Proposed Development once constructed and occupied.

As a Waste Collection Authority (WCA), Manchester City Council (MCC) is responsible for the collection all municipal solid waste (including household but excluding commercial wastes) within its area.

The construction of the Proposed Development, which comprises mid-tech units, multi-storey car park (MSCP), commercial uses and associated access, servicing, public realm and landscaping, may potentially result in an increase in the overall municipal waste arisings for MCC (as some waste could be collected by MCC in the future if commercial waste collection services are offered). Even if not included within the municipal waste arisings, the occupation of the Proposed Development will increase the overall waste arisings produced in Manchester City and the Northwest region. It is important that an operational waste management strategy is adopted that aims to manage the waste from the Proposed Development in a sustainable manner, and which minimises the resultant environmental impact.

This document has been prepared with consideration of MCC’s ‘Waste Storage and Collection Guidance for New Developments v7¹’. The OWMS does not consider the management of waste produced during demolition and construction, however a separate Construction Site Waste Management Plan (SWMP) has been submitted with the hybrid planning application to consider those waste types.

1.1 Document Content

The Operational Waste Management Strategy provides:

- An overview of the Proposed Development to provide the context for the document;
- reference to the Waste Storage and Collection Guidance Document;
- an overview of current municipal waste management performance in Manchester City;
- estimates of the quantities and volumes of waste anticipated to be generated from the Proposed Development;
- information about the management of waste types anticipated to be generated from the Proposed Development; and
- consideration of the management of wastes from the public realm (including litter and wastes from landscaping activities) and other wastes.

A series of Appendices sets out additional supporting information.

¹https://www.manchester.gov.uk/downloads/file/29119/gd04_waste_storage_and_collection_guidance_for_new_developments_v7_sept_2023



2.0 The Development Proposals

This chapter of the OWMS provides details of the Site and the Proposed Development.

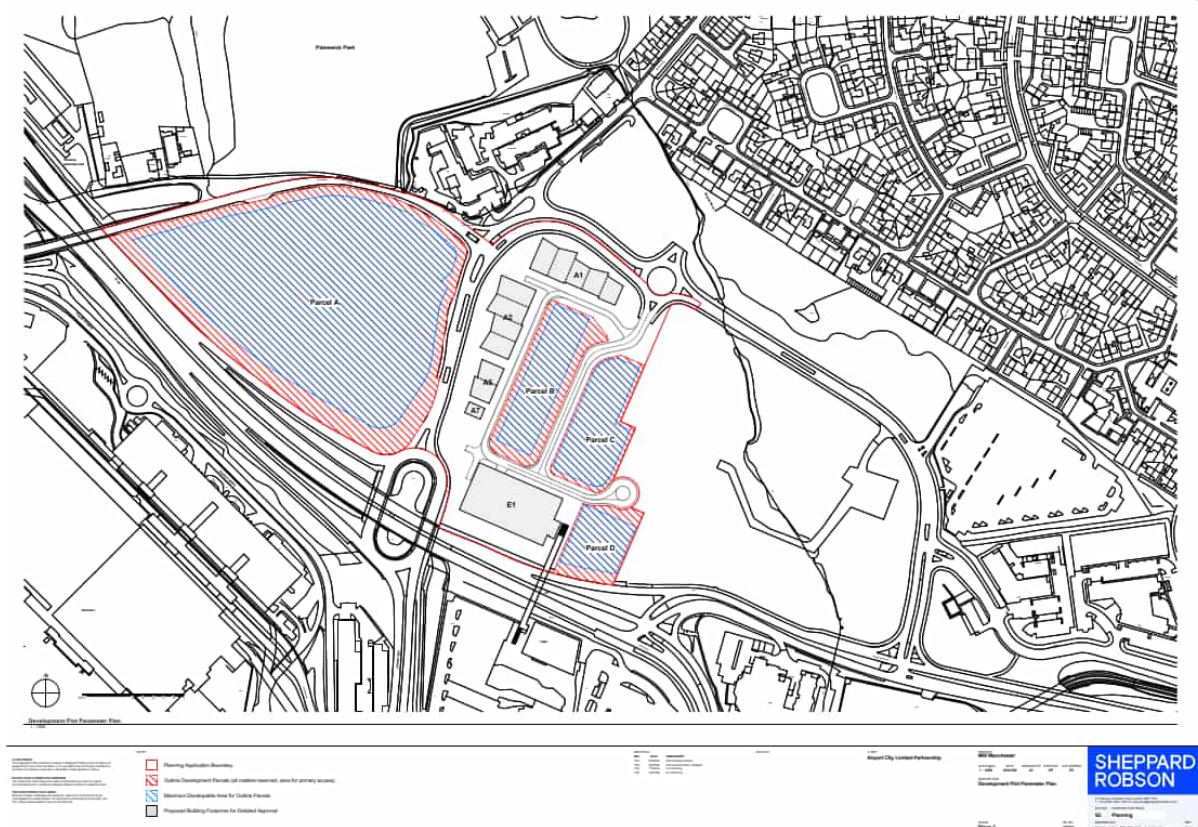
2.1 The Application Site

MIX Manchester (the 'Site') (formerly Airport City North) is located on land to the North of the A56 Spur, immediately South of Wythenshawe and to the North of Manchester Airport, M90 5AZ. At present the Detailed Element (Units A1, A2, A5, A7 and E1) and Outline Element (Parcel B, C and D) currently comprise previously developed (brownfield) land. The Outline Element (Parcel A) currently comprises a long stay airport car park. The Site Location Plan is provided in Figure 2-1 below (with the original full sized drawing included in Appendix A), and Figure 2-2 illustrates the proposed Site plan with identification of development parcel nomenclature (A to D).

Figure 2-1 Site Location Plan



Figure 2-2 Proposed Site Plan (with Development Parcel Identification)



2.2 Description of Proposed Development

Hybrid Planning Application seeking:

- 1) Full planning permission for development of mid-tech units (Use Class E.g.(i,ii,iii)) and multi-storey car park (Use Class Sui Generis), alongside ancillary commercial uses (Class E) with associated access, servicing, public realm and landscaping.
- 2) Outline planning permission for development of a range of uses (comprising Use Class E.g., B2, C1) alongside a Multi-Storey Car Park (Use Class Sui Generis) and ancillary commercial uses (Class E), with associated access, servicing, public realm and landscaping. All matters reserved for future determination save for primary access.

In totality the scheme is referred to as the Proposed Development. Within this document the full planning permission aspects are referred to as the Detailed Element of the Proposed Development and the outline planning permission aspects referred to as the Outline Element of the Proposed Development.

The Detailed Element of the planning application comprises:

- Unit A1 – 2,835m² GIA. Consisting of 5 mid-tech units.
- Unit A2 – 2,785m² GIA. Consisting of 4 mid-tech units.
- Unit A5 – 950m² GIA. Consisting of 2 mid-tech units.
- Unit A7 – 180m² GIA. Consisting of retail / food and beverage and amenity.
- Multi Storey Car Park (MSCP) – 41,253m² GIA. Including a ground floor commercial unit of 475m².

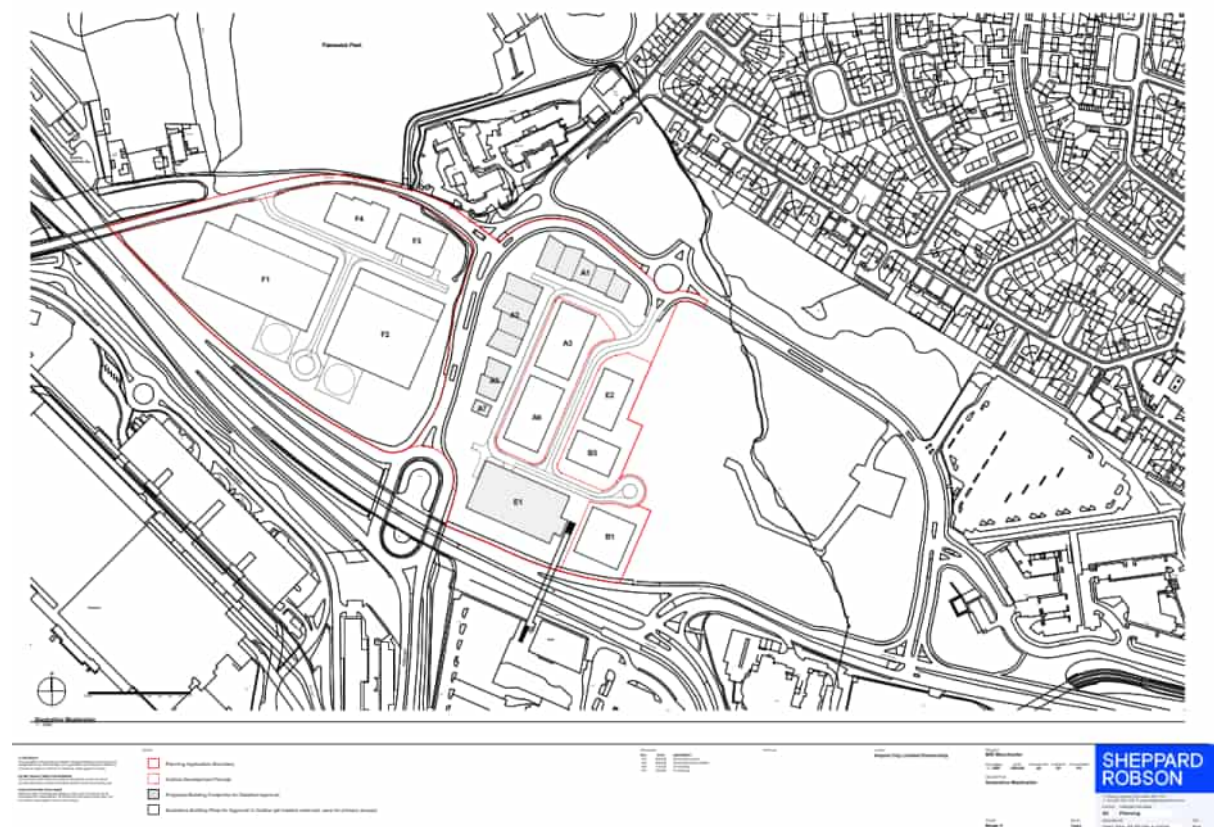


The Outline Element of the planning application comprises:

- Parcel A – commercial floorspace up to 49,500m² GIA including a MSCP.
- Parcel B – commercial floor space up to 23,100m² GIA.
- Parcel C – commercial floor space up to 17,820m² GIA.
- Parcel D – commercial floor space up to 16,060m² GIA.

The Illustrative Masterplan for the Proposed Development is included below in Figure 2-3, a full size version of the drawing is included in Appendix B.

Figure 2-3 Illustrative Masterplan



3.0 Waste Policy Framework

This chapter provides an overview of relevant local policy governing waste management.

3.1 Greater Manchester Joint Waste Development Plan Document

In April 2012, the Association of Greater Manchester Authorities (AGMA) now the Greater Manchester Combined Authority (GMCA) adopted a Joint Waste Plan covering the period 2012 to 2027². The purpose of the waste plan is to set out the waste planning strategy to 2027 to enable adequate provision of waste management facilities for the management of municipal, commercial and industrial, construction and demolition and hazardous wastes.

The plan sets eight key objectives; for brevity the objectives of particular relevance to the Proposed Development are summarised below (please refer to footnote 2 for further detail):

- To promote the movement of waste up the waste hierarchy, assuming minimisation at source, increasing reuse, recycling and recovery, whilst recognising there may still be a need for additional landfill capacity for residual wastes.
- To assist in reducing greenhouse gas emissions and assist in adoption/mitigation of climate change, including resource efficiency and minimising the need for energy in accordance with targets at national, regional and local level.
- To reduce waste movements and, where waste needs to be moved, to promote the sustainable movement of waste across the sub-region.

It is noted that the plan is now nearing the end of the strategy period in 2027 and has in effect been superseded; it is included within this report for completeness. Please see Section 3.2 below for details of the latest recycling and waste plan for Greater Manchester.

3.2 Greater Manchester Combined Authority Interim Recycling and Waste Plan

GMCA (of which MCC is apart) as a Waste Disposal Authority (WDA) adopted an Interim Recycling and Waste Plan³ on the 2nd February 2026. The Plan covers the period 2026 – 2030 and sets out actions that GMCA will undertake to monitor national policies and adapting services to develop a waste management strategy in the future. Four key strategic objectives are defined as follows:

1. Develop and deliver innovative and inclusive services that reflect local challenges such as population growth, diversity, demographic changes and housing stock.
2. Reduce the carbon impact of household waste services and infrastructure.
3. Deliver social, environmental and economic value using our services.
4. Ensure Greater Manchester's voice is heard on waste matters.

The plan is primarily focused on the performance and delivery of the recycling and management of household wastes. The Proposed Development will comprise commercial uses only, therefore, all wastes arising will be classified as commercial and industrial wastes.

² https://www.greatermanchester-ca.gov.uk/media/ibdjnc2n/greater_manchester_waste_plan.pdf

³

<https://democracy.greatermanchesterca.gov.uk/documents/s41969/8A%20Interim%20Waste%20Strategy%202026-30%20Final.pdf>



Included below are extracts from the Interim GMCA Recycling and Waste Plan ‘Actions and Implementation’ section that are of relevance to non-residential wastes:

1. To develop and deliver innovative and inclusive services that reflect local challenges such as population growth, diversity, demographic changes and housing stock we will (amongst other measures):
 - g. Work with councils, the Environment Agency (EA) and Defra to promote and enable households and businesses to dispose and recycle their waste via legitimate routes to reduce occurrences of fly-tipping

At the time of preparing this report, this remains the most recent and up to date strategy for MCC.

3.3 British Standards

The following British Standards are of relevance to waste management:

3.3.1 BS5906: Waste Management in Buildings Code of Practice

BS 5906 is a code of practice for methods of storage, collection, segregation for recycling and recovery, and on-site treatment of waste from residential and non-residential buildings and healthcare establishments.

3.4 Definitions of Waste

Legal definitions for different waste streams are provided in Table 3-1; some terms listed are not used within this document but are nevertheless included to avoid any confusion or ambiguity. The waste arising from the Proposed Development will predominantly be classified as commercial waste.

Table 3-1 Waste Descriptions

Controlled Waste	Description
Household Waste	Household waste refers to waste collected from domestic, residential properties; it includes household collection rounds, other household collections such as bulky waste collections, waste deposited by householders at household waste recycling centres and recycling points / bring banks.
Municipal Waste	The definition excludes non-domestic properties such as hospitals and nursing homes, residential hostels, residential homes, schools, universities and other educational facilities, caravan sites and campsites, self-catering holiday accommodation, prisons and penal institutions, public halls, royal palaces and premises occupied by charities and used for charitable purposes.
Commercial Waste	Commercial waste comes from premises used wholly or mainly for trade, business, sport, recreation or entertainment, and excludes household and industrial waste.
Industrial Waste	Industrial waste is the waste produced by industrial activity which includes any material that is rendered useless during a manufacturing process such as that of factories, mills, and mining operations.
Construction, Demolition and Excavation Waste	Demolition waste includes unwanted material arising from the demolition or strip out of an existing structure. Excavation waste includes unwanted material resulting from excavation activities such as a reduced level dig and site preparation and levelling, excavation of foundations, basements, tunnels and services trenches, typically consisting of soil and stones.



Controlled Waste	Description
	Construction waste is any other unwanted material produced at the construction site.
Green Waste	Green waste refers to biodegradable waste (i.e. waste that can decompose naturally and organically) such as grass cuttings, hedge trimmings or other similar material.
Food (Catering) Waste	Food (catering) waste is defined as all waste food including used cooking oils originating in restaurants, catering facilities and kitchens (including central kitchens and household kitchens). Where catering wastes are collected separately their management is subject to additional controls (Animal By-product Regulations).
Bulky Waste	The definition of bulky waste is “any article of waste which exceeds 25 kilograms in weight; and/or any article of waste which does not fit, or cannot be fitted into a receptacle for household waste provided in accordance with section 46 of the Environmental Protection Act 1990; or where no such receptacle is provided, a cylindrical container 750 millimetres in diameter and 1 metre in length.”
Clinical Waste	Clinical waste is the term used to describe medical waste produced from healthcare and similar activities that may pose a risk of infection. Clinical waste can be hazardous to anyone who comes into contact with it. Clinical waste may contain human or animal tissue, blood or other body fluids, excretions, drugs or other pharmaceutical products, used swabs or dressings, used syringes, needles or other sharp instruments.
Infectious Waste	Infectious waste is normally produced during human and animal health care activities and typically comprises waste contaminated with blood and other bodily fluids (e.g. from discarded diagnostic samples), cultures and stocks of infectious agents from laboratory work (e.g. waste from autopsies and infected animals from laboratories), or waste from patients in isolation wards and equipment (e.g. swabs, bandages and disposable medical devices).
Offensive Waste	Offensive waste is non-infectious waste, which is unpleasant and may cause offence to those coming into contact with it. It includes outer dressings and protective clothing (e.g. masks, gowns and gloves that are not contaminated with body fluids), hygiene waste and sanitary protection (e.g. nappies and incontinence pads); and autoclaved laboratory waste. Offensive waste is classified as non-hazardous waste.



4.0 Ensuring Sustainable Waste Management

This chapter sets out the concepts and requirements for the sustainable management of waste.

The Applicant wishes to ensure that the methods adopted for managing waste are sustainable and that any negative environmental impact is kept to a minimum. In considering the approach to sustainable waste management a number of concepts and assessment methods have been taken into consideration; these are set out in this chapter.

4.1 Waste Hierarchy

Article 4 of the revised EU Waste Framework Directive (Directive 2008/98/EC) sets out five steps for dealing with waste, ranked according to environmental impact – the ‘waste hierarchy’. Table 4-1 presents the five stages of the waste hierarchy and describes the requirements of each stage.

The waste hierarchy set out in the EU Waste Framework Directive is enshrined into domestic legislation for England and Wales through Regulation 12 of the Waste (England and Wales) Regulations 2011.

Table 4-1 Waste Hierarchy

Stages	Requirements
Prevention	Using less material in design and manufacture. Keeping products for longer; re-use. Using less hazardous materials.
Preparing for reuse	Checking, cleaning, repairing, refurbishing, whole items or separating into spare parts.
Recycling	Turning waste into a new substance or product. Includes composting if it meets quality protocols.
Other recovery	Includes anaerobic digestion, incineration with energy recovery, gasification and pyrolysis which produce energy (fuels, heat and power) and materials from waste; some backfilling.
Disposal	Landfill and incineration without energy recovery.

In developing the OWMS, the Applicant has sought to follow the priorities set out in the waste hierarchy such that options for prevention, reuse and recycling are promoted above recovery and that disposal approaches are limited as far as possible.

4.2 Circular Economy

National and local governments have declared climate emergencies, placing responsibility on citizens and businesses to consider how their actions can impact upon the global climate. In response, public and private sector organisations must now consider the environmental impact of their activities and how they can be adapted to support efforts for sustainable growth⁴.

New developments provide an opportunity to consider how materials are sourced and used. These opportunities can be used to reduce waste generation and associated emissions. The circular economy is an economic system where the very notion of waste is eliminated. The system seeks to maximise value from the materials we consume and products we use whilst eradicating the notion of waste entirely when the materials and products reach the end of their working life.

⁴ <https://watereurope.eu/european-parliament-adopts-resolution-on-the-new-circular-economy-action-plan/>



Developments such as this can consider and address the Circular Economy by:

- Incorporating sustainable materials and products that are technically, economically and environmentally practicable alternatives to carbon-intensive supplies.
- Using careful supply estimations to minimise surplus goods. Where surplus goods do arise, seeking to return these to suppliers, utilise these in other operational developments or identify organisations within local communities that can use the product.
- Adopting a modular approach to the design and manufacture of goods used in the operations of the development to minimise wastes and facilitate the ability to undertake repairs opposed to replacement of modules. A modular approach will allow for disassembly and reuse of items.
- Exploring opportunities to lease goods for the Development. This will eradicate the need to purchase and then manage items.
- Sourcing suppliers that share similar values and who demonstrate circular principles in their own operations.
- Working with supply chains and encourage take-back services that remove packaging, surplus stock and spent items from the Development, to then be reused, recycled or recovered in their own operations.
- Working with local supply chains to identify off-takers that can valorise waste materials arising from the Development to generate new products beyond dry mixed recycling materials.
- Ensuring suitable bin storage is allocated to allow for the appropriate segregation of recyclable materials (including food waste) to push waste up the waste hierarchy.

4.3 Simpler Recycling

Simpler Recycling has reformed recycling collections in England, applying to both households and businesses. It mandates that the same core set of materials for recycling are collected from households and businesses. The stipulated materials are as follows: plastic⁵, metal, glass, paper/card, food waste and garden waste (with garden waste only applying to households where requested). There was previously no legal requirement for businesses to separate dry recycling or food waste, until the introduction of Simpler Recycling which made this a legal requirement.

The new default requirement for households and workplaces is to have four waste storage containers (general waste, recyclables 1 (paper and card), recyclables 2 (plastic, cans and glass), and food waste). However, three containers may be possible where a waste collection contractor has completed a written assessment in order to co-collect recyclables 1 and recyclables 2 within a single bin.

Businesses in England are classified based on the number of full time equivalent (FTE) employees as follows:

⁵ Including cartons



Business Size	Number of FTEs
Micro	<10
Small	<50
Medium	<250
Large	≥250

Simpler Recycling commenced in March 2025, with a phased roll out to 2027, as follows:

- March 2025 – small, medium and large businesses recycle all waste streams except for plastic film and garden waste;
- March 2026 – Households to recycle all waste streams except for plastic film (and food waste where transitioning arrangements apply); and
- March 2027 – Micro-firms recycle all waste streams except for garden waste. Plastic film collections from all businesses and households.

While future occupiers are currently unknown, it is the Applicants intention that the Proposed Development will be compliant with Simpler Recycling requirements from the point of first occupation.

4.4 The Carbon Agenda

4.4.1 Climate Change Act and UK Carbon Plan

The Climate Change Act 2008 established a legally binding target to reduce the UK's greenhouse gas emissions by at least 80% below base year levels by 2050. To drive progress and set the UK on a pathway towards this target, the Act introduced a system of carbon budgets which provide legally binding limits on the amount of emissions that may be produced in successive five-year periods, beginning in 2008.

The first three carbon budgets were set in law in May 2009 and require emissions to be reduced by at least 34% below base year levels in 2020. The fourth carbon budget, covering the period 2023–27, was set in law in June 2011 and requires emissions to be reduced by 50% below 1990 levels. The fifth carbon budget, covering the period 2028–32, was agreed by the Government in 2016 and requires emissions to be reduced by 57% relative to 1990 levels. The sixth carbon budget covering the period 2033–37 was set out by the Government in 2021 and defines the carbon budget at 965 MtCO₂e across the period.

The seventh carbon budget covering the period 2038 to 2042 was published as a recommendation by the Climate Change Committee to the UK Government in February 2025. It defines the carbon budget at 535 MtCO₂e across the period. However, it is currently not yet finalised as official policy⁶. The UK government has until 30th June 2026 to finalise the carbon budget for the period 2038 to 2042⁷.

In 2019, the 2050 target amendment to the Climate Change Act was agreed, which increased the minimum percentage reduction requirement for the net UK carbon account for the year 2050 from 80% to 100% compared to 1990 baseline levels.

The UK Carbon Plan, published in December 2011, sets out the Government's plans for achieving the emissions reductions set out in the Climate Change Act 2008. Chapter 6 of the

⁶ [The Seventh Carbon Budget - Climate Change Committee](#)

⁷ [The seventh carbon budget | NEB Digest](#)



plan includes commitments to reducing the carbon emissions from waste management. These commitments include:

- transition to a “zero waste economy”; and
- harnessing energy from waste through anaerobic digestion and Combined Heat and Power.

4.5 Other Sustainable Waste Management Initiatives

4.5.1 Compulsory Recycling

Compulsory recycling can be enforced by Local Authorities under section 46 of the Environmental Protection Act 1990, as amended by Section 48 of the Clean Neighbourhoods and Environment Act 2005. Although the exact method can vary between councils, it generally means monitoring kerbside recycling schemes and ultimately prosecuting those who do not recycle.

This is applicable to residential premises, but similarly commercial waste companies may in the future start checking residual bins. In general, recycling bins are cheaper than residual waste bins so there is a financial incentive for businesses to prioritise recycling.

4.5.2 Variable Charging/ Pay As You Throw

Pay As You Throw (PAYT), also known as variable charging, refers to charging households and businesses for the collection, treatment and disposal of their waste. Crucially, it is charged according to the quantity of waste set out for collection (measured by volume, weight, size or number of containers, or a combination of these).

PAYT schemes have been operating in the US and continental Europe for some time. In the UK, existing legislation forbids any sort of charge to be made for household waste collection, but not so for commercial waste, where charges by container size and collection frequency often form the basis of charging (with some operators weighing containers as they are lifted and charging by weight).

As the Proposed Development will produce commercial waste, the waste collection services will be paid for. Although weight-based charges are applied in some instances, in general a flat charge per bin lift and bin size is normally levied by the commercial waste collection company. The number of bins required by material stream and the collection frequency will be kept under review throughout the life of the Proposed Development by the tenants and estate management team to ensure a suitably robust yet cost effective waste management service is operated.



5.0 Manchester City Council Waste Arrangements

This chapter sets out details of the current MCC waste management arrangements.

5.1 Current Waste Management Performance

MCC's waste performance for the past three years, according to Government statistics (Department for the Environment, Food and Rural Affairs (Defra) waste data reports), is provided in Table 5-1.

Table 5-1 MCC Current Waste Management Performance (Local Authority Collected Waste)

	2021/22	2022/23	2023/24
Total Local Authority Collected Waste (tonnes)	174,362	168,451	161,508
LACW recycling and composting rate (%)	36.6%	39.7%	38.8%
Proportion of municipal waste diverted from landfill (recovery rate %) ⁸	98.1%	98.4%	98.7%

The past 3 years' waste management performance presented in Table 5-1 shows that MCC's recycling and composting rates have fluctuated year on year ending in a net increase of 2.2% in 2023/24 compared to 2020/21. The MCC proportion of municipal waste diverted from landfill has remained relatively stable at c. 98% since 2020/21. MCC achieves such high recovery rates due to the treatment of its general waste via energy from waste technology (further information is included below).

5.1.1 Waste Disposal Arrangements

MCC is a Waste Collection Authority (WCA) and so has responsibility for waste collection. GMCA as the Waste Disposal Authority (WDA) has the responsibility of arrangements for disposal of municipal waste.

GMCA has been in contract with Suez since 2019 for the management and disposal of recycling and wastes. In 2024 an extension was agreed and the arrangement will now run until 2034⁹. The majority of the non-recyclable waste that is collected by MCC is sent to Runcorn energy recovery facility, with a smaller proportion going to Raikes energy recovery facility for treatment¹⁰.

5.2 Commercial Waste Arrangements

MCC do not currently offer a commercial waste collection service. As such the occupants of the Proposed Development will be required to procure waste management services from a private sector waste management company, or multiple companies.

It is the Applicants intention to provide facilities for recycling that comply with current guidance and requirements to maximise segregation of recyclables from residual waste across the Proposed Development. The Applicant and estate management team will consider the specification of preferred waste management companies within the lease agreements in order to minimise the number of refuse collection vehicles accessing the Site.

⁸ As reported by Greater Manchester Combined Authority as the Waste Disposal Authority.

⁹ <https://www.suez.com/en/news/press-releases/suez-and-greater-manchester-agree-extension-waste-and-recycling-contracts-2034-worth-over-1-billion>

¹⁰ <https://recycleforgreatermanchester.com/what-happens-to-my-general-waste/>



6.0 Waste Management System

This chapter sets out the proposed waste management system to be implemented for the Proposed Development.

As previously noted, the Proposed Development comprises hybrid planning application for a science and technology research and manufacturing park. The following sub-sections provide details of the waste management strategy for the Detailed and Outline Elements of the Proposed Development.

Provided in Appendix D is the completed MCC Pro Forma 'Appendix E – Waste Management Strategy (v7.00 from September 2023)'¹¹ confirming the requested waste management details and cross referencing to the relevant sections of this OWMS document as applicable.

6.1 Estimates of Waste Arisings

Set out below is an estimate of the likely mass of waste that could be generated from the Proposed Development. The calculations are based on a combination of building area schedules and an assumed 50kg of waste arising per square metre per annum (which is a typical indicative value for estimation of commercial waste tonnages). Table 6-1 presents a summary of total estimated refuse (including recyclables, food waste and residual wastes) per annum and per week.

Table 6-1 Estimated Waste Arisings

Proposed Development Reference	Waste arisings (tonnes per annum)	Waste arisings (tonnes per week)
Detailed Element	339.2	6.5
Outline Element	4,609.0	88.6
Total Proposed Development	4,948.2	95.2

Commercial waste arisings from the Proposed Development are predicted to be circa 4,948 tonnes per annum. The materials from each of the buildings should be segregated into dry recyclables (ideally two streams for Simpler Recycling compliance), food waste, residual waste and other waste streams. Due to the nature of the laboratory activities, it is expected that 'other' wastes will arise which will require separate management and direct collection from the tenant unit. This is discussed further below in Section 6.2.

The Applicant will ensure sufficient space is provided for a combination of residual and recyclable/compostable containers for the buildings within the Proposed Development within the designated bin stores (space internally within the unit for appropriate containment of specialist waste requirements will be addressed as part of the fit-out process).

6.2 Commercial Waste Management

As mentioned in Section 5.2, MCC do not currently offer a paid for service to collect commercial waste. All wastes arising from the Proposed Development will require collection from a private sector waste management company or utilising back-haul methods for some types of waste (e.g. packaging crates or pallets).

¹¹

https://www.manchester.gov.uk/download/downloads/id/29115/gd04_waste_storage_and_collection_guidance_for_new_developments_v7_sept_2023_-_appendix_e_proforma.pdf



Commercial waste collections are often very flexible, both in terms of collection frequencies and the sizes of the bins available. This means that commercial waste services can be tailored to meet the tenants' specific requirements and waste arisings, and adjustments can be made over time to the service.

6.2.1 Waste Minimisation and Reduction

The occupiers of the Proposed Development will be encouraged to adopt practices that reduce the quantity of waste generated and which ensure that waste is managed in the most sustainable manner possible.

The following provides examples of initiatives that will be considered to encourage waste minimisation and reduction:

- use of green leases setting out waste management approaches that organisations must adopt and setting targets for waste arisings and recycling performance; and
- encouraging the use of reusable transit packing and back-hauling of non-reusable transit packaging.

6.2.2 Waste Volumes and Storage Requirements

6.2.2.1 Detailed Element

The Detailed Element consists of:

- 11 Mid-Tech units within 3 buildings (Units A1, A2 and A5);
- 2 Shared amenity units within a single building (Unit A7); and
- MSCP including a ground floor (GF) commercial unit.

Each unit incorporates a separate internal refuse storage area which has been sized appropriately to accommodate the required number and type of containers for each unit. The waste storage requirement for each unit has been calculated utilising waste generation metrics which are applied to the Gross Internal Area (GIA) figures. The waste generation metrics applied by building/unit are summarised in Table 6-2 below.

Table 6-2 Waste Volume Arising Assumptions

Building and Category	Waste Generation Metric (L/m ²)
A1 – Mid Tech Units	4.25*
A2 – Mid Tech Units	
A5 – Mid Tech Units	
A7 – Shared Amenity	10.0
MSCP – GF Commercial Unit	5.0

*Mid Tech units are intended for R&D / Innovation uses and may include some light manufacturing and office use. 95% of waste generation is assumed to be the core waste streams (residual, recycling and food waste). The remaining 5% is assumed to be 'other' wastes requiring separate storage and management, further detail provided below.



Mid-Tech Units

Illustrated in Figure 6-1, Figure 6-2, Figure 6-3 are the General Arrangement (GA) drawings for the ground floor level of the Detailed Element buildings A1, A2 and A5 which consist of the Mid-Tech units.

There is an option for the Mid Tech units to incorporate a mezzanine level of up to 25% additional area. For the purposes of determining the waste storage requirements it is assumed that the Mid Tech units are developed with a 25% Mezzanine level, which is assumed to be waste generating (the most conservative assumption for waste modelling purposes). The waste storage requirements below are inclusive of the Mezzanine level area ensuring that the storage requirements are adequately sized. Each unit has a separate waste store, illustrated by the orange shaded areas, which is co-located with the 'plant room' in each unit.

Figure 6-1 Plot A1 proposed bin store locations and sizes

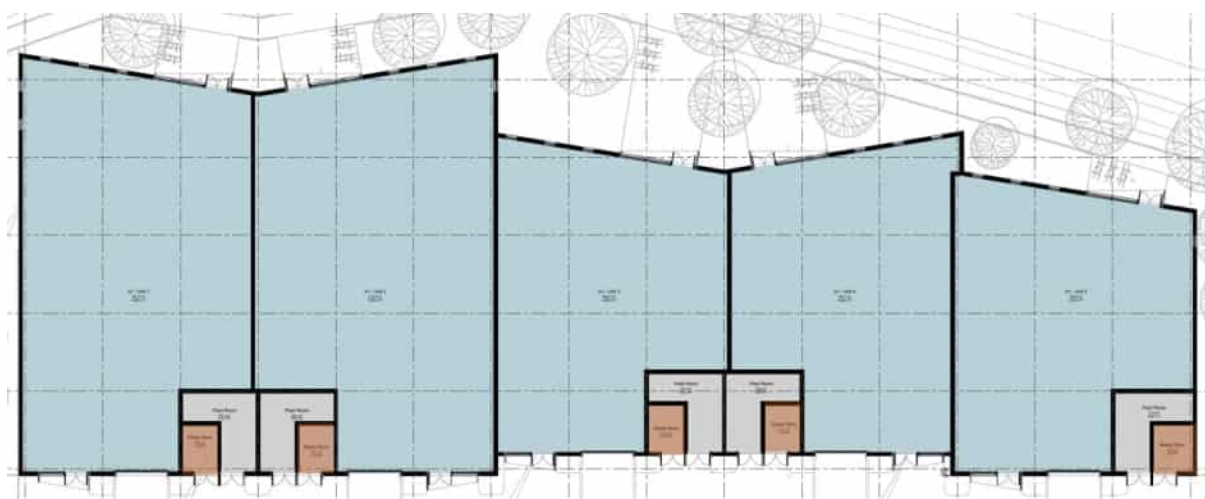


Figure 6-2 Plot A2 proposed bin store locations and sizes



Figure 6-3 Plot A5 proposed bin store locations and sizes



The total calculated waste storage volume provisions must then be divided into individual waste streams (residual waste, recycling (2 separate waste streams for Simpler Recycling compliance), food waste and other wastes from the laboratories as appropriate). The volume splits are indicative based on typical waste arisings likely to be generated from the occupation of the Proposed Development.

The bin stores for the Mid Tech units have been sized to accommodate the calculated waste arisings and corresponding number of bins. Specifically, the bin stores in each Mid Tech unit have been designed to accommodate the bins detailed in Table 6-3 below.

Table 6-3 Mid Tech Units Bin Requirements

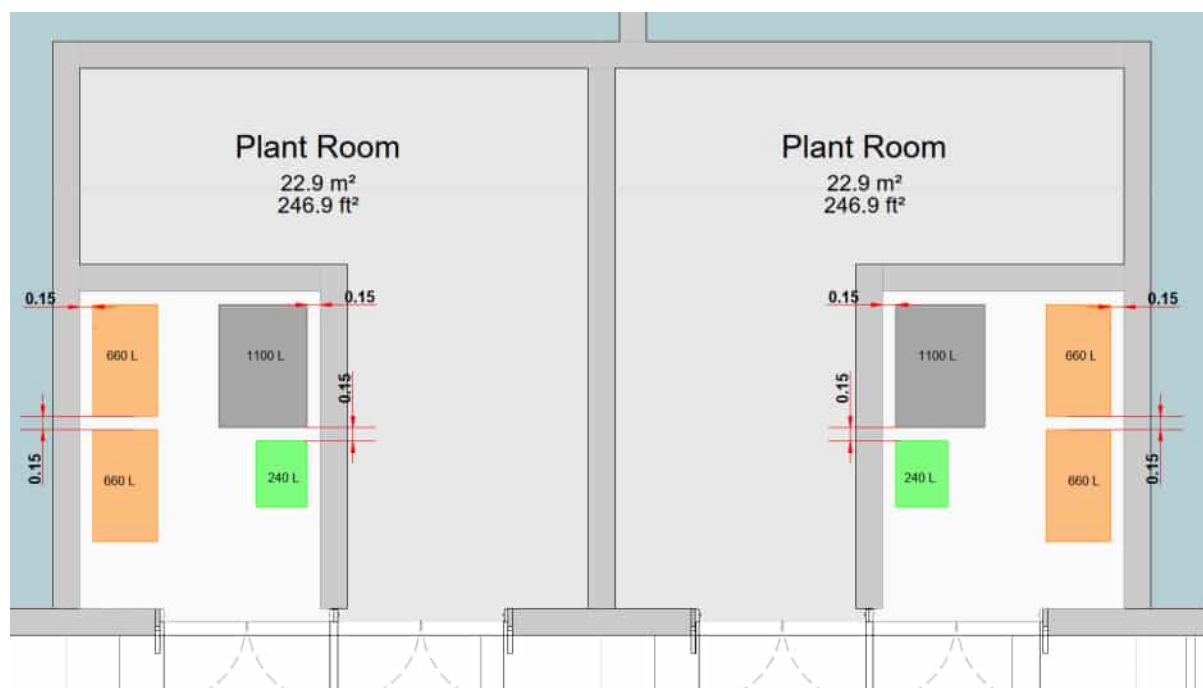
Waste Stream	Count & Bin Size (L)	Collection Frequency
Residual Waste	1 x 1100	2 x per week
Recycling	2 x 660 [#]	2 x per week
Food Waste	1 x 240	2 x per week

[#] 1 x 660L bin for paper and card, 1 x 660L bin for plastic, cans and glass as required under Simpler Recycling requirements.

An illustrative arrangement of the required bins contained within the smallest allocated bin store area (of 9.6m²) within the Detailed Element for the Mid Tech Units is illustrated in Figure 6-4 overleaf. There is adequate space for the storage and movement of bins to facilitate the collection and return of bins once emptied.



Figure 6-4 Indicative Mid Tech Unit Bin Store Layout



As mentioned above, it is anticipated that ‘other’ wastes will arise from the potential laboratory activities in the Mid Tech units. The type and amount of ‘other’ wastes will be dependent upon the tenants and the specific activities undertaken. It is anticipated that these wastes will not be suitable for depositing within the waste bins set out above and will require separate management. For the purposes of this OWMS, it is assumed that these ‘other’ wastes comprise c. 5% of the total waste arisings from each unit and will be stored within and collected directly from each unit.

Due to potential safety and greater precautionary requirements, it is not envisaged that these wastes will be stored in the bin stores along with the other wastes. The containment and collection frequency of the ‘other’ wastes will be subject to agreement between the tenant and specialist waste contractors, depending on the quantum and nature of the wastes requiring storage and collection. As mentioned above, commercial waste collections are often flexible and can be tailored to the specific tenant requirements to ensure an appropriate storage and collection arrangement.

Shared Amenity Units

Building A7 is comprised of two shared amenity units. Each unit includes a separate back of house area and the required bins will be stored within this area. There is potential for the two amenity units to have a combined refuse area within one of the back of house areas, should this be deemed to be more efficient and acceptable to the tenant letting strategy. The exact arrangement will be determined prior to occupation and will ensure that the layout of the back of house area can be optimised for the corresponding activities. To ensure an appropriate storage area for bins, each back of house area is adequately sized to store the required bins for each unit. The waste types arising from the shared amenity will be residual waste, recycling and food waste, the calculated bin requirements are detailed in Table 6-4 below.



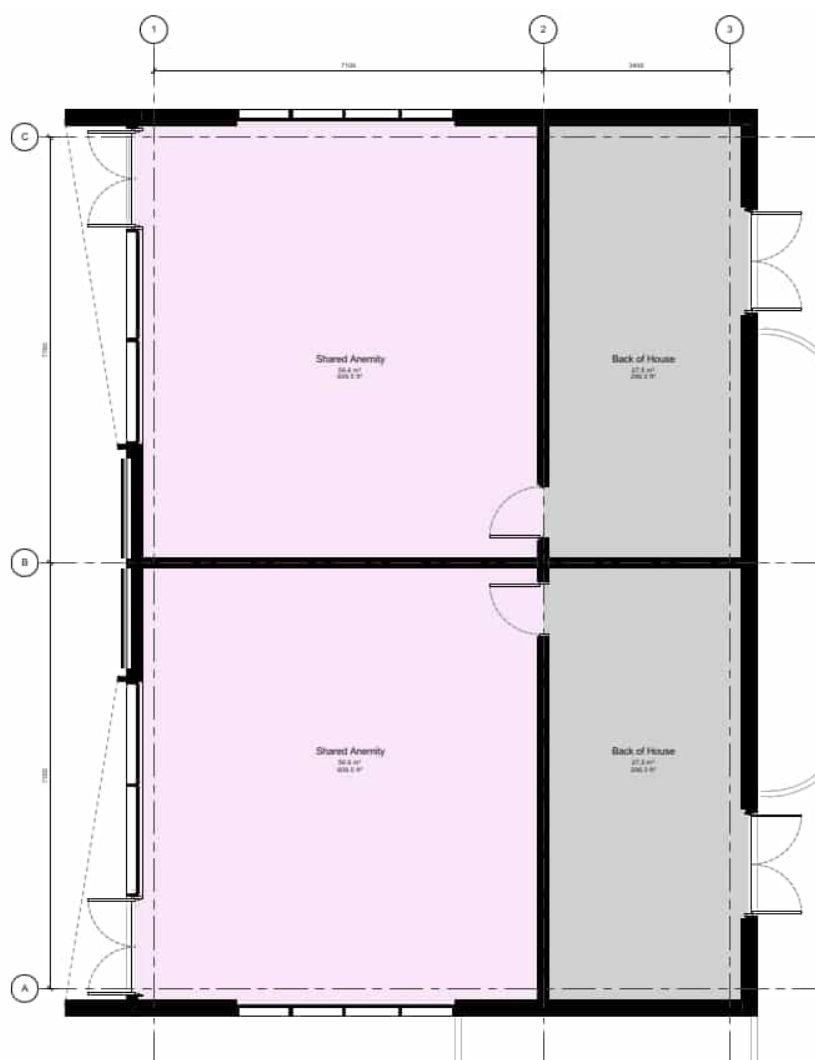
Table 6-4 Shared Amenity Unit Bin Requirements

Waste Stream	Count & Bin Size (L)	Collection Frequency
Residual Waste	1 x 240	2 x per week
Recycling	2 x 240 [#]	2 x per week
Food Waste	1 x 240	2 x per week

[#] 1 x 240L bin for paper and card, 1 x 240L bin for plastic, cans and glass as required under Simpler Recycling requirements.

The GA plan of the Shared Amenity units is provided in Figure 6-5 below; each back of house area is 27.5m². The Back of House area is sufficiently sized to accommodate the required bins alongside other uses.

Figure 6-5 Shared Amenity Units Layout



MSCP – Commercial Unit

It is assumed that the MSCP itself will be non waste generating, this area is therefore excluded from the waste generation calculations. A commercial unit is however included within the ground floor of the MSCP. The specific commercial use will be determined with a future tenant but it is anticipated to be a retail provision (convenience store or similar). The waste types arising from the MSCP commercial unit will be residual waste, recycling and food waste, the calculated bin requirements are detailed in Table 6-5 overleaf.

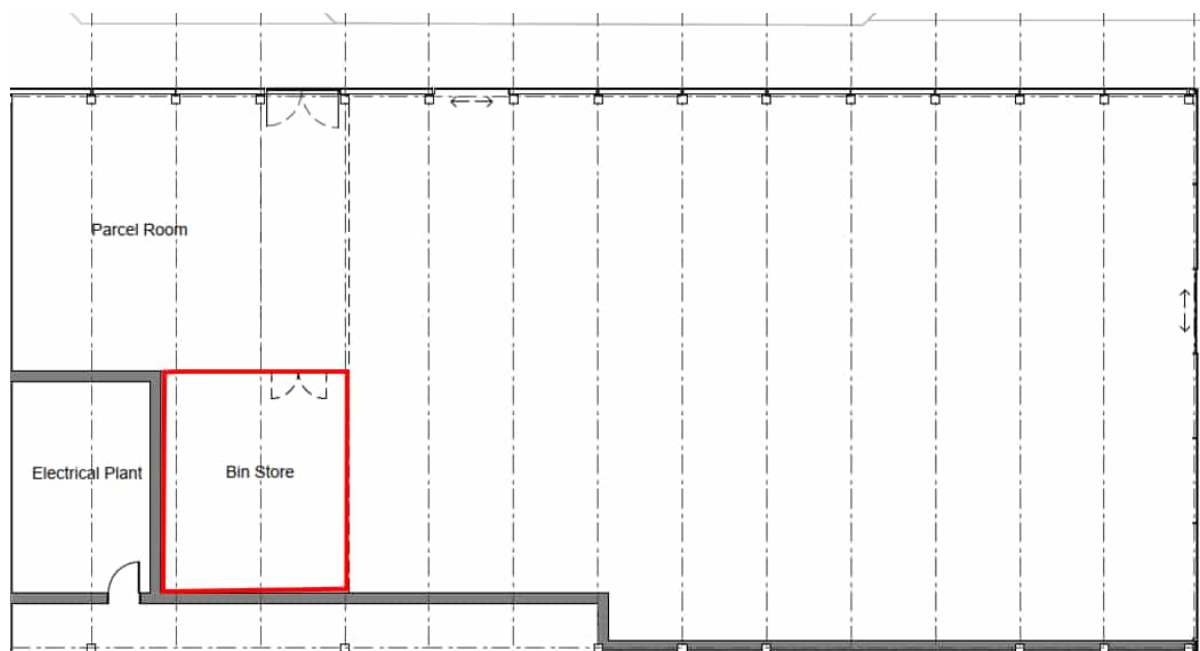
Table 6-5 MSCP Commercial Unit Bin Requirements

Waste Stream	Count & Bin Size (L)	Collection Frequency
Residual Waste	1 x 660	2 x per week
Recycling	2 x 660 [#]	2 x per week
Food Waste	2 x 240	2 x per week

[#] 1 x 660L bin for paper and card, 1 x 660L bin for plastic, cans and glass as required under Simpler Recycling requirements.

Depicted by Figure 6-6 below is the indicative ground floor GA plan of the commercial unit in the ground floor of the MSCP showing the potential location of the bin store. The bin store of ~36m² in size is highlighted by the red outline and will be serviced via the double doors into the store and then directly via a corridor to the front of the building.

Figure 6-6 Indicative MSCP Commercial Unit Layout

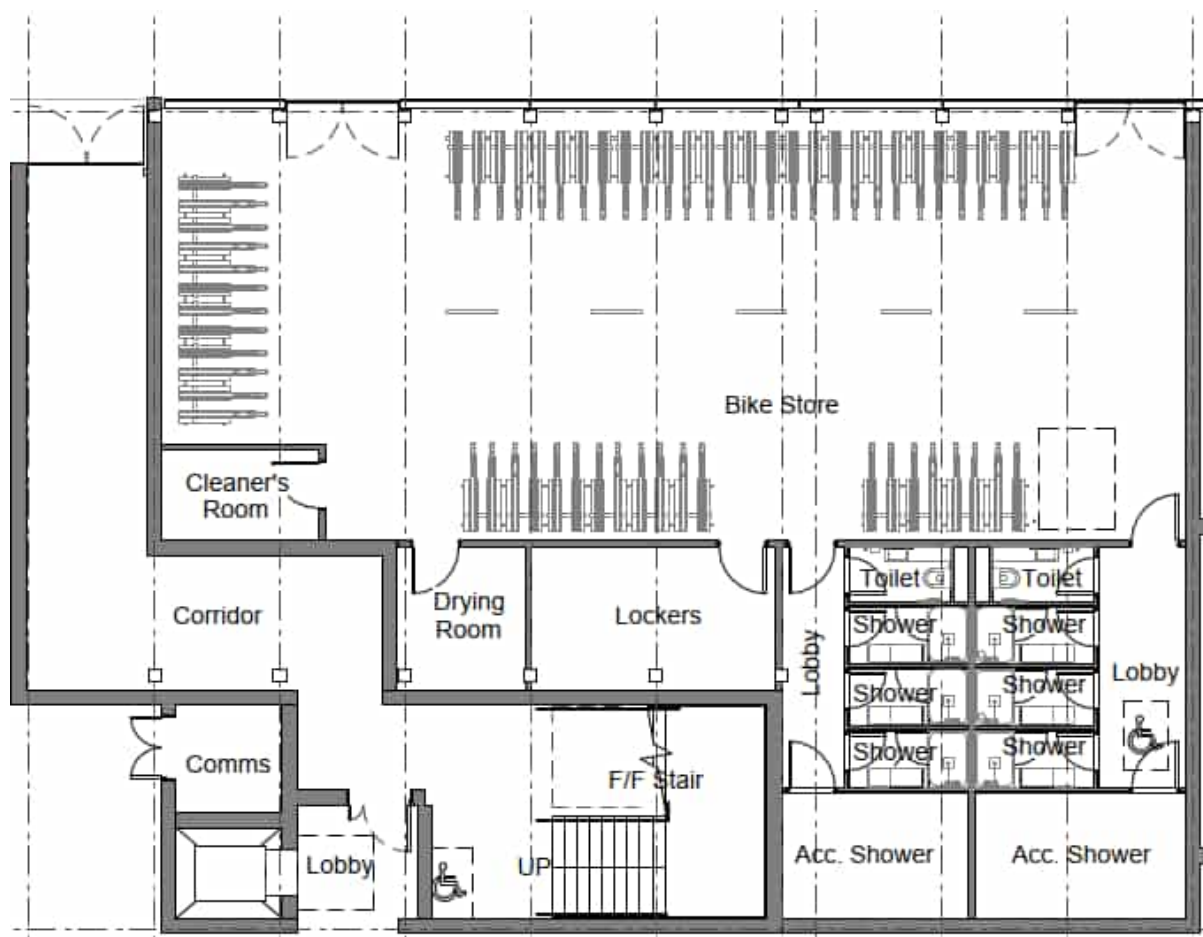


MSCP – Showers and changing rooms

The MSCP includes a bicycle store along with provision of showers and changing rooms as shown in Figure 6-7 overleaf.



Figure 6-7 MSCP Showers and Changing Room Area



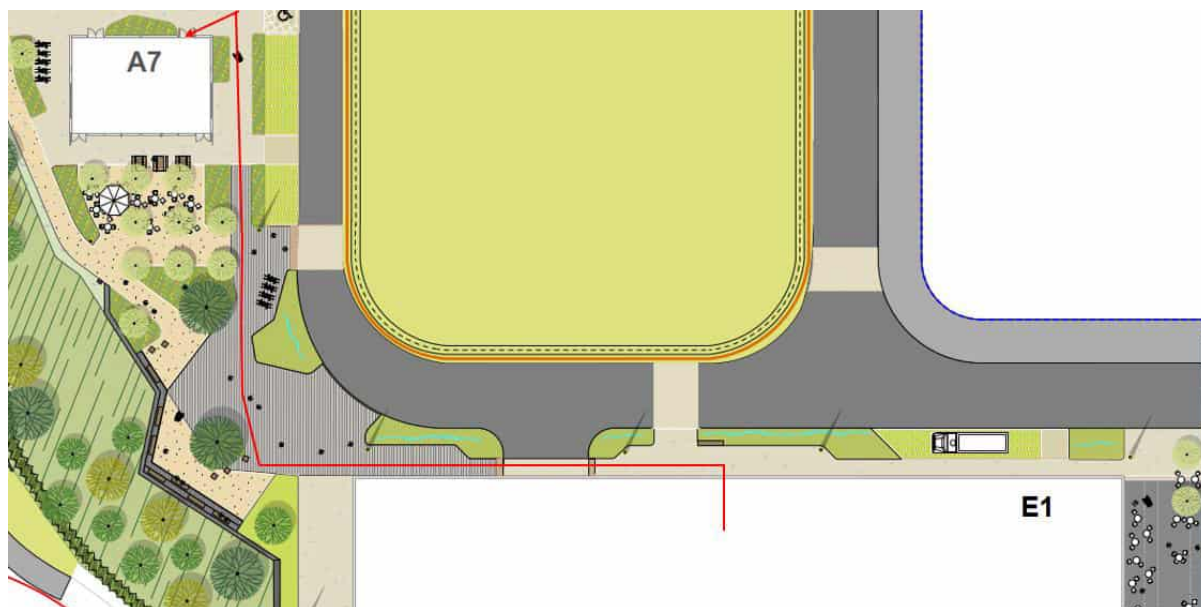
It is not anticipated that these areas will generate significant waste volumes to require separate bins to be collected by a waste contractor. Internal waste receptacles will be provided for the capture of residual, recycling (2 for recycling to ensure Simpler Recycling compliance) and food waste residues arising in the shower and changing room areas. These bins will be emptied as required. The exact operational arrangement will be determined by the Estate Management Team (EMT) once occupied, it is envisaged that the wastes from the MSCP Showers / Changing Room receptacles would be deposited into a waste trolley¹² and/or transfer bin/s. The Shared Amenity Back of House area (see Figure 6-5) has sufficient space for storing the trolley/transfer bin/s when not in use. The corresponding transfer container will be used to move the waste to the corresponding Shared Amenity bins (see

¹² Example waste trolley: <https://static.raptorsupplies.com/catalog/product/og/WESCO-272577.JPG>



Table 6-4). The bin provisions in the shared amenity units have been adequately sized to accommodate any small quantum of waste arising from the showers and changing rooms in the MSCP. An illustrative movement of the waste from the showers and changing room areas (using the transfer container) to the Shared Amenity bin store (Unit A7) is depicted by the red arrow on Figure 6-8 below.

Figure 6-8 Waste Movement from MSCP Showers / Changing Room to Shared Amenity Bin Store



The Proposed Development designs have ensured that sufficient space is made available to enable commercial waste from the Detailed Element to be stored, and for the separate storage of recyclables and compostables. The space will allow flexibility for the segregation of other recyclable materials in the future if required. The designs ensure that sufficient space is allowed for the movement of waste containers within the bin store and from the bin store to the collection point. Please refer to Section 6.2.3 below for further details on the waste servicing arrangements.

Please note that some types of waste will not be included within the capacity provisioned above – these waste types can include hygiene wastes (which require their own specialist containers) or confidential paper. These containers are collected directly from within the respective units and thus do not require storage space allocation within the bin stores. Please refer to Section 7.0 for further details on these wastes.

6.2.2.2 Outline Element

The Outline Element consists of Development Parcels A-D which include a range of use types; the buildings (some of which contain multiple units) are shown by the white fill on Figure 6-9 below (the Detailed Element buildings / units are greyed out for ease of highlighting the Outline Element buildings).



Figure 6-9 Outline Element Masterplan



A breakdown of the indicative uses by development parcel and the assumed waste generation metrics are detailed in Table 6-6 below.

Table 6-6 Outline Element Waste Volume Arising Assumptions^{13,14}

Parcel	Indicative Building and Potential Use	Waste Generation Metric (L/m ²) ¹⁴
Parcel A	F1 – GMP Manufacturing	5.0
	F2 – GMP Manufacturing	
	F3 – MSCP	Assumed to be non-waste generating.
	F4 – Mid-Tech	
Parcel B	A3 – Office/R&D	4.25*
	A6 – Office/R&D	
Parcel C	B3 – Office/R&D	
	E2 – Office/R&D	
Parcel D	B1 - Hotel	7.5

*95% of waste generation is assumed to be the core waste streams (residual, recycling and food waste). The remaining 5% is assumed to be 'other' wastes requiring separate management, further detail provided below.

The overall capacity requirement for the storage of waste from each building and unit has been considered and adequate space will be included within the Outline Element designs which will be developed in detail and confirmed in the reserved matters application(s).

¹³ BS 5906

¹⁴ Conservative assumption based on highest applicable waste generating use.



As mentioned earlier in the report, multiple collections of commercial waste per week are common (as it is a paid for service) and therefore the size and number of containers which a commercial premises require can often be reduced through contracting more frequent collections. For the purposes of this OWMS the frequency of waste collection by unit has been assumed to achieve an appropriate waste management operation (number of bins requiring storage) in each case. The collection frequency assumptions are defined within the tables set out in the following sub-sections.

As with the Detailed Element, proposed laboratory activities within the Outline Element buildings and units are expected to generate 'Other' wastes. At this stage, it is assumed these wastes will make up 5% of the corresponding waste arisings that will require separate management. It is assumed that these wastes will be stored within and collected directly from the buildings / units and will not require storage within a bin store. The exact containment and collection requirements depend upon the activities and will be agreed between the tenant and specialist waste collection contactor(s).

The exact storage arrangement for the bins required for each unit will be defined during the detailed development process in advanced of RMA(s).

The calculated bin numbers by parcel of the Outline Element are summarised in the sections below, split by waste stream.

Parcel A

Table 6-7 Parcel A Indicative Waste Storage Requirements*

Residual Waste (1100L)	Recycling (1100L) [#]	Food Waste (240L)	Collection Frequency
20	33	14	2 - 3 x per week

[#] Recycling bins will be divided to separately collect a) paper and card and b) plastic, cans and glass as required under Simpler Recycling requirements.

*Results for F1 and F2 which are manufacturing units are based on waste containment in 1100L bins, however it is likely that the solution will involve skips and potentially compactors to ensure an efficient waste management solution. The waste strategy will be reviewed during detailed design review and specified in the OWMS submitted with subsequent RMA(s).

Parcel B

Table 6-8 Parcel B Indicative Waste Storage Requirements

Residual Waste (1100L)	Recycling (1100L) [#]	Food Waste (240L)	Collection Frequency
15	28	11	2 x per week

[#] Recycling bins will be divided to separately collect a) paper and card and b) plastic, cans and glass as required under Simpler Recycling requirements.

Parcel C

Table 6-9 Parcel C Indicative Waste Storage Requirements

Residual Waste (1100L)	Recycling (1100L) [#]	Food Waste (240L)	Collection Frequency
12	22	8	2 x per week



Recycling bins will be divided to separately collect a) paper and card and b) plastic, cans and glass as required under Simpler Recycling requirements.

Parcel D

Table 6-10 Parcel D Indicative Waste Storage Requirements*

Residual Waste (1100L)	Recycling (1100L) [#]	Food Waste (240L)	Collection Frequency
5	8	15	7 x per week

Recycling bins will be divided to separately collect a) paper and card and b) plastic, cans and glass as required under Simpler Recycling requirements.

* There is flexibility for the waste collection frequency from the hotel to be adjusted as required, and potential for consideration of other innovative ways of collecting food waste such as tanks or on site composting. The waste strategy will be reviewed during detailed design review and specified in the OWMS submitted with the RMA.

Note that some types of waste will not be included within the capacity provisioned in the tables above– these waste types can include hygiene wastes (which require their own specialist containers) or confidential paper. Please refer to Section 7.0 for further details of the management of these wastes.

The proposed detailed designs will ensure sufficient space is made available to enable commercial waste from the Outline Element buildings and units to be stored, and for the separate storage of recyclables and compostables. The allocated space/s will allow flexibility for the segregation of other recyclable materials in the future if required. The designs will ensure that sufficient space is allowed for the movement of waste containers within the bin store and from the bin store to the collection point. Please refer to Section 6.2.3 below for further details on the waste servicing arrangements.

6.2.3 Vehicle Access and Presentation of Waste

Well defined vehicle routes are in place. Vehicular access to the Proposed Development will be via Enterprise Way on the Northern extent of the Proposed Development. A swept path analysis of the proposed roads within the Proposed Development has been undertaken by a Transport Consultant and the vehicle tracking has been carried out using a Refuse Collection Vehicle (RCV). The results of the swept path analysis are detailed in the sub-sections below. Full size versions of the swept path analysis drawings are included in Appendix C.

6.2.3.1 Detailed Element and Parcel B, C & D of Outline Element

Figure 6-10 below demonstrates RCV access to the Detailed Element of the Proposed Development. The diagram also shows the vehicle tracking to Parcel B, C and D of the Outline Element.



Figure 6-10 Swept Path Analysis of the Detailed Element and Parcel B, C & D of the Outline Element

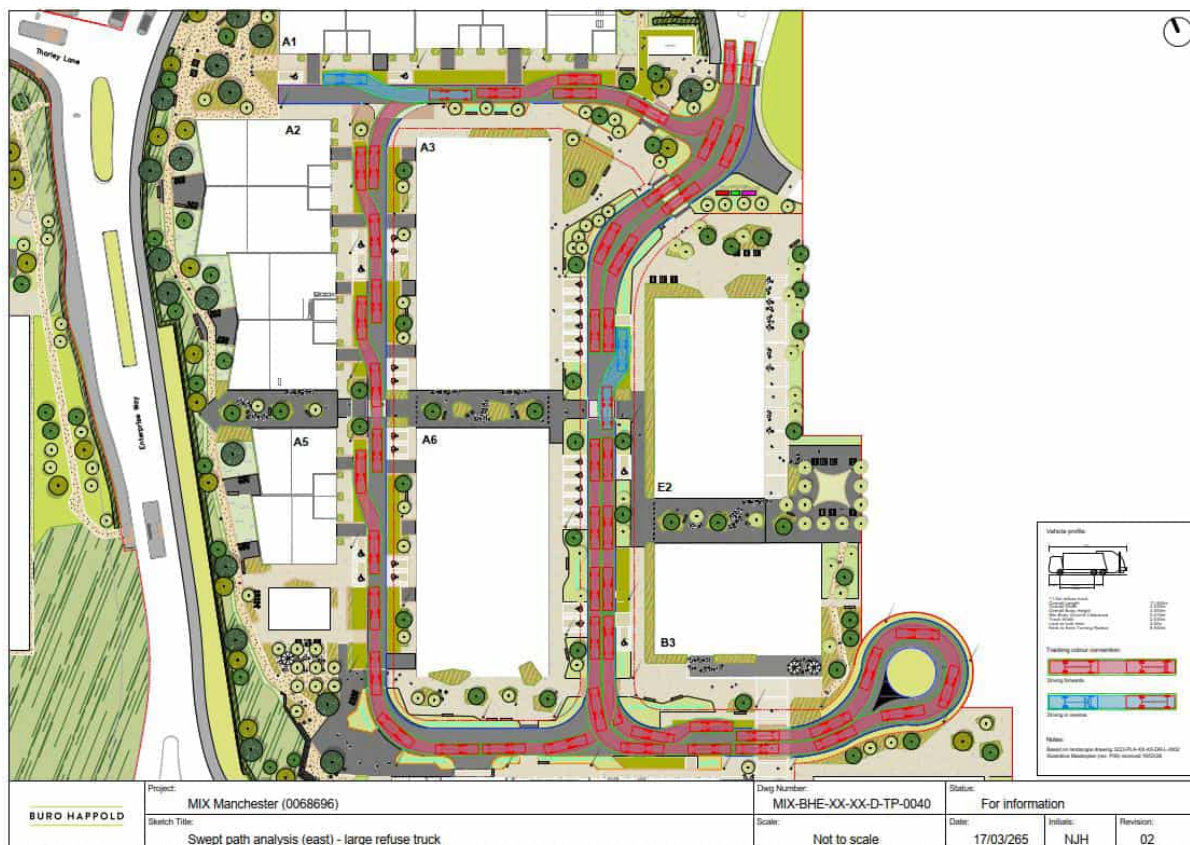
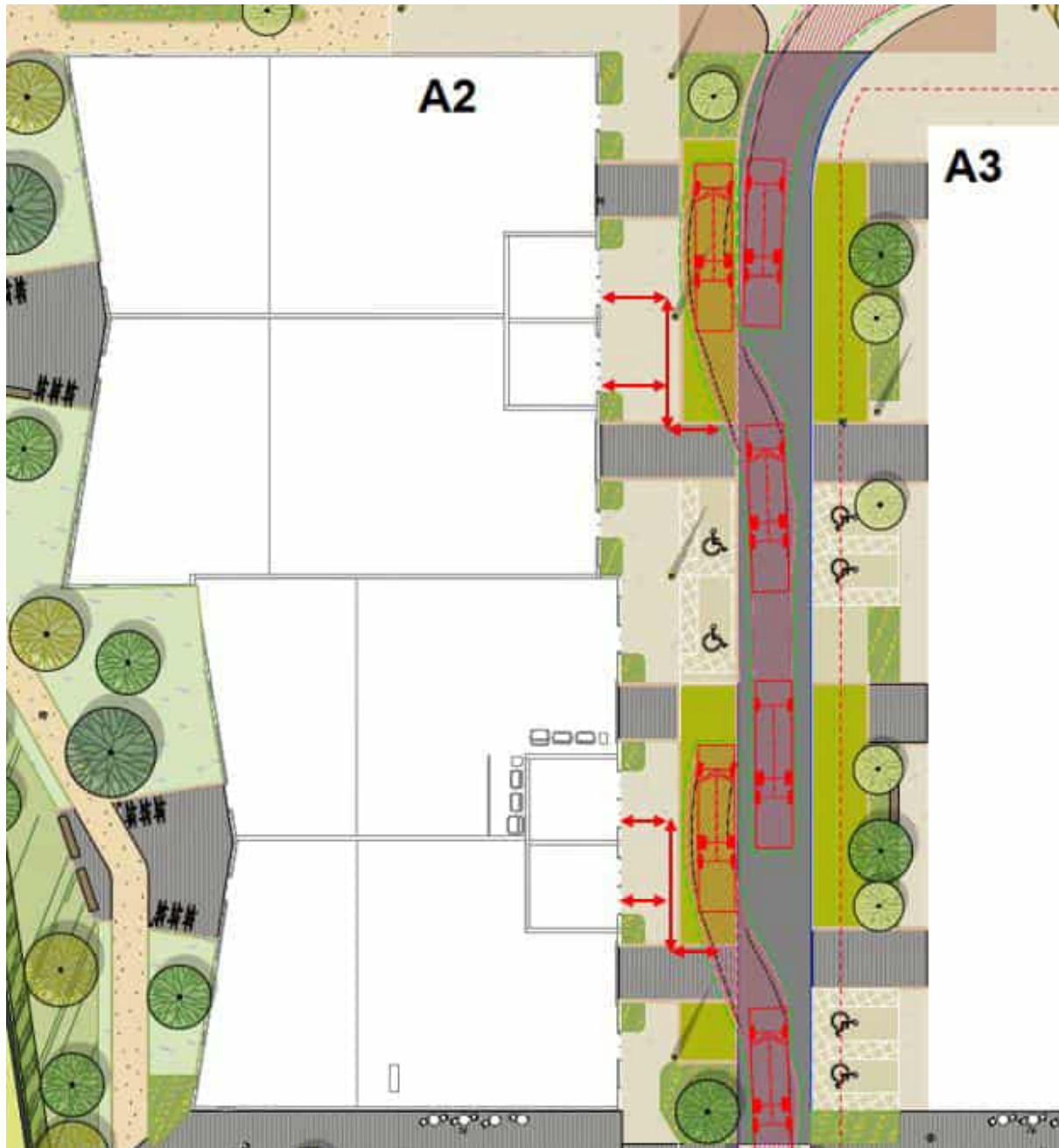


Figure 6-11 illustrates the anticipated waste servicing strategy for the Detailed Element. The RCV will pull into the servicing bay(s) which are proximately located to the bin stores. The movement of bins to/from the RCV will be on smooth flat level surface suitable for the movement of wheeled bins.

The typical movement of bins is illustrated by the red arrows to/from the bin store and the RCV. The requirement for manual handling/movement of bins is minimised due to the close stopping location of the RCV adjacent to the bin store/s.



Figure 6-11 Detailed Element Example RCV Servicing Arrangement



The Proposed Development includes an internal road network which provides easy access to all Elements (Detailed and Outline) within the Masterplan. Figure 6-12 below demonstrates RCV access to the Site and tracking around parcel A of the Outline Element of the Proposed Development. Notably the RCV can stop in the conveniently located servicing bays to enable collection of waste from all of the units. Furthermore, it is likely that waste will be stored within the service yards of F1 and F2.

7.0 Public Realm Waste and Other Wastes

This chapter sets out proposals for the management of public realm waste which can be broadly split into litter and landscaping wastes. The chapter also considers other wastes, specifically hygiene wastes, confidential paper and bulky wastes which may be generated on an ad hoc basis.

7.1 Litter Waste

In addition to wastes being generated by the occupants of the Proposed Development, some customers and visitors to the Proposed Development may discard small quantities of waste within the Public Realm which will require management to prevent littering. The Landscape plans for the Detailed Element includes 5 no. Litter Bins.

There will be enclosed litter bins¹⁵ located at optimised locations across the Proposed Development, these will be emptied by MCC or the Estate Management Team.

7.2 Landscaping Wastes

Where contractors are employed to carry out landscaping works the contracts will specify that all green wastes are where appropriate left in situ (for example grass clippings) or removed from site by the landscaping contractor and sent for offsite composting or a similar beneficial activity (e.g. chipping).

7.3 Hygiene Wastes

Toilet and washroom provision within the Proposed Development will result in the generation of hygiene wastes which will require collection and disposal by a specialist hygiene waste collection operator.

Hygiene wastes will be stored within the toilet cubicles within specialist containers and will be removed directly by the appointed contractor(s) at the necessary collection frequency. As such the bin stores do not require any space provision for this waste type. The specification, within leases, of a preferred hygiene waste contractor will be considered to reduce the number of vehicles accessing the Site.

7.4 Confidential Paper Waste

The tenants of the buildings are likely to generate confidential paper wastes. The tenants will arrange lease of internal confidential waste bins and a regular collection service to meet their needs.

Confidential wastes will be removed directly from the secure internal confidential waste storage bins for destruction and processing by the appointed contractor (either within their collection vehicle, or at their site), and as such space provision for this waste type within the bin store is not required. The specification, within leases, of a preferred confidential waste contractor will be considered to reduce the number of vehicles accessing the Site.

7.5 Bulky Wastes

Bulky wastes (such as chairs and other furniture) are expected to be generated by the tenants of the Proposed Development from time to time. Should an item need replacing, the

¹⁵ Exact specification to be determined and agreed with Manchester Airport Group and their safety team. Litter bins are required to be fully enclosed to prevent bird hazards within the vicinity of Manchester Airport.



tenants will arrange for the item to be replaced. Where possible, the defective item will be removed at the same time as the new item is delivered.

Where this is not possible, the tenant will arrange general tidying / clear outs of their respective units whereby a skip is made available for larger items such as disused office furniture. The skip is to be provided and collected by a private waste management company and will be placed within the assigned unit external demise during use.



8.0 Conclusion

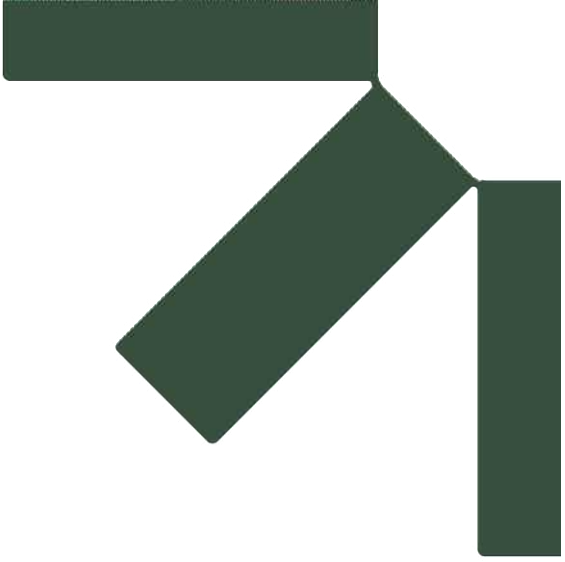
This Operational Waste Management Strategy sets out a number of guiding principles to ensure that waste arising from the Proposed Development is managed in a sustainable manner, with minimal impact on the environment.

Through detailed consideration of the waste management guidance within the MCC Guidance Document and understanding of the anticipated site operations, the Applicant is confident that the waste management system outlined in this document complies with the guidance for developers issued by MCC; and that it is practical in terms of on-site management and that the service levels are deliverable.

Consideration has been given to the containment and storage of all waste types that may arise from the occupation of the Proposed Development, and also to the management of wastes potentially produced by the broader site (e.g. landscaping wastes).

Confirmed waste management solutions and space allocation are provided for the Detailed Elements of the Proposed Development with initial assumptions included for the Outline Elements of the Proposed Development. The waste strategy for the Outline Elements of the Proposed Development will be reviewed during detailed design review and confirmed in the subsequent OWMS submitted with RMA(s).





Appendix A Site Location Plan

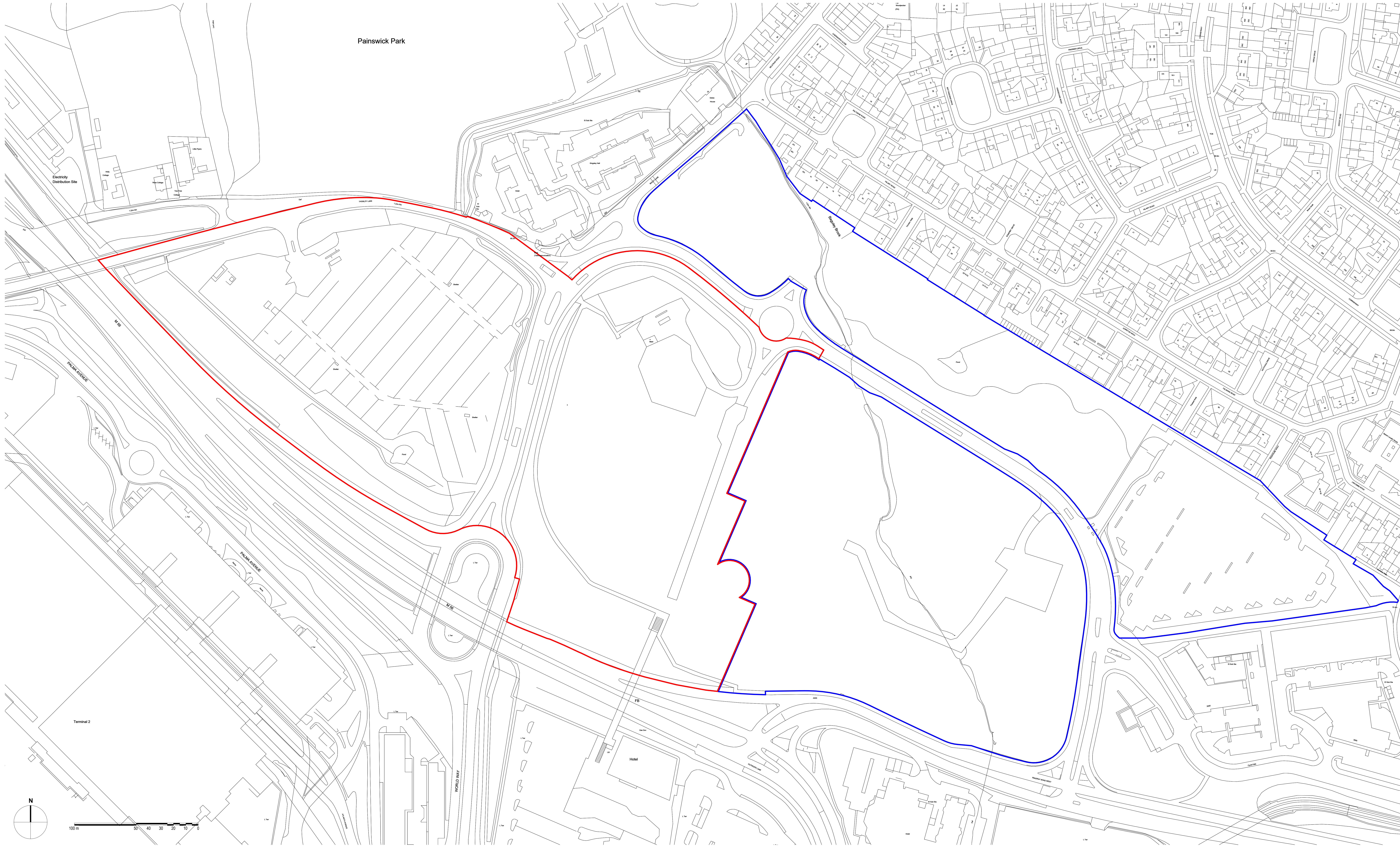
MIX Manchester – Phase 1

Operational Waste Management Strategy

Airport City Limited Partnership

SLR Project No: 402.065887.00001

26 March 2026



Site Location Plan
1 : 1000

NOTES

- Planning Application Boundary
- Additional Land within Ownership of Applicant

© COPYRIGHT
The copyright in this drawing is vested in Sheppard Robson and no license or assignment of any kind has been, or is, granted to any third party whether by provision of copies or originals or otherwise unless agreed in writing.

DO NOT SCALE FROM THIS DRAWING
The contractor shall check and verify all dimensions on site and report any discrepancies in writing to Sheppard Robson before proceeding work.

FOR ELECTRONIC DATA ISSUE
Electronic Data drawings are issued as "read only" and should not be interpreted for measurement. All dimensions and levels should read, only from those values stated in text on the drawing.

REVISIONS

REV.	DATE	AMENDMENT
P01	05/02/26	Planning Boundaries
P02	05/02/26	Planning Boundary Updated
P03	11/03/26	For Planning
P04	18/03/26	For Planning

KEYPLAN

CLIENT

Airport City Limited Partnership

PROJECT

MIX Manchester

SCALE@AD	DATE	ORIGINATOR	CHECKED	AUTHORISED
1 : 1000	16/03/26	JD	CP	PC

DESCRIPTION

Site Location Plan

STAGE
Stage 3

SR NO.
7092

**SHEPPARD
ROBSON**

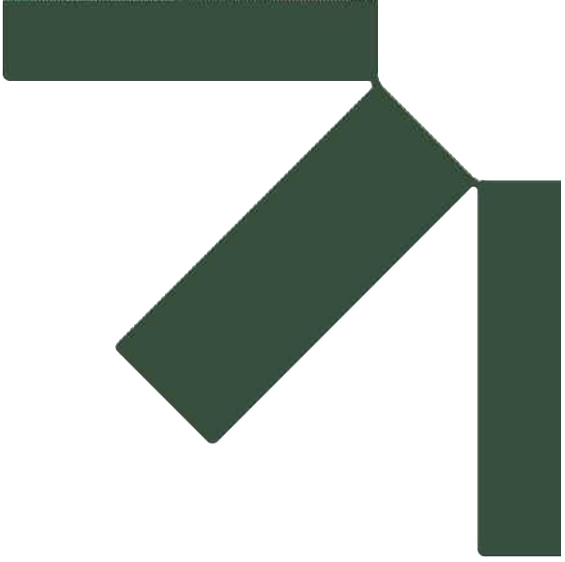
77 Parkway Camden Town London NW1 7PU
T: +44 (0)20 7504 1700 E: enquiries@sheppardrobson.com

STATUS PURPOSE FOR ISSUE

S2 Planning

DRAWING NO.
7092-SRA-ZZ-ZZ-DR-A-02010

REV.
P04



Appendix B Proposed Masterplan

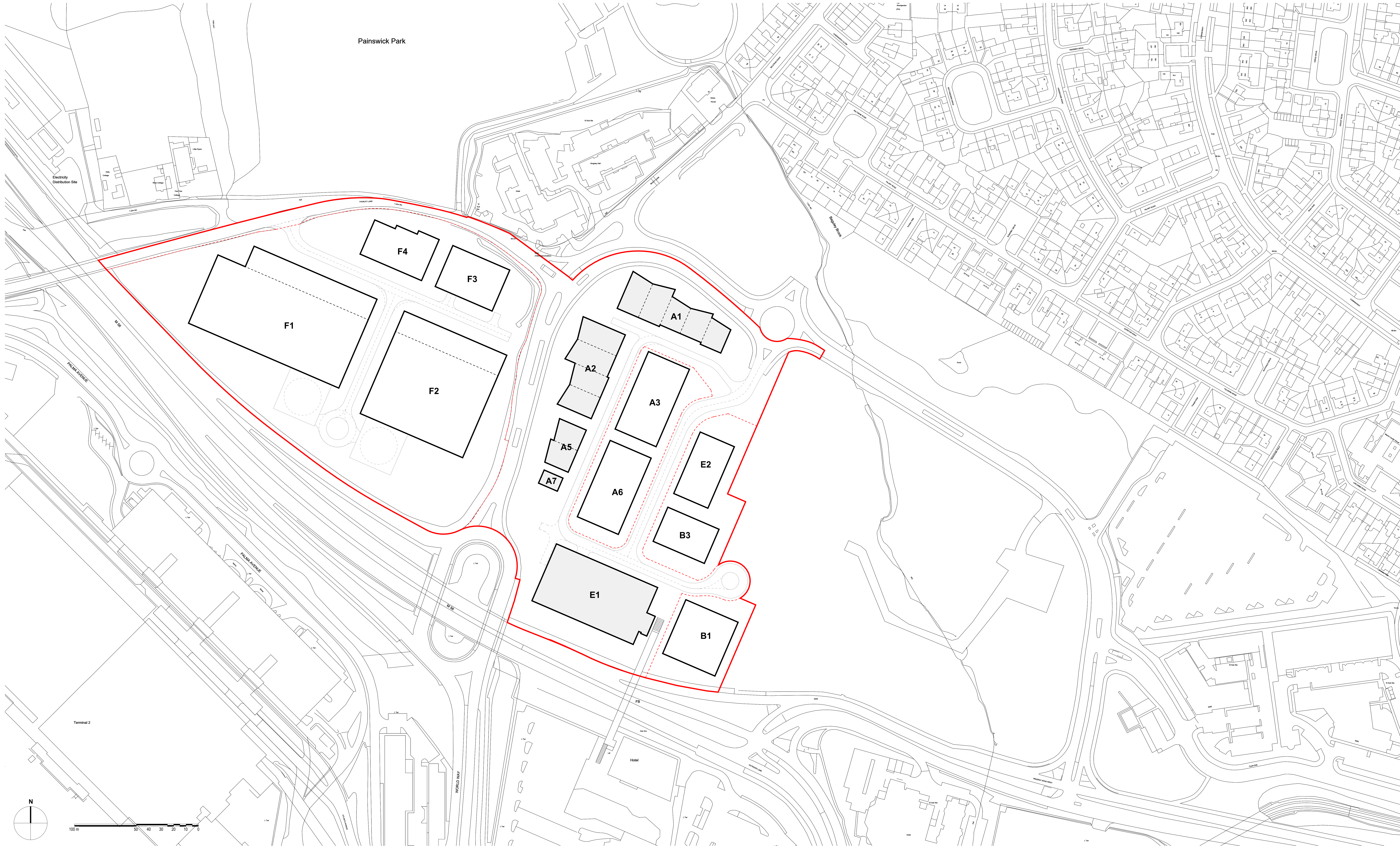
MIX Manchester – Phase 1

Operational Waste Management Strategy

Airport City Limited Partnership

SLR Project No: 402.065887.00001

26 March 2026



Illustrative Masterplan
1 : 1000

- NOTES**
- © COPYRIGHT
The copyright in this drawing is vested in Sheppard Robson and no license or assignment of any kind has been, or is, granted to any third party whether by provision of copies or originals or otherwise unless agreed in writing.
- DO NOT SCALE FROM THIS DRAWING**
The contractor shall check and verify all dimensions on site and report any discrepancies in writing to Sheppard Robson before proceeding work.
- FOR ELECTRONIC DATA ISSUE**
Electronic Data drawings are issued as "read only" and should not be interrogated for measurement. All dimensions and levels should read, only from those values stated in text on the drawing.
- Planning Application Boundary
 - Outline Development Parcels
 - Proposed Building Footprints for Detailed Approval
 - Illustrative Building Plots for Approval in Outline (all matters reserved, save for primary access)

REVISIONS	DATE	AMENDMENT
REV. P01	06/02/26	Planning Boundaries
P02	05/02/26	Planning Boundary Updated
P03	11/03/26	For Planning
P04	18/03/26	For Planning

KEYPLAN

CLIENT
Airport City Limited Partnership

PROJECT
MIX Manchester

SCALE@AD	DATE	ORIGINATOR	CHECKED	AUTHORISED
1 : 1000	16/03/26	JD	CP	PC

DESCRIPTION
Illustrative Masterplan

STAGE
Stage 3

SR NO.
7092

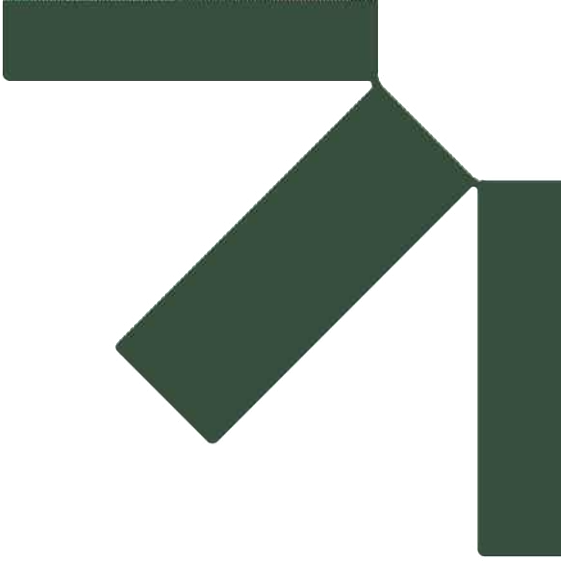
**SHEPPARD
ROBSON**

77 Parkway Camden Town London NW1 7PU
T: +44 (0)20 7504 1700 E: enquiries@sheppardrobson.com

STATUS PURPOSE FOR ISSUE
S2 Planning

DRAWING NO.
7092-SRA-ZZ-ZZ-DR-A-02050

REV.
P04



Appendix C Vehicle Tracking and Swept Path Analysis

MIX Manchester – Phase 1

Operational Waste Management Strategy

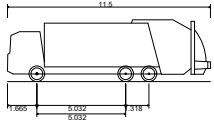
Airport City Limited Partnership

SLR Project No: 402.065887.00001

26 March 2026

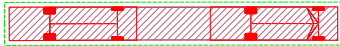


Vehicle profile:

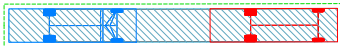


11.5m refuse truck	11.500m
Overall Length	2.530m
Overall Width	3.500m
Overall Body Height	0.416m
Min Body Ground Clearance	2.530m
Track Width	4.00m
Lock to lock time	8.940m
Kerb to kerb Turning Radius	

Tracking colour convention:



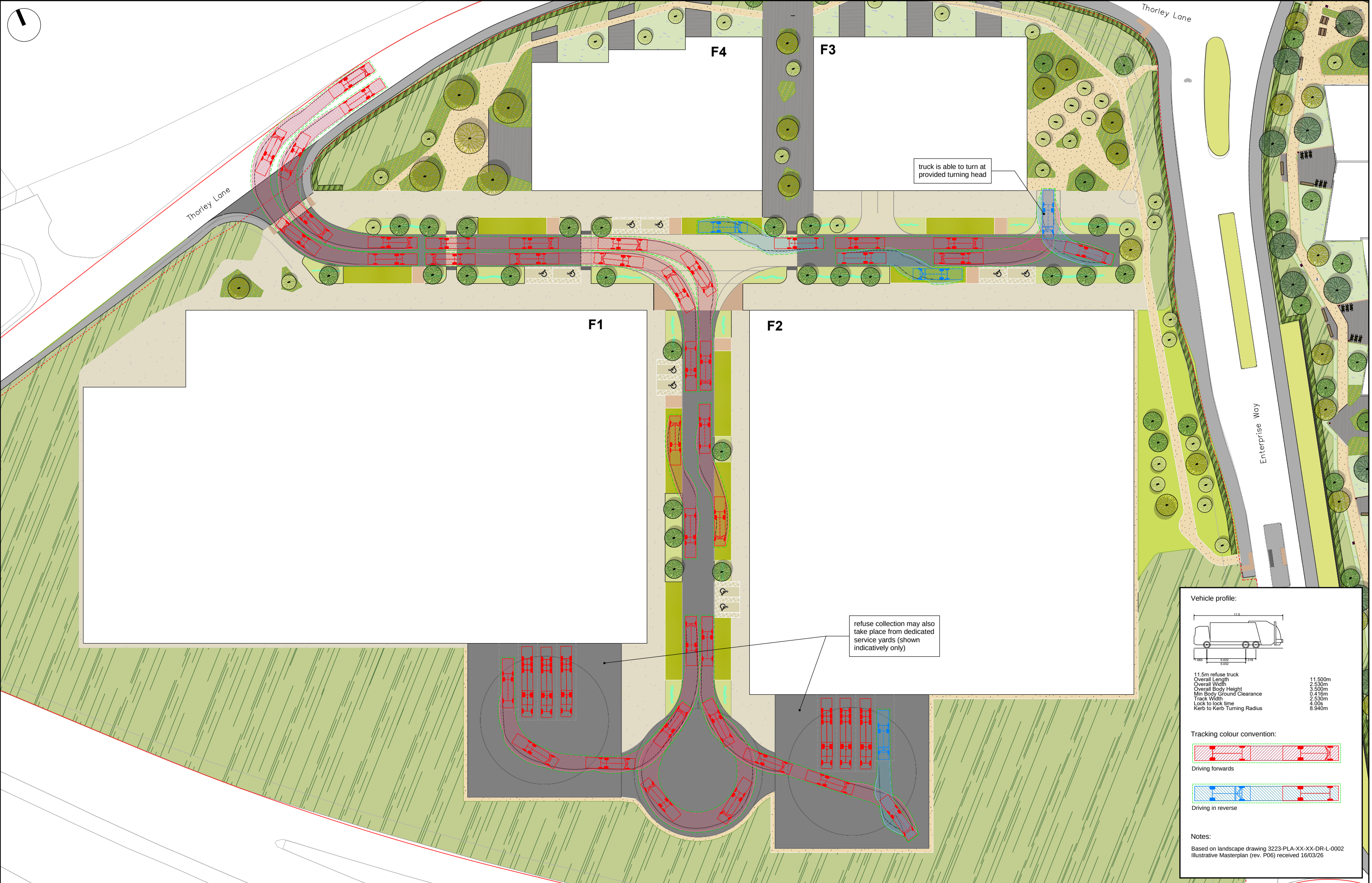
Driving forwards



Driving in reverse

Notes:

Based on landscape drawing 3223-PLA-XX-XX-DR-L-0002
Illustrative Masterplan (rev. P06) received 16/03/26



Vehicle profile:

11.5m refuse truck	
Overall Length	11.500m
Overall Width	2.530m
Overall Body Height	3.500m
Min Body Ground Clearance	0.416m
Track Width	2.530m
Lock to lock time	4.00s
Kerb to Kerb Turning Radius	8.940m

Tracking colour convention:

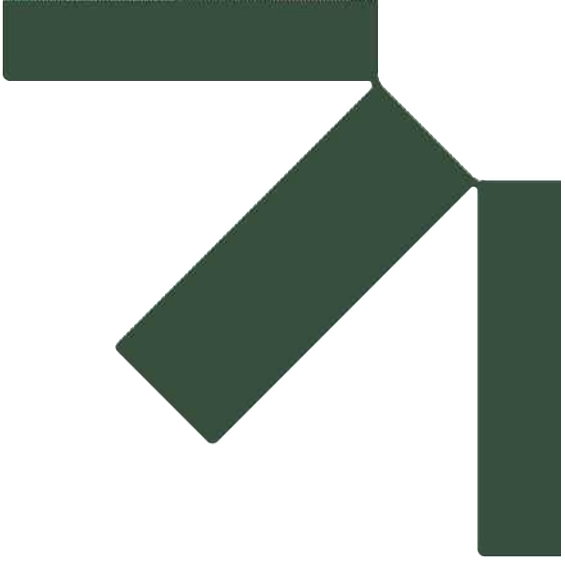
Driving forwards

Driving in reverse

Notes:

Based on landscape drawing 3223-PLA-XX-XX-DR-L-0002
Illustrative Masterplan (rev. P06) received 16/03/26

	Project: MIX Manchester (0068696)	Dwg Number: MIX-BHE-XX-XX-D-TP-0045	Status: For information		
	Sketch Title: Swept path analysis (west) - large refuse truck	Scale: Not to scale	Date: 17/03/265	Initials: NJH	Revision: 02



Appendix D MCC Waste Storage and Collection Pro Forma

MIX Manchester – Phase 1

Operational Waste Management Strategy

Airport City Limited Partnership

SLR Project No: 402.065887.00001

26 March 2026

Appendix E - Waste Management Strategy (v7.00 from September 2023)

Planning Application Number:

Date Submitted:

Estimated volumes / m2 required by the development

Will this property be used as a House in Multiple Occupation (HMO)?	No (delete as appropriate)
If this property will be used as an HMO, how many people do you intend to accommodate (5+)?	N/A

Low Rise Domestic [Proposed Development does not include residential dwellings.](#)

Waste Types	Capacity required (litres)	Number of bins required (per household)	Confirm what is to be provided (and whether the developer or the resident will be responsible for ordering these)
General refuse	140 standard / 240 in certain circumstances	1 x wheeled bin (possibly more for HMO)	N/A
Pulpable Recycling	240	1 x wheeled bin (possibly more for HMO)	N/A
Mixed Recycling	240	1 x wheeled bin (possibly more for HMO)	N/A
Garden Waste	240	1 x wheeled bin (possibly more for HMO)	N/A
Food Waste	23	1 x 23 litre caddy (Possibly more for HMO)	N/A

High Rise Apartment Developments Proposed Development does not include residential dwellings.

0.43m ² has been provided per apartment for the containers, with extra space for residents to access each container and space for staff to manoeuvre each container for collection. (different for purpose-built student accommodation – see guidance)	N/A How many of each container do you plan to provide? N/A x general refuse x 1100 litre (based on 110 litres per apartment) N/A x pulpable Recycling x 1100 litre (based on 55 litres per apartment) N/A x mixed recycling x 1100 litre (based on 55 litres per apartment) N/A x food waste x 240 litres (based on 10 litres per apartment) N/A x garden waste (if applicable) x 240 litres
Is it as easy, or easier, for residents to recycle, as it is for them to dispose of general waste?	N/A

Commercial Developments

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

General Waste -	Detailed Element - 11 x 1100L, 1 x 660L, 2 x 240L Outline Element - 52 x 1100L
Dry recycling (include material type details) -	Recycling bins provided to collect two streams a) paper and card, b) plastic, cans and glass (50/50 split in bin provisions below):
Food Waste -	Detailed Element - 15 x 240L Outline Element - 48 x 240L
Industrial Waste -	- Detailed Element - 28 x 660L, 4 x 240L - Outline Element - 91 x 1100L
Other -	For details of other wastes please refer to Section 7.0 of the submitted OWMS. For further details on the bin requirement calculations please refer to section 6.2.2 of the submitted OWMS.

Has / will a contract be obtained with a licenced waste carrier?	Yes (delete as appropriate)
--	--

Mixed Use Developments

Are the stores for residential and commercial waste completely separate from each other, with residents having no access to the commercial store and the commercial units having no access to the residential store?	N/A
--	-----

Internal Stores (Residential and Commercial)

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

Where required separate internal waste receptacles will be provided. In each case these will capture the waste streams separately as follows: - Recyclables 1 - Paper and Card - Recyclables 2 - Plastic, Cans and Glass - Food Wastes - Residual Wastes - Other

Storage Areas for Waste Containers (Residential and Commercial)

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

The Designs incorporate designated separate storage areas for the bins via the use of internal refuse rooms (for the Detailed Element). Please refer to the submitted OWMS for further details (see Section 6.2) and identified locations within the Proposed Development.
--

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 -	The internal refuse stores will be fitted with louvred doors to provide passive ventilation.
Hygiene -	Estate Management Team / Tenants will be responsible for the cleaning of bins and sanitisation of refuse stores as required.

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

It is anticipated that the appointed private sector waste management company / companies will collect the bins directly from the refuse stores and return them once empty. The development designs have given careful consideration to the location of the service bays with respect to the refuse stores.

Please ensure that you have attached:

Detailed plans of bin stores	☒
Location plans showing stores	☒
Location plans showing the proposed collection point and the route the collection vehicle will take (please refer to the Road, Vehicle and Waste Operative Access Specification – paying particular attention to turning space and reversing)	☒

Please ensure that you have completed this form in accordance with the latest version of GD04 Waste Storage and Collection Guidance for New Developments – v.7 September 2023, read in conjunction with the Waste and Recycling Service Standard found on the Council website.

