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STACK, Oxford Road, Manchester

Waste Management Strategy

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1.0 Introduction

1.1 Background

1.1.1 Curtins has been appointed by Stack (Manchester) Limited to provide transport and highways advice in relation to a retail / leisure mixed-use development on the former Hatch site on Oxford Road, Manchester.

1.1.2 Hatch opened in 2017 in the undercroft of the Mancunian Way off Oxford Road, a space formerly occupied by a surface level car park. The scheme began as a three-storey marketing suite with café / gallery and marketing / commercial floorspace (Manchester City Council (MCC) planning reference: 12619/FO/2016) which gained temporary approval until 22 August 2021.

1.1.3 Subsequent planning applications for the Hatch scheme were approved between 2017 – 2019 for the extension of the scheme across a larger footprint, offering a mix of street food and bars set around a central plaza, with a central stage hosting live entertainment. These are detailed as follows:

- Phase 1 (MCC planning reference: 117089/FO/2017) – Temporary approval for erection of two storey building to be used for flexible commercial uses (Use Classes A1 (shop), A3 (restaurant/cafe), A4 (drinking establishment) or A5 (hot food takeaway)). Temporary approval lasted until 20 October 2022;
- Phase 2 extension (MCC planning reference: 120050/FO/2018) – Erection of one and two storey buildings with flexible commercial uses (Use Classes A1, A3, A4 or A5) at ground and first floor. Temporary approval lasted until 25 September 2023;
- Reorganisation of the scheme and an increase in floorspace (MCC planning reference: 124502/FO/2019): Erection of one and two storey buildings with flexible commercial uses (Use Classes A1, A3, A4 or A5) or B1 (office)) at ground and first floor. Temporary approval was granted until 6 March 2025.

1.1.4 Notwithstanding, the Hatch site was closed in September 2023, with a small café within the Hatch Courtyard (the footprint occupied by the original 2017 planning consent) remaining operational, with the intention for all elements to close upon a change of ownership from Bruntwood to Stack (Manchester) Limited.

1.1.5 The vision is to recreate the atmosphere and feel generated by Stack (Manchester) Limited at the highly successful and popular STACK developments across Newcastle and Seaburn, and to implement this as a permanent use of the space. The existing space would be largely retained as part of the proposed development, which would comprise the courtyard arrangement to the north, and the undercroft space under the Mancunian Way to the south, with both linked by a small plaza.

1.1.6 The scheme is understood to create new outward facing retail stores to the north of the former craft bar, and the undercroft space would host street food vendors and bars within shipping containers, alongside the stage to host entertainment events, similar to the extant scheme.

1.1.7 Similar to the extant consent, the STACK development would be car-free given its central and highly accessible location. Four Sheffield cycle stands (totalling space for 8 cycles) were delivered along the western boundary of the site (directly off Oxford Road) as part of Hatch – Phase 2, and remain in use for future visitors to STACK.

1.1.1 It is envisaged that refuse and servicing trips would take place via a bin store at the rear of the development, on land that is leased from Bruntwood (to the south-east of the site, behind the proposed stage). The bin store can be accessed via Brook Street.

1.1.2 The proposed site layout is included in **Appendix A**.

1.2 Purpose of This Report

1.2.1 This Waste Management Strategy (WMS) has been prepared comprehensively, taking into account the consented development and WMS, whilst considering the operational needs of the development, its neighbouring development, and how this differs to the consented scheme.

1.2.2 This WMS considers the potential refuse and recyclable waste volumes, including organic waste and for all uses across the above properties. This WMS also provides details of the collection arrangements.

1.3 Structure of the Report

1.3.1 Following this introduction, **Section 2** of the report provides a comprehensive description of the site location, including the existing use and surrounding highway network.

1.3.2 Relevant local and national waste policy is summarised in **Section 3.**

1.3.3 **Section 4** contains the waste forecasting methodology used to establish the likely refuse generation associated with the buildings, providing details of recycling, waste management and collection procedures.

1.3.4 The report is summarised and concluded in **Section 5.**

1.3.5 **Appendix B** to the rear of this report contains the completed MCC Waste Pro Forma form for the proposed development.

1.3.6 **Appendix C** to the rear of this report contains the consented waste management strategy (and Waste Pro Forma forms where applicable) for the consented development.

2.0 Existing Situation

2.1 Site Location

2.1.1 The site is located entirety underneath the Mancunian Way flyover within Manchester City Centre. The site is bound to the north by Manchester Technology Centre, to the west by Oxford Road, to the south by Manchester Metropolitan University (MMU)'s Institute of Sport building, and to the east by Circle Square's site management compound. In the extant scenario, traders from Hatch share an external bin store / service yard with Circle Square and the neighbouring Tesco Express convenience store.

2.1.2 The Circle Square masterplan area further to the north of the site has been delivered by Bruntwood and VITA Group. Circle Square comprises a mixed-use development comprising of leisure, retail, student accommodation, residential, office, hotel, public realm and multi-storey car park uses.

2.1.3 **Figure 2.1** below shows the site in a local context relating to the local highway network:

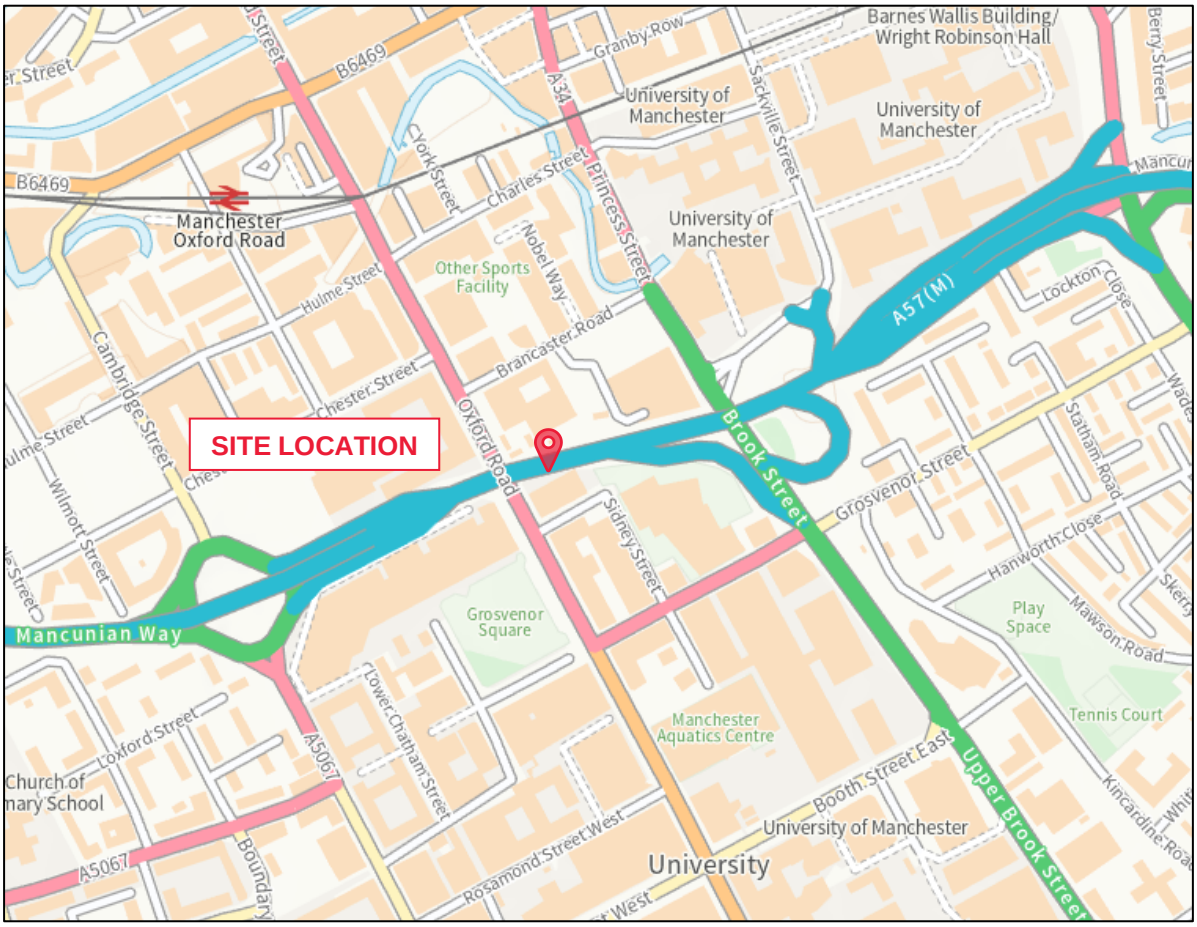


Figure 2.1 – Site Location
(Source: OS Maps, 2024)

2.1.4 The proposals are also cognisant of plans for the neighbouring site which is owned and operated by Bruntwood, located under the Mancunian Way fly-over, to the south of the Circle Square Masterplan

area. The existing site was an external compound area that served Manchester Technology Centre (MTC) with on-site parking (34 car parking spaces) for customers to the MTC in the years prior to 2020.

2.1.5 Since 2020, the site has been used solely by Bruntwood, and has been used for Bruntwood staff parking to minimise customer car travel, as well as starting to form a basis of an external compound. The external compound serves as a storage for materials and equipment to serve the external Circle Square estate. The equipment stored includes a street sweeper, leaf blowers, rock salt (in the winter), and other equipment needed to maintain the estate.

2.1.6 Bruntwood are in the process of submitting a planning application for the site to serve Manchester Technology Centre and No.1 & No.2 Circle Square as a site management compound, and to improve the efficiency of the waste collection process.

2.1.7 In light of this, STACK have agreed with Bruntwood to lease an area adjacent to this space in order to facilitate servicing so that Bruntwood's site management compound can operate independently of STACK's needs.

2.2 Existing Use and Access

2.2.1 Whilst the former Hatch site was fully operational, it primarily served as a food and leisure site, with a smaller number of retail units, for visitors to eat, drink, and shop. The nature of the site offered flexible and affordable licenses for small businesses, and as such was home to independent traders who rotated frequently.

2.2.2 The site also included 4 terraces and a large event space in the middle of the site, with capacity for up to 900 people. Hatch regularly hosted live music and events in addition to its primary food and drink offer. At the peak of operation, there were over 30 independent retailers, breweries, restaurants, and street food traders and more than 350 seated covers.

2.2.3 At the time of writing, the majority of the former Hatch space has closed. Only a small café within the Hatch Courtyard (the footprint occupied by the original 2017 planning consent) remains operational, however the intention is for all elements to close upon a change of ownership from Bruntwood to Stack (Manchester) Limited.

2.2.4 Pedestrian access to the site can be taken directly off Oxford Road, whereas vehicular access is provided to the east / rear of the site, off the service yard. Due to the accessible nature of the site, there is no car parking provided. On this basis, vehicular traffic to the site comprises service and delivery vehicles.

2.3 Surrounding Highway Network

B5117 Oxford Road

2.3.1 To the west of the site, Oxford Road extends for approximately 2km in a north to south alignment. The road commences as a continuation of the A34 Oxford Street at a priority junction with New Wakefield Street, and links Manchester City Centre to the university campuses, Manchester Royal Infirmary, Whitworth Park and Rusholme, before terminating at a signalised junction with Moss Lane East and continuing as the B5117 Wilmslow Road (known as the "Curry Mile") from then on.

2.3.2 The road comprises a two-way, single carriageway of approximately 14m in width, with two lanes in each direction, one of which is dedicated solely to buses along certain lengths. General traffic is prohibited from travelling through the bus gates between 6am and 9pm from Monday to Sunday, restricting access to sections of the corridor between Hathersage Road and Portland Street. Traffic cameras are used to enforce this restriction.

2.3.3 There are also 'Dutch-style' segregated cycle lanes along certain lengths of the road, some of which run behind each bus stop. Each bus stop also has a cycle bypass lane with crossings for pedestrians to walk in between the bus stops and the footway.

2.3.4 Pedestrian infrastructure exists in the form of wide pavements which are in excellent condition and have an average width of 2.5m, complete with dropped kerbs and tactile paving. There is adequate street lighting in regular intervals, along with many signalised Toucan crossing points along the entirety of the road to allow pedestrians and cyclists to cross the road in a safe manner. There is also a pedestrian refuge island present along the road.

2.3.5 Oxford Road is subject to a speed limit of 20mph throughout. Double yellow parking line restrictions are present along the entirety of the road.

2.3.6 Many buses service the Oxford Road corridor, as such there are many bus stops with excellent infrastructure (shelter, pole, seating, timetable information) along the road. In addition to the university campuses, there are also many amenities and facilities present along the road, including several fitness centres, public houses, restaurants, Tesco, Sainsbury's, and several parks.

Brancaster Road

2.3.7 Further to the north of the site, Brancaster Road commences at a priority junction with the A34 Oxford Road and extends in a west-to-east alignment for c. 180m, then terminates at a priority junction with the A34 Princess Street. The road is one-way from the west to east.

2.3.8 The carriageway is approximately 4m wide, with wide footways of c. 4m along both sides of the road. There is a crossing point where Brancaster Road meets Oxford Road; this comprises dropped kerbs and tactile paving, where adequate signage is provided to alert pedestrians of vehicles turning in.

2.3.9 Towards the eastern section of the road, the northern side of the footway blends into the public realm of the completed Circle Square development, as such pedestrian infrastructure is in good condition.

2.3.10 Parking restrictions are present in the form of double yellow lines (no waiting at any time) along the entire length of Brancaster Road to prevent unauthorised parking.

3.0 Waste Management Policy

3.1 Introduction

3.1.1 When developing refuse strategies, it is important to be cognisant of the national and local waste management policies. The following section of the report provides an overview of the policies relevant to the site.

3.2 Waste Management Plan for England (January 2021)

3.2.1 The Waste Management Plan for England, to be read in combination with the Resources and Waste Strategy issued in 2018, sets out measures to eliminate avoidable plastic waste, tackle confusion over household recycling, and make sure that those responsible for creating polluting products pay for the costs of that pollution.

3.2.2 The Resources and Waste Strategy identifies five strategic ambitions:

- *"To work towards all plastic packaging placed on the market being recyclable, reusable or compostable by 2025;*
- *To work towards eliminating food waste to landfill by 2030;*
- *To eliminate avoidable plastic waste over the lifetime of the 25 Year Environment Plan;*
- *To double resource productivity by 2050; and*
- *To eliminate avoidable waste of all kinds by 2050."*

3.2.3 The next figure, included on the Waste Management Plan, identifies the evolution of *The Waste Hierarchy* through the years, its current status, and the goal for 2030:

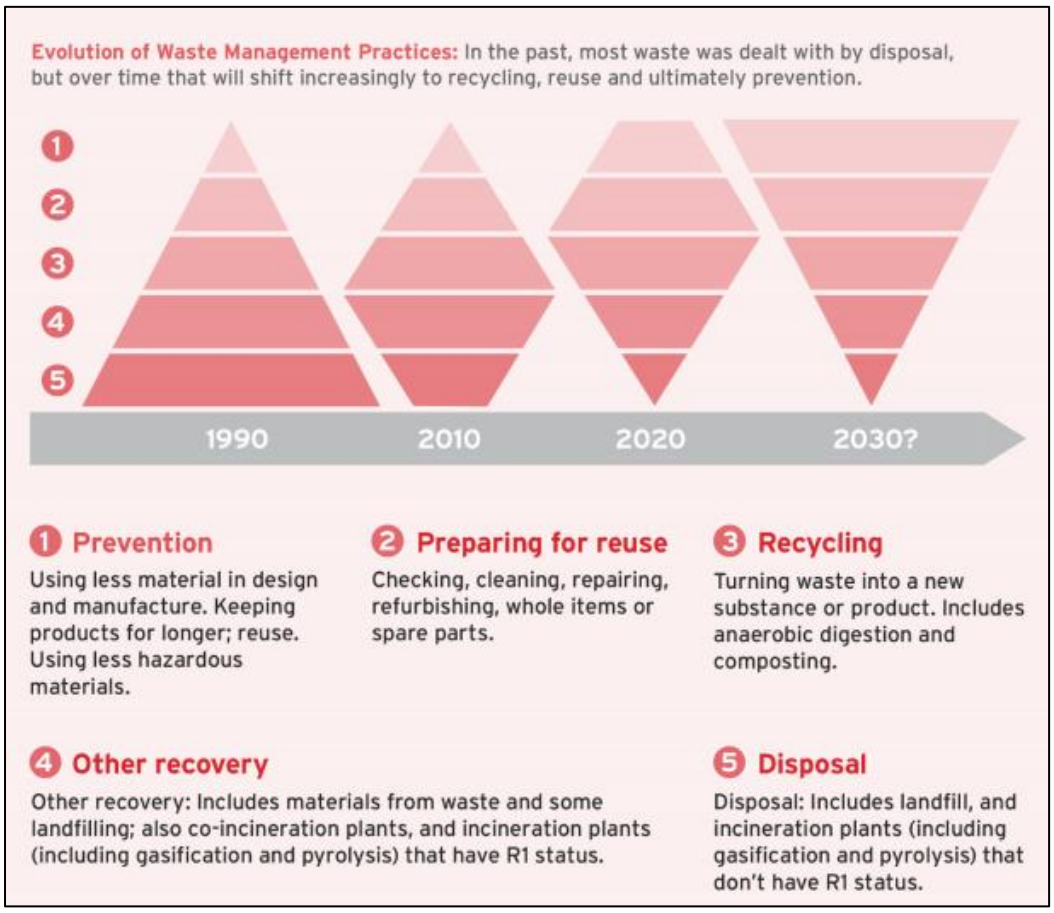


Figure 3.1 – Evolution of Waste Management Practices
(Source: Defra)

3.2.4 The 2030 hierarchy gives top priority to preventing waste in the first place. When waste is created, it gives priority to preparing it for re-use, then recycling, then recovery, and last of all disposal (e.g. landfill).

3.2.5 This Waste Management Strategy (WMS) adheres to the above guidance, prioritising recycling.

3.3 Waste Management in Buildings – Code of Practice (BS 5906:2005)

3.3.1 To complement the Waste Management Plan for England, a National Code of Practice (BS 5906:2005) document has been developed and this provides guidance relating to waste forecasting for new developments.

3.3.2 This WMS has consulted the weekly arisings included within this Code of Practice, to further support the estimated waste generation set on MCC's GD 04 waste guidance for the anticipated retail uses of the site (assumed as food and beverage (F&B) use for robustness).

3.3.3 This code of practice also includes guidance for office developments. However, the forecast is based on the number of employees, and at the time of writing there is no information on the potential number of employees. Therefore, all calculations for this use have been based on MCC's GD04 guidance.

3.4 Building Regulations

3.4.1 In addition to the above guidance, all new developments must comply with the requirements set out in Part H6 of the Building Regulations 2000 which states that adequate means of storing solid waste should be provided and adequate means of access should be provided for people in the building to the place of storage.

3.4.2 This WMS proposes waste storage areas which comply with the requirements set by Building Regulations document.

3.5 Controls on Animal By-Products

3.5.1 Organic waste recycling is subject to DEFRA's Controls on Animal By-Products - Guidance on regulation (EC) 1069/2009 and accompanying implementing Regulation (EC) 142/2011, enforced in England by the Animal By-Products (Enforcement) (England) Regulations 2011.

3.5.2 The regulations predominantly relate to food waste. These regulations state that if the volume of waste is over 20kg, it must be stored and labelled in a special container and will be collected by a licensed carrier, who records all stages of the waste movement.

3.5.3 It is the occupier's responsibility to ensure that a licensed waste company is arranged, and that it complies with the regulation.

3.6 Waste Storage and Collection Guidance for New Developments (GD 04 – v7.00, Sept 2023)

3.6.1 At a more local level, Manchester City Council has prepared a Waste Storage and Collection Guidance Note which contains minimum standards to be considered for the storage and collection of waste. This guidance follows the recommendations set on the Waste Management Plan for England, strongly encouraging and promoting high levels of quality recycling.

3.6.2 The note states that all planning applications for new developments and conversions must include a Waste Management Strategy that includes:

- Estimated volumes and types of waste produced by the development;
- Details of internal and external stores for both waste and recycling, including any plans and designs;
- Location of the proposed collection point and details of the route the collection vehicle will take;
- Details of how waste will be transferred between stores and to the collection location; and
- Details of number and capacity of bins proposed and collection frequency.

3.6.3 The following sections of this report provide additional information on each of the above points whilst the pro forma document, contained at the rear of the guidance note, is included as **Appendix B**.

4.0 Waste Forecasting and Strategy

4.1 Introduction

4.1.1 A key element of national and local policy is to ensure that new developments maximise recycling while minimising waste generation. It is important to ensure that developments facilitate high recycling rates by providing convenient, attractive, and simple means to achieve the Government's goals.

4.2 Waste Forecast

4.2.1 Based on the consented WMS, the total floor area of Hatch was as follows:

- Retail: 161 sqm;
- Food & Beverage: 720 sqm;
- Workspace / Office: 150 sqm; and
- Storage: 60 sqm;
- Totalling: 1,091 sqm.

4.2.2 Whereas the proposed STACK development would comprise approximately 1,242.91 sqm of floorspace dedicated to bars, food and drink units, and retail space over two floors, including back of house storage. Of the 1,242.91 sqm, the breakdown is as follows:

- Retail: 52.4 sqm;
- Food & Beverage: 662.48 sqm;
- Miscellaneous (i.e., cellars for bars, washrooms, and ancillary areas): 528.03 sqm.

4.2.3 The remaining c. 2,621.15 sqm of floorspace would be spread out across the stage, street seating, and plaza / circulation areas.

4.2.4 The assumptions used in the consented WMS were as follows:

- Retail (non-food): BS5906:2005, forecasting a waste generation of 10 litres per square metre per week based on a rate for shopping centres;
- Food & Beverage: BS5906:2005, forecasting a waste generation of 75 litres per cover per week. Vectos further assumed that:
  - The food and beverage units would accommodate c. 37 covers;
  - Each bench would have sufficient space to accommodate a maximum of 6 covers – with 30 benches provided, this is c. 180 covers;
  - However not every cover will be eating, so the total number of covers equates to around 217 (37+180);
  - It is further assumed that a proportion of food and beverage will be consumed whilst stood up, so a further 217 covers will be eating / drinking in this manner;

- The total number of covers is 434, half of which are sitting and half of which are standing.

- Office: BS5906:2005, forecasting a waste generation of 50 litres per employee per week. Vectos further assumed that there would be one employee per 10m² Gross External Area (GEA) of B1 office space.

4.2.5 The consented WMS also cited waste recycling rates based on the Waste & Resources Action Programme (WRAP) Study of Waste in the Hospitality Sector, which assumes best practice is applied. These are simplified in **Table 4.1** as follows:

Waste Stream	Recycling Rates per Building Use (%)		
	Retail	Food and Beverage	Office
General Refuse	50%	12%	30%
Paper / Card	25%	24%	50%
Mixed Recycling	25% (Co-Mingled)	4%	15% (Co-Mingled)
Glass Recycling		3%	
Metals Recycling		14%	
Organic Food Recycling	0%	43%	5%

Table 4.1 – 2019 Consented Recycling Rates

4.2.6 In summary, the weekly waste volumes forecast in the consented WMS are reproduced as follows:

Waste Stream	Retail	Food and Beverage	Office	Total
General Refuse	241 l	1,172 l	225 l	**1,638 l**
Paper / Card	121 l	2,344 l	374 l	**2,840 l**
Mixed Recycling	121 l	391 l	112 l	**2,284 l**
Glass Recycling		293 l		
Metals Recycling		1,367 l		
Organic Food Recycling	0 l	4,199 l	38 l	**4,237 l**
Total Volume	**482 l**	**9,765 l**	**750 l**	**10,997 l**

Table 4.2 – 2019 Consented Weekly Waste Volumes

MCC Guidance

4.2.7 For comparison, the proposed waste forecast has been calculated based on the recommendations set by the Waste Storage and Collection Guidance for New Developments (GD04), Version 6.00.

4.2.8 Waste forecasts for any F&B units have been based on MCC's GD04 Guidance, following the recommendations for Restaurants / Fast Food Outlets of 1,500l per 20 dining spaces.

4.2.9 There is no guidance on estimating the number of covers / dining spaces, however STACK have advised that the anticipated capacity of the venue is 2,500 people, taking into account that the majority of people would not be eating / would be drinking instead.

4.2.10 MCC guidance notes that the recycling rates for this use can be variable, however an estimated percentage of 50% has been used for calculation purposes.

4.2.11 The retail uses at the buildings that are located at the ground floor have also been calculated based on MCC's GD04 Guidance recommendations of 5,000l per 1,000m² of gross floor space. A recommended initial recycling percentage of 50% has been used for calculation purposes.

4.2.12 Based on the above, **Table 4.3** forecasts the weekly waste volume generated by the site:

Waste Stream	Retail	Restaurant and Bar	Total
Non-Recyclable Waste	131 l	93,750 l	**93,881 l**
Dry Mixed Recycling	85 l	56,250 l	**56,335 l**
Glass Recycling	46 l	28,125 l	**28,171 l**
Organic Food Recycling	0 l	9,375 l	**9,375 l**
Total Volume	**262 l**	**187,500 l**	**187,762 l**

Table 4.3 – Estimated Weekly Waste Volumes (Based on MCC Guidance)

4.2.13 A comparison between the consented WMS and the forecasts based on MCC Guidance demonstrates that the proposed development would result in a significantly higher waste forecast due to the increase in capacity of the venue.

4.3 Bin Types

4.3.1 STACK have stated that the most suitable containers for the general waste and recycling streams would be 1,100 l Eurobins except for glass bins and organic food recycling which would be 240 l bins.

4.3.2 The collections would be undertaken by a private company as per the extant operations, and the frequency will be 5 times a week.

4.3.3 The following **Table 4.4** summarises a comparison of the required waste containers per stream in 2 different scenarios, namely:

- The consented WMS; and
- This WMS (calculated against MCC Guidance for comparative purposes).

Waste Stream Collection Frequency	Consented WMS (5x a week)	MCC Guidance (5x a week)	Difference
General Refuse	2x 1,100 l bins	18x 1,100l bins	In general, paper and dry mixed recycling is combined. The consented WMS accommodated a daily peak of 30% of weekly waste (assumed to be over a weekend), however proposed waste volumes are still significantly higher than that of the consented scenario due to the added capacity.
Paper / Card	3x 1,100l bins	11x 1,100l bins	
Mixed Recycling	2x 1,100 l bins		
Glass Recycling	4x 240 l bins	24x 240 l bins	
Organic Food Recycling	18x 240 l bins	8x 240 l bins	
Total Bins	**7x 1,100l bins + 22x 240 l bins**	**29x 1,100l bins + 32x 240 l bins**	

Table 4.4 – Comparison of Number of Required Bins

4.3.4 The STACK bin store would comprise space for 30 no.1,100 l Eurobins and 33 no. 240 l bins, which is equivalent to the number of bins required by the site. Should the recycling rates for STACK be increased in the future, it would be possible to decrease the number of 1,100 l Eurobins and replacing them with additional 240 l bins (to accommodate more glass recycling for example).

4.4 Waste Management Strategy – Internal Arrangements

4.4.1 The four main waste streams are:

- General, non-recyclable waste;
- Dry mixed recycling (comprising cardboard and paper, plastic and aluminium);
- Glass recycling; and
- Organic food recycling.

4.4.2 Similar to the consented development whereby the bin store was located at the south-east corner of the site as shown in **Figure 4.1** below, the bin store for STACK will be located in a similar position as shown in **Figure 4.2** overleaf:

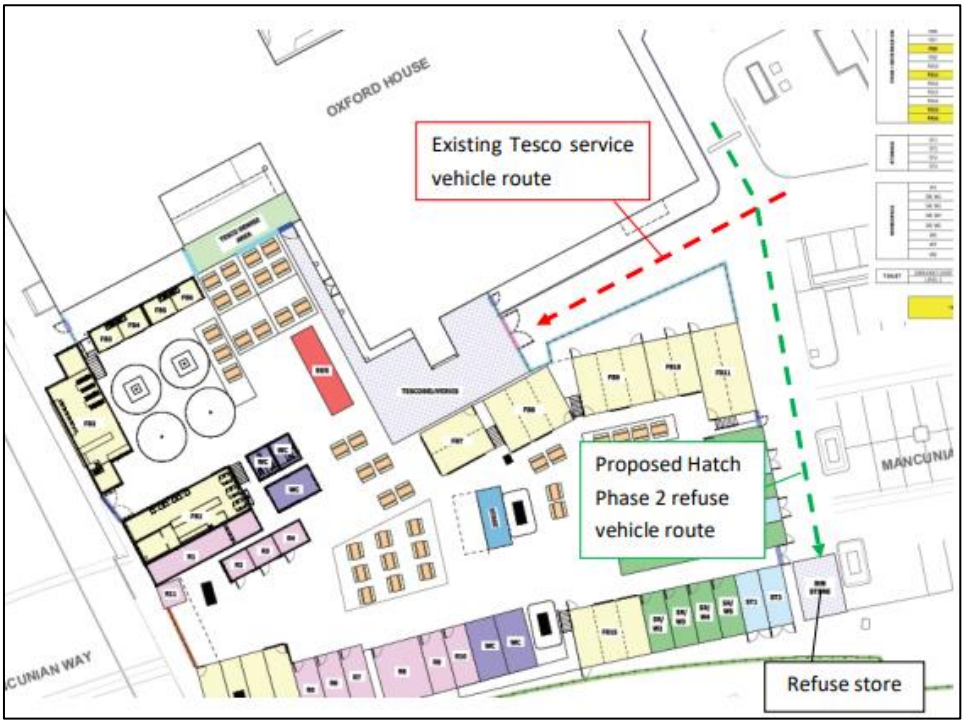


Figure 4.1 – Consented Bin Store Location for Hatch
(Source: Vectos, 2019)

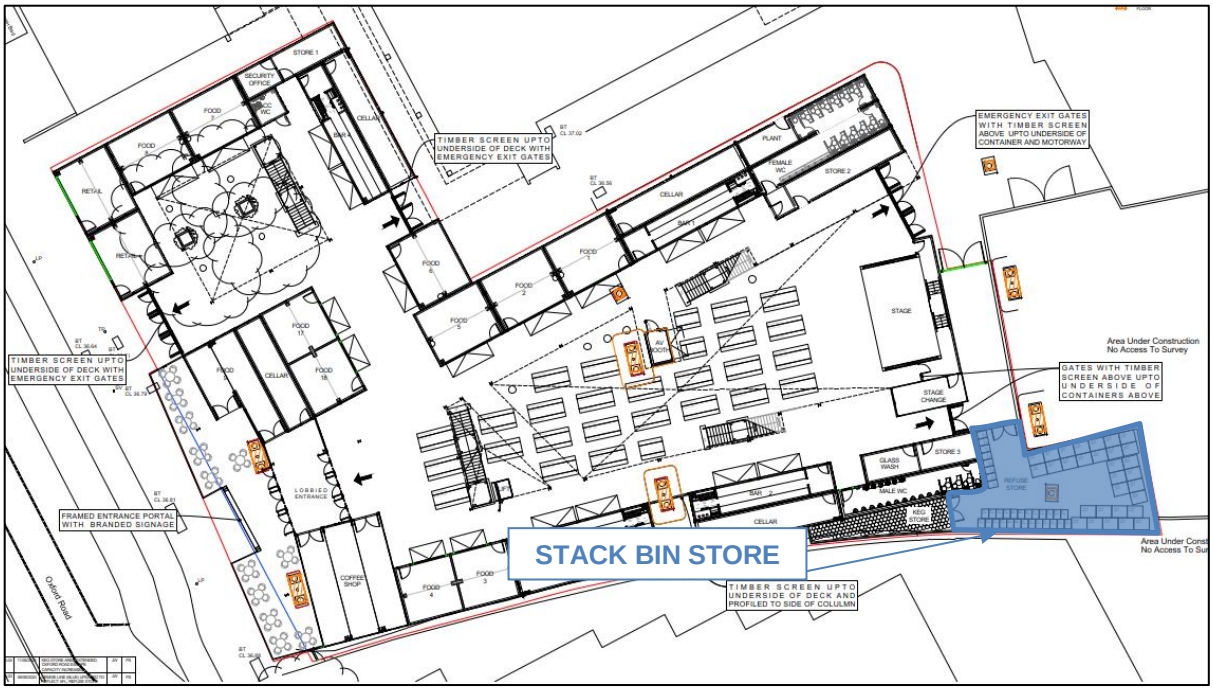


Figure 4.2 – Proposed Bin Store Location for STACK
(Source: Bruntwood, 2024)

4.4.3 **Drawing 85453-CUR-00-XX-DR-TP-05001** to the rear of the report shows that a 11.2m large refuse vehicle can safely access and egress from this space in forward gear in a similar manner to the existing route.

4.4.4 The waste storage areas will be well lit and ventilated, including a bin clean down area with a water feed. The floor will comprise an easily cleaned surface and adequate drainage will be provided.

4.4.5 The management company would be responsible for keeping the waste storage facilities clean and safe. They would also be responsible for cleaning the bins on a regular basis and arranging for replacing damaged bins when necessary.

4.5 Waste Management Strategy – Collections

4.5.1 **Drawing 85453-CUR-00-XX-DR-TP-06001** to the rear of the report shows the location of the waste store and the routes from the waste stores to the collection point.

4.5.2 The management company would be responsible for moving full bins from the respective waste stores to the collection point prior to collection day. The waste operators will collect the bins and load them into the refuse vehicle.

4.5.3 The collection point for all the bins would be directly outside the bin store. The extant Hatch development shared a servicing and delivery area with the neighbouring Tesco Express convenience store; however, the intention now is for this to be separate.

4.5.4 As outlined above, the proposals are also cognisant of plans for the neighbouring site which is owned and operated by Bruntwood, noting that Bruntwood are in the process of submitting a planning application for the site to serve Manchester Technology Centre and No.1 & No.2 Circle Square as a site management compound, and to improve the efficiency of the waste collection process.

4.5.5 In light of this, STACK have agreed with Bruntwood to lease an area adjacent to this space in order to facilitate servicing so that Bruntwood's site management compound can operate independently of STACK's needs.

4.5.6 **Drawing 85453-CUR-00-XX-DR-TP-05001** to the rear of the report demonstrates that a 11.2m large refuse vehicle can safely service the site by entering via the neighbouring Multi-Storey Car Park (MSCP) off the A34 Princess Street, turning left after the substation and reversing into the vehicular gate leading to the bin store, and exiting onto the A34 Princess Street via Cloak Street.

4.5.7 This arrangement does not interfere with the traffic flow to and from the MSCP, as the junction with A34 Princess Road would be two-way. Regular commuter vehicles would therefore be restricted to enter and exit the MSCP from this junction only and would be prohibited from travelling further north beyond the MSCP. As such, service and delivery vehicles can easily access and egress from the site in forward gear. The proposed access route for service and delivery vehicles is shown in **Figures 4.3** and **4.4** as follows:



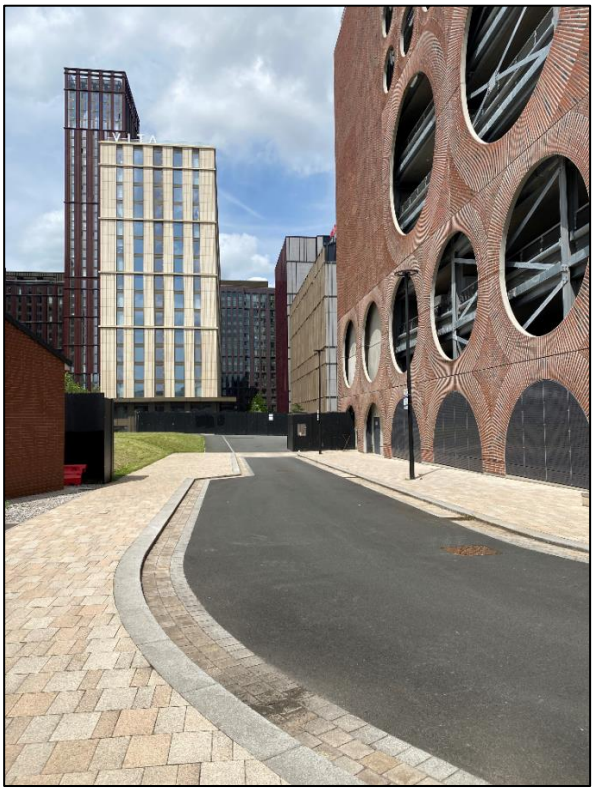


Figure 4.3 (left) – Service and Delivery Vehicle Access from MSCP

Figure 4.4 (right) – Continuation of Service and Delivery Vehicle Access, Northbound towards Brancaster Road

4.5.8 Once the bins have been emptied, containers would be carried immediately back to the bin stores within the respective buildings by the management team.

4.5.9 Furthermore, it is important to highlight that collections are arranged with private contractors and that timings can be agreed upon.

5.0 Summary and Conclusions

5.1 Summary

5.1.1 Curtins has been appointed by Stack (Manchester) Limited to provide transport and highways advice in relation to a retail / leisure mixed-use development on the former Hatch site on Oxford Road, Manchester.

5.1.2 The Hatch site was closed in September 2023, with a small café within the Hatch Courtyard (the footprint occupied by the original 2017 planning consent) remaining operational, with the intention for all elements to close upon a change of ownership from Bruntwood to Stack (Manchester) Limited.

5.1.3 The vision is to recreate the atmosphere and feel generated by Stack (Manchester) Limited at the highly successful and popular STACK developments across Newcastle and Seaburn, and to implement this as a permanent use of the space. The existing space would be largely retained as part of the proposed development, which would comprise the courtyard arrangement to the north, and the undercroft space under the Mancunian Way to the south, with both linked by a small plaza.

5.1.4 It is envisaged that refuse and servicing trips would take place via a bin store at the rear of the development, on land that is leased from Bruntwood (to the south-east of the site, behind the proposed stage). The bin store can be accessed via Brook Street.

5.1.5 This Waste Management Strategy (WMS) has been prepared to consider the potential refuse and recyclable waste volumes, including potential organic waste, and for all uses of the proposed development. This WMS also provides details of the collection arrangements.

5.1.6 Comparisons have been made between the waste forecast consented as part of the 2019 WMS, and calculations based on the recommendations set by Manchester City Council's Waste Storage and Collection Guidance for New Developments (GD04), Version 6.00 (and further supported by the estimations set on the Code of Practice BS 5906:2005).

5.1.7 It has been concluded that the proposed development would result in a significantly higher waste forecast when compared against the consented Hatch development, due to the increase in capacity of the venue. Notwithstanding, the STACK bin store has been designed to accommodate the number of bins required by the site.

5.1.8 Similar to the consented development whereby the bin store was located at the south-east corner of the site, the bin store for STACK will be located in a similar position. The site will be served by private refuse collections. The bins will be transported to the collection point by the management company's staff.

5.1.9 The collection point for all the bins would be directly outside the bin store. The extant Hatch development shared a servicing and delivery area with the neighbouring Tesco Express convenience store; however, the intention now is for this to be separate.

5.1.1 The proposals are cognisant of plans for the neighbouring site which is owned and operated by Bruntwood, noting that Bruntwood are in the process of submitting a planning application for the site to serve Manchester Technology Centre and No.1 & No.2 Circle Square as a site management compound, and to improve the efficiency of the waste collection process.

5.1.2 In light of this, STACK have agreed with Bruntwood to lease an area adjacent to this space in order to facilitate servicing so that Bruntwood's site management compound can operate independently of STACK's needs.

5.1.3 Access to the bin store would be via the neighbouring Multi-Storey Car Park (MSCP) off the A34 Princess Street, turning left after the substation and reversing into the vehicular gate leading to the bin store, and exiting onto the A34 Princess Street via Cloak Street.

5.1.4 STACK is anticipated to be served by five-times-a-week collections, which is consistent with the consented operational frequencies. The size of the bin store has been determined accordingly whilst consideration to segregation and recycling of waste, and cleaning of bins has been given.

5.2 Conclusions

5.2.1 From a waste management perspective, there are no reasons why the site should not be granted planning approval.

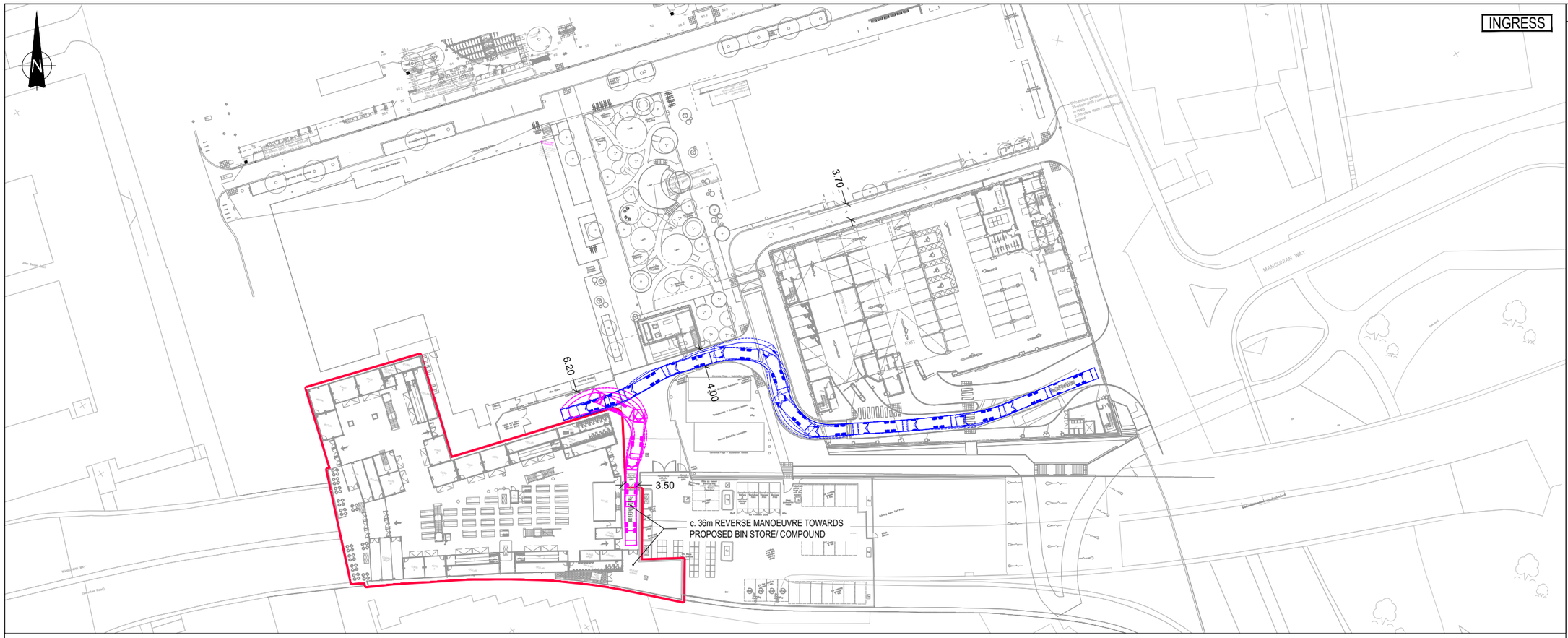
Drawings

Drawing 85453-CUR-XX-00-D-TP-05001 – (Swept Path Analysis) 11.2m Large Refuse Vehicle

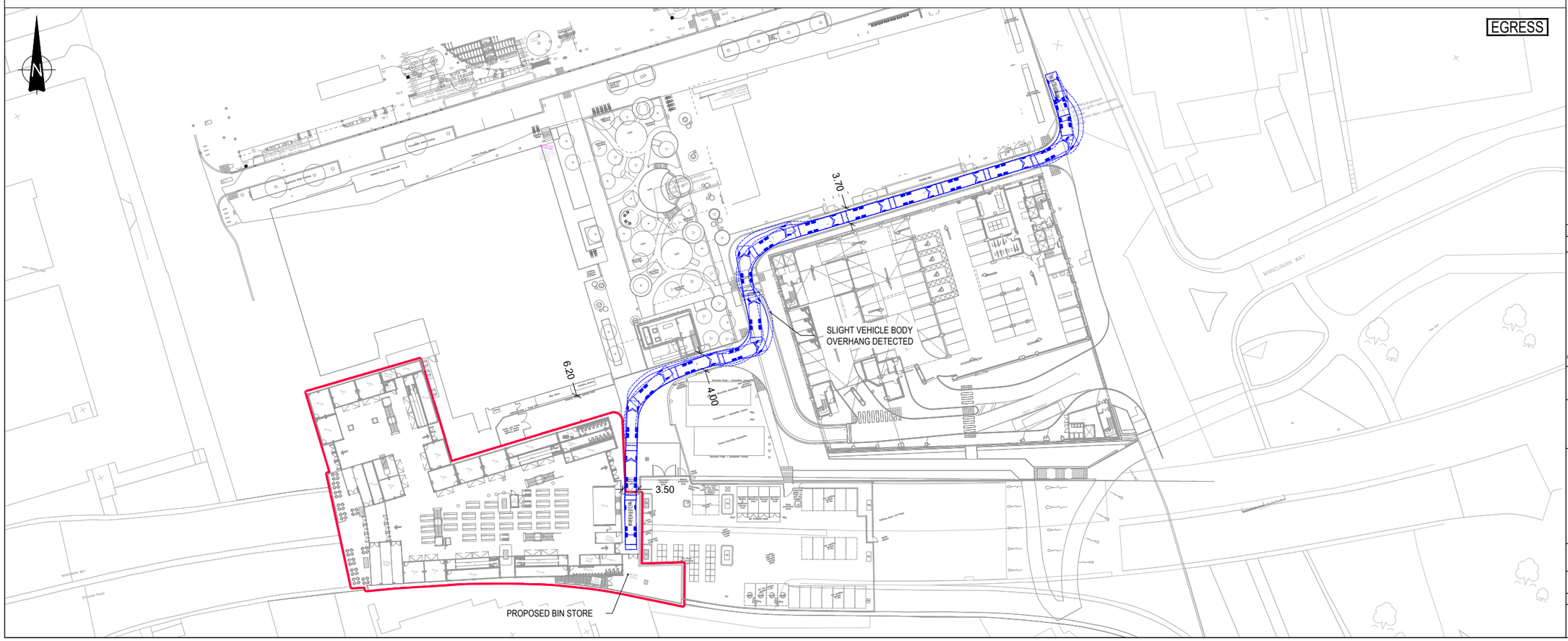
Drawing 85453-CUR-XX-00-D-TP-06001 – Waste Transport Route

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INGRESS



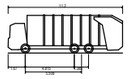
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DRAWING REFERENCE: '1162.1-P0-[20]-100.2 PROPOSED GROUND FLOOR'

VEHICLE PROFILE:



Phoenix 2 Duo (P2-15W with Elite 6x4 chassis)	
Overall Length	11.200m
Overall Width	2.530m
Overall Body Height	3.735m
Min Ground Clearance	0.301m
Track Width	2.500m
Lock to lock time	4.00s
Kerb to Kerb Turning Radius	9.900m

Rev:	Description:	Date:	By:	Chkd:
P02	Layout & redline updated	30/07/24	JM	LL

Curtins

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Civils & Structures • Transport Planning • Environmental • Infrastructure • Geotechnical • Conservation & Heritage • Principal Designer
Birmingham • Bristol • Cambridge • Cardiff • Douglas • Dublin • Edinburgh • Glasgow • Kendal • Leeds • Liverpool • London • Manchester • Nottingham

Status: PRELIMINARY

Project: STACK, OXFORD ROAD - MANCHESTER

Drg Title:

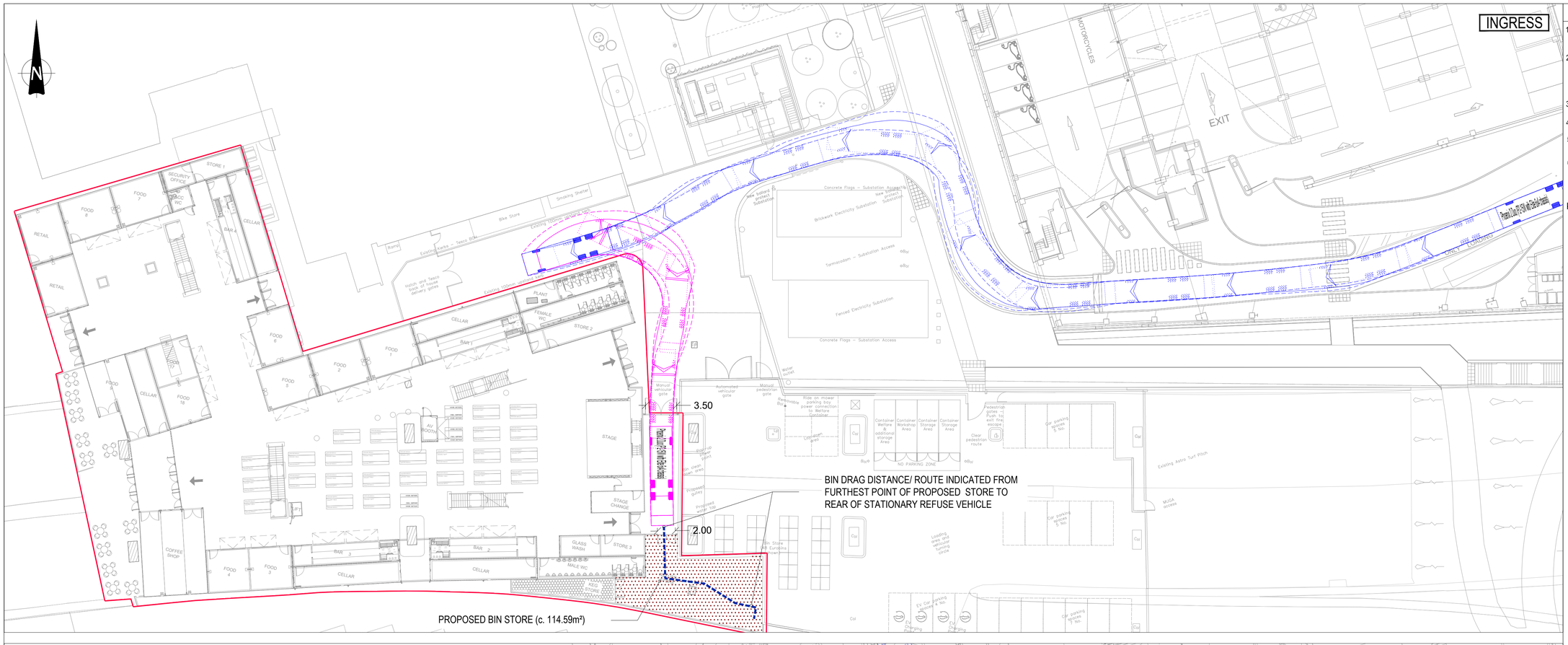
SWEPT PATH ANALYSIS
11.2m REFUSE VEHICLE

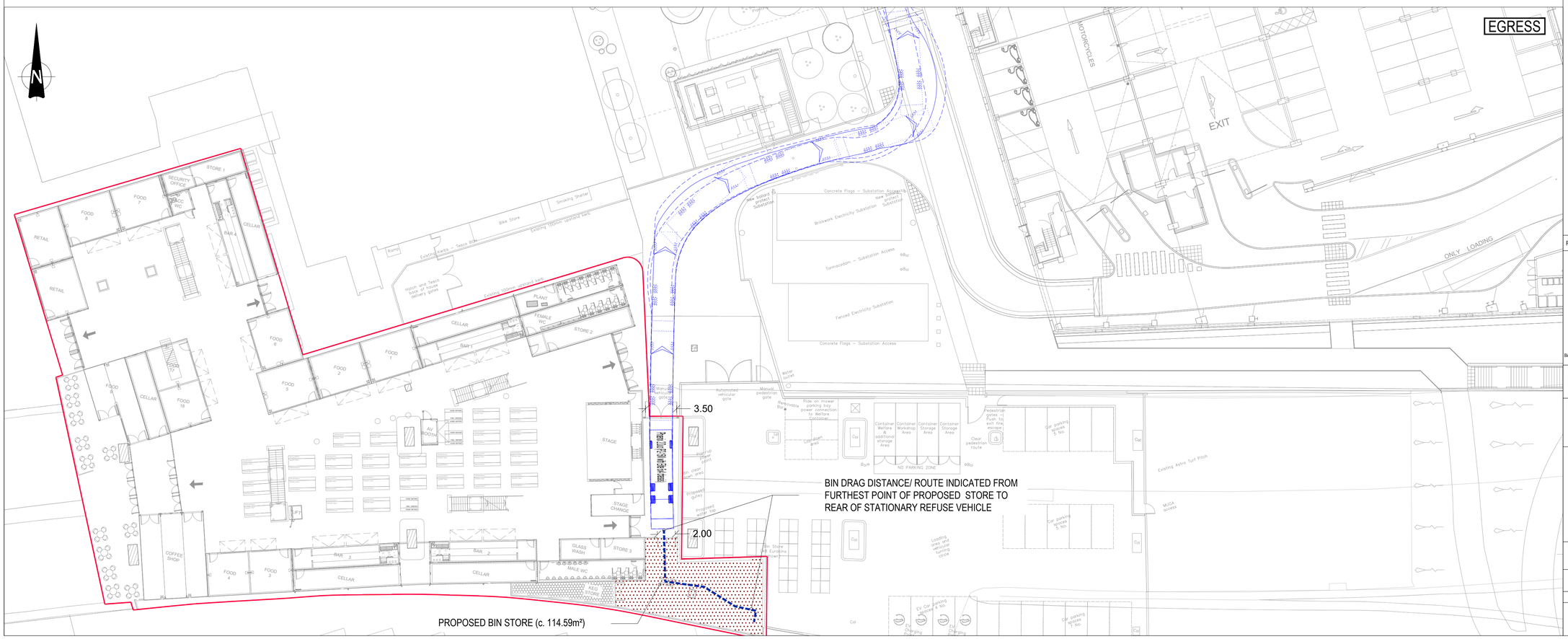
Drawn By	Designed By	Checked By
JM	JM	LL
	Date: 03/07/24	Scales @ A1: 1:500

Project No - Originator - Function - Spatial - Form - Discipline - Number: 85453 - CUR - XX - 00 - D -TP- 05001

Revision: P02

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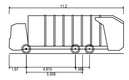


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KEY:
- WASTE STORE
- BIN ROUTE (18.1m from furthest point of refuse store)

VEHICLE PROFILE:



Phoenix 2 Duo (P2-15W with Elite 6x4 chassis)	
Overall Length	11.200m
Overall Width	2.550m
Overall Body Height	3.751m
Min Body Ground Clearance	0.304m
Track Width	2.500m
Lock to lock time	4.00s
Kerb to Kerb Turning Radius	9.500m

Rev:	Description:	Date:	By:	Chkd:

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Status: PRELIMINARY

Project: STACK, OXFORD ROAD - MANCHESTER

Drg Title: WASTE MANAGEMENT STRATEGY

Drawn By	Designed By	Checked By
JM	JM	LL
	Date: 03/07/24	Scales @ A1: 1:250

Project No - Originator - Function - Spatial - Form - Discipline - Number: 85453 - CUR - XX - 00 - D -TP- 06001

Revision: P01

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Appendix A – Proposed Site Layout

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NORTH

VISUAL SCALE BAR 1:125
0 1m 2m 3m 4m 5m 6m

EXISTING HIGH CONTAINMENT KERB TO BASE OF COLUMNS

COLUMN PROFILE AT GROUND FLOOR

STORE 1
SECURITY OFFICE
ACC WC
FOOD 7
FOOD 8
RETAIL
RETAIL
CELLAR
BAR 4
FOOD 6
FOOD 5
FOOD 2
FOOD 1
BAR 1
CELLAR
PLANT
FEMALE WC
STORE 2
STAGE
STAGE CHANGE
AV BOOTH
FOOD 17
FOOD 9
CELLAR
FOOD 18
LOBBIED ENTRANCE
LIFT
COFFEE SHOP
FOOD 4
FOOD 3
BAR 3
CELLAR
BAR 2
CELLAR
GLASS WASH
STORE 3
MALE WC
KEG STORE
REFUSE STORE

TIMBER SCREEN UPTO UNDERSIDE OF DECK WITH EMERGENCY EXIT GATES

EMERGENCY EXIT GATES WITH TIMBER SCREEN ABOVE UPTO UNDERSIDE OF CONTAINER AND MOTORWAY

TIMBER SCREEN UPTO UNDERSIDE OF DECK WITH EMERGENCY EXIT GATES

FRAMED ENTRANCE PORTAL WITH BRANDED SIGNAGE

TIMBER SCREEN UPTO UNDERSIDE OF DECK AND PROFILED TO SIDE OF COLULMN

GATES WITH TIMBER SCREEN ABOVE UPTO UNDERSIDE OF CONTAINERS ABOVE

Area Under Construction
No Access To Survey

Area Under Construction
No Access To Survey

BT CL 37.02
BT CL 36.56
BT CL 36.64
BT CL 36.71
BT CL 36.79
BT CL 36.81
BT CL 36.88
TP
SV
LP
LP
Flower Bed
Oxford Road

REV	DATE	DESCRIPTION	BY	CHK
PL04	11/06/2024	KEG STORE AREA EXTENDED; OXFORD ROAD ESCAPE CAPACITY INCREASED	JW	PS
PL03	06/06/2024	DEMISE LINE (BLUE) UPDATED TO REFLECT AFL; REFUSE STORE RE-ORGANISED TO SUIT DEMISE; APPLICATION BOUNDARY (RED LINE) UPDATED TO CAPTURE STREET SEATING	JW	PS
PL02	10/04/2024	UPDATED TO SUIT AMENDMENTS TO FIRST FLOOR GA - INCLUDING REFORMATTING OF - FIRE ESCAPES, REFUSE STORE, STAIRS & PLATFORM LIFT, AND PLANT ROOM & FEMALE WC	JW	PS
PL01	15/03/2024	ISSUED FOR PLANNING	JW	PS

dunwoodieswift architects

CLIENT
STACK (MANCHESTER) LIMITED

PROJECT
STACK MANCHESTER

TITLE
PROPOSED FLOOR PLAN GROUND LEVEL

SCALE @ A1 1:125
STATUS PLANNING
NAME DATE
DRAWN BY JW 29/07/2024
CHECKED BY PS
PROJECT No. 1162.1
DRAWING No P0-[20]-000.2
REVISION PL04

Manchester Technology Centre

DASHED LINES INDICATE TENSILE FABRIC ROOF OVER

COVERED SEATING FORMED OUT OF HIGH CUBE CONTAINERS SET ONTO DECK LEVEL WITH OPEN FACE TO PLAZA AND GLAZED FACE TO BOUNDARY

ACOUSTIC SCREENING OVER CONTAINERS

TIMBER SCREEN UPTO UNDERSIDE OF MOTORWAY

UNDERSIDE OF MOTORWAY OVER SITE

GLAZED SCREENS TO EDGE OF UPPER DECK WITH BALUSTRADE EXTERNALLY

FRAMED ENTRANCE PORTAL WITH BRANDED SIGNAGE

GLAZED SCREENS TO EDGE OF UPPER DECK WITH BALUSTRADE EXTERNALLY

TIMBER SCREEN UPTO UNDERSIDE OF MOTORWAY

CORUGATED CONTAINER STYLE CLADDING

IC
CL 36.73

Canopy

Upper Canopy

Canopy

Flower Bed

FOOD 15

FOOD 13

CLNR CUPB

ACC WC

BAR 7

BAR 5

36.54

36.67

FOOD 11

STAFF ROOM

MALE WC

LIQUOR STORE

STAGE BELOW

PLAZA

VOID

COVERED WALKWAY

FOOD 14

STORE

FOOD 12

BAR 6

STORE

FOOD 10

GLASS WASH

FEMALE WC

OFFICE

STORE

Area Under Construction
No Access To Survey

Area Under Construction
No Access To Survey

Oxford Road

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NORTH

VISUAL SCALE BAR 1:125
0 1m 2m 3m 4m 5m 6m

COLUMN PROFILE AT FIRST FLOOR

REV	DATE	DESCRIPTION	BY	CHK
PL02	10/04/2024	BOH AREA TO NORTH AND SOUTH OF STAGE REFORMATTED IN RESPONSE TO FIRE STRATEGY REVIEW; FOOD 14 & ACC WC UNITS REFORMATTED TO ALLOW ADDITIONAL STORE; ADDITIONAL STORE BETWEEN BAR 6 AND FOOD 10 (FORMED OUT OF TIMBER HOARDING)	JW	PS
PL01	15/03/2024	ISSUED FOR PLANNING	JW	PS

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CLIENT
STACK (MANCHESTER) LIMITED

PROJECT
STACK MANCHESTER

TITLE
PROPOSED FLOOR PLAN
UPPER LEVEL

SCALE @ A1		STATUS
1:125		PLANNING
NAME		DATE
DRAWN BY	JW	29/07/2024
CHECKED BY	PS	

PROJECT No.	DRAWING No	REVISION
1162.1	P1-[20]-100.2	PL03

Appendix B – MCC Waste Pro Forma

MANCHESTER CITY COUNCIL

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)?	~~Yes~~ / No (delete as appropriate)
If this property will be used as an HMO, how many people do you intend to accommodate (5+)?	

Low Rise Domestic

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)	
Pulpable Recycling	240	1 x wheeled bin (possibly more for HMO)	
Mixed Recycling	240	1 x wheeled bin (possibly more for HMO)	
Garden Waste	240	1 x wheeled bin (possibly more for HMO)	
Food Waste	23	1 x 23 litre caddy (Possibly more for HMO)	

High Rise Apartment Developments

0.43m2 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)	Yes / No (delete as appropriate) How many of each container do you plan to provide? _____ x general refuse x 1100 litre (based on 110 litres per apartment) _____ x pulpable Recycling x 1100 litre (based on 55 litres per apartment) _____ x mixed recycling x 1100 litre (based on 55 litres per apartment) _____ x food waste x 240 litres (based on 10 litres per apartment) _____ 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?	Yes / No (delete as appropriate)

Commercial Developments

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

General Waste - 18 no. 1,100l bins Dry recycling (include material type details) - 11 no. 1,100l bins (paper/card and mixed), and 24 no. 240l bins (glass) Food Waste - 8 no. 240l bins Industrial Waste - N/A Other - N/A All relevant calculations are provided in the accompanying Waste Management Strategy (Document reference: 85453-CUR-XX-XX-T-TP-00003).

Has / will a contract be obtained with a licenced waste carrier?	Yes / ~~No~~ (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?	Yes / No (delete as appropriate)

Internal Stores (Residential and Commercial)

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

Storage Areas for Waste Containers (Residential and Commercial)

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

Building management team to move bins from the the respective waste stores to the collection point prior to collection day, with waste being collected from a single bin store under the Mancunian Way. The collection frequency would be 5x a week.

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

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

Ventilation - The waste storage facilities are appropriately ventilated as it is located out-doors but sheltered under the Mancunian Way. Details have been provided in relevant documentation. Hygiene - A bin cleaning area would be provided within the outdoor compound. The management company will be responsible for cleaning the facilities.

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

The management company.

Please ensure that you have attached:

Detailed plans of bin stores	X
Location plans showing stores	X
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)	X

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.

Appendix C – Consented Waste Management Strategy by Vectos

vectos
transport planning specialists

Bruntwood Ltd

HATCH PHASE 2, MANCHESTER

Waste Strategy

VN80989

April 2019

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Tel: 0161 228 1008 www.vectos.co.uk
Company no. 07794057
Registered address: Vectos North Limited, 4th Floor Oxford Place, 61 Oxford Street, Manchester, M1 6EQ

REPORT CONTROL

Document:	Waste Strategy Report
Project:	Hatch Phase 2, Manchester
Client:	Bruntwood Ltd
Job Number:	VN80989
File Origin:	N:\Vectos Job Data\2018\VN80989 Hatch Phase 2, Mancunian Way\Docs\Reports\Hatch Phase 2

Document Checking:

Primary Author	Elliot Read	**Initialled:**	ER
Contributor	Elliot Read	**Initialled:**	ER
Review By	Gareth Davis	**Initialled:**	GD

Issue	Date	Status	Checked for Issue
1	11.04.19	V1	GD
2			
3			
4			

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Appendices

Appendix A **Waste Pro Forma**

1 INTRODUCTION

1.1 Introduction

1.1.1 Bruntwood Ltd has commissioned Vectos to prepare a Waste Strategy in support of the further development of the Hatch scheme, which will provide a mixed-use retail, food & beverage and events venue to the vacant courtyard adjacent to Oxford House and extending to a vacant area below the Mancunian Way, adjacent to Oxford Road.

1.2 Application History

1.2.1 A Waste Strategy was produced by Vectos in support of the original Hatch Phase 2 planning application and was approved by Manchester City Council (MCC) in May 2018 (app ref: 120050/FO/2018). The application is to be resubmitted as proposals have been amended slightly. Such amendments have therefore been reflected when forecasting waste generation and associated bin storage requirements.

1.3 Proposed Development

1.3.1 The scheme will offer a range of pop-up and semi-permanent occupiers within former shipping containers and will occupy the vacant courtyard area. The retail/food and beverage offer will be constantly evolving so that customers visiting the site explore different operators on a regular basis.

1.3.2 Changes to the previously approved scheme are minor and comprise the following:

- Reorganisation of units at rear of site has seen 4x containers previously allocated for food and beverage now allocated for serviced retail / workshop space alongside two storage units;
- Replacement of some external seating with three food and beverage units and a workspace unit;
- Inclusion of a bus which will be used as a commercial unit; and
- Centralising storage units whilst removing one of these.

1.4 Site Location

1.4.1 The application site is located off Oxford Road, to the south of Manchester City Centre. Manchester Technology Centre is located immediately to the north and east of the site with the Old Students Union of Manchester Metropolitan University sitting to the south.

1.4.2 The Mancunian Way flyover extends above the southern section of the site. The location of the site is shown in **Figure 1.1**.

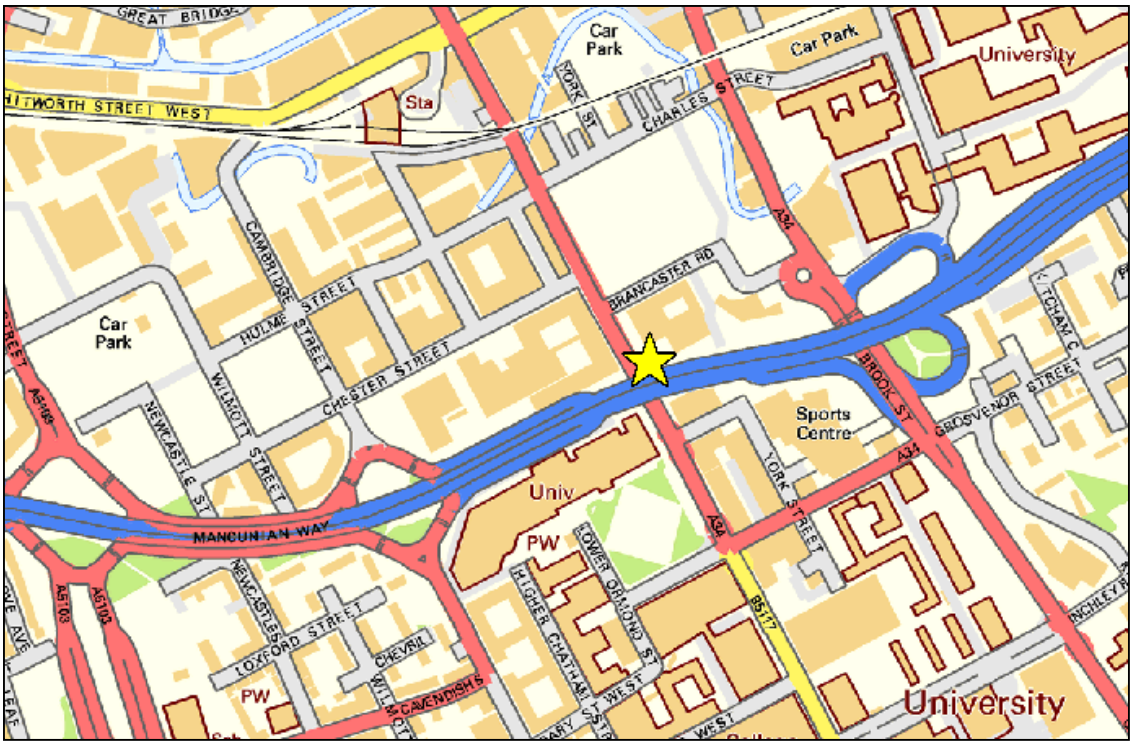


Figure 1.1 – Site LocationThe Report

1.4.3 This report sets out the policy context for waste management, forecast the waste generated, the number of bins required, the collection frequency, the management and oversight of the waste collection strategy.

1.4.4 The waste from the new development will be coordinated with that for Manchester Technology Centre so this report also describes the current waste collection regime for that building and how this will be altered to accommodate the new waste generated.

1.4.5 This Waste Strategy establishes the means of recycling the material generated and sets out the following:

- Forecast waste generation & recycling rates;
- Proposed waste management strategy;
- Proposed waste storage facilities; and
- Forecast the refuse collection frequency.

2 EXISTING WASTE COLLECTIONS

2.1 Introduction

2.1.1 The new development waste collection will be coordinated with the existing waste collection for Manchester Technology Centre. The main waste collection for Manchester Technology Centre is made via 4x 1100 litre Eurobins. These are separated into 2x for General Refuse, 1x Co-mingled and 1x Paper & Card Bin. The Homes 4 U occupier also uses these bins for their waste.

2.1.2 Separately there is a smaller 330 litre wheeled bin for general refuse and also a contractor's waste bin located there. The bin store for the Manchester Technology Centre prior to the first phase of Hatch is shown in **Figure 2.1**.



Figure 2.1: Manchester Technology Centre Bins

2.1.3 The 2x General Refuse bins are collected every weekday, as is the Paper & Card bin. The Co-Mingled recyclables bin is collected on a Monday and Thursday. Refuse vehicles reverse up to these bins for collection.

3 DEVELOPMENT PROPOSALS

3.1.1 The Hatch Phase 2 development comprises retail, food and beverage, along with office and storage space. The proposals are shown across ground to first levels in **Figure 3.1** and **3.2**.



Figure 3.1 – Proposed Ground Floor Layout



Figure 3.2 – Proposed First Floor Layout

3.1.2 As shown in **Figure 3.1** and **Figure 3.2**, in terms of waste generating land uses, the development will comprise retail, food & beverage, office space. It is noted that units allocated for storage space will not generate any waste.

3.1.3 The quantum of each land use and its location is summarised in **Table 3.1**.

Land Use	Total Floorspace
Retail	161m²
Food & Beverage	720m²
Workspace	150m²
Storage	60m²

Table 3.1: Area Schedule

3.1.4 The nature of the site will require additional bins located in the public areas which will be monitored and emptied by the site management and waste transferred to the main bin storage area will be done so according to demand.

4 WASTE MANAGEMENT STRATEGY

4.1 Introduction

4.1.1 The development falls within the City of Manchester and MCC have published guidance on the design and management of buildings to produce waste management strategies that maximise the amount of waste that is recycled.

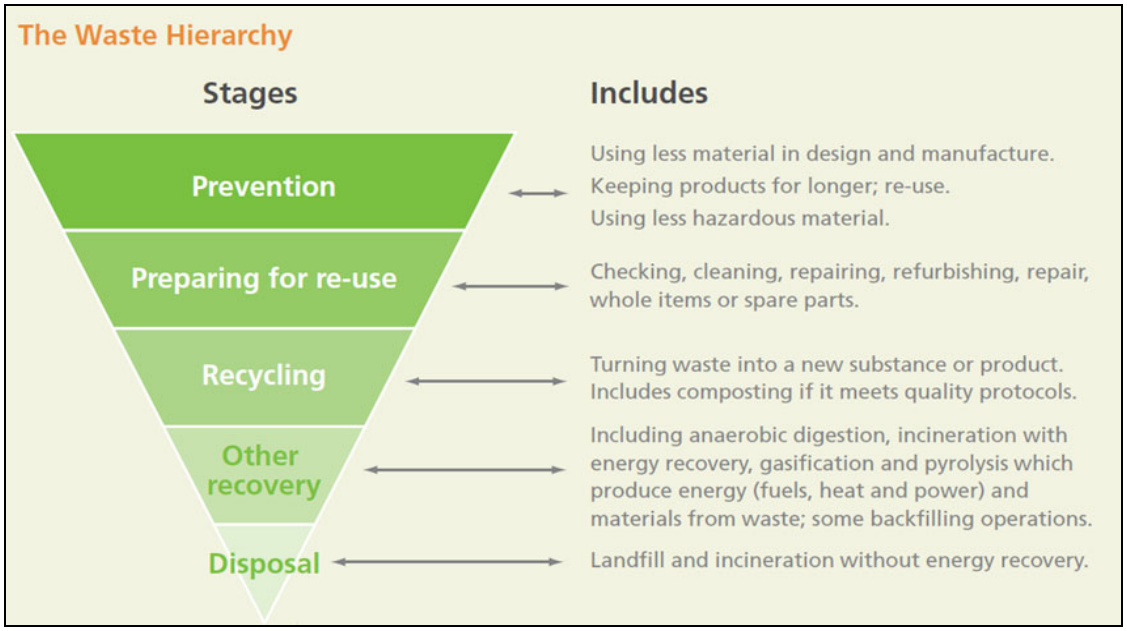
4.1.2 Manchester City Council requests that a Waste Pro Forma is completed to support development applications and this is presented in **Appendix A**.

4.1.3 To achieve high recycling rates, it states that all refuse should be separated at source and stored off the highway in purpose-built refuse stores minimising the distance to collection thus reducing the opportunity for spillage.

4.1.4 In accordance with Section 34 of the Environmental Protection Act 1990, the manager of the development has 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.

4.1.5 The Waste (England and Wales) (amendment) Regulations 2012 has introduced changes and updates that affect both waste producers and waste management companies alike. These include the need to separate waste paper, metal, plastic and glass in different waste streams.

4.1.6 Another change will be the obligatory use of SIC codes in all documentation relating to waste management services and a compulsory commitment from waste producers to adhere to the waste hierarchy as described overleaf.



4.1.7 To demonstrate compliance with regulations, a Waste Transfer Note is required when that waste is collected by the waste carrier. This may be provided electronically. Many carriers are also able to provide environmental reports to inform on the waste management performance.

4.1.8 There will be food waste generated by the kitchens and restaurants which needs to be covered by the Animal By-Products (Enforcement) (England) Regulations 2011. The volumes of waste will be greater than 20kg and therefore need to be stored in a labelled container and collected by a licensed carrier and records kept.

4.1.9 Interventions are needed in all stages of the process to minimise waste going to landfill. The minimisation of waste and recycling interventions by occupiers and the management company can help meet the City Council's and Government's aspirations.

4.1.10 All new developments must meet the requirements of Part H6 of the Building Regulations 2000 (solid waste storage) which states:

- Adequate means of storing solid waste shall be provided; 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.

5 WASTE FORECASTS

5.1 Forecast Waste Assumptions

5.1.1 The calculation of waste is largely similar to that contained within the previous Waste Strategy prepared for the approved scheme but takes into account the change in land use of certain containers proposed.

5.1.2 The development will comprise a mix of land use types. The assumptions used in forecasting the likely waste volumes are largely derived from the guidance from the British Standard BS 5906:2005 complemented by nationally published rates from WRAP Studies and some additional forecasting assumptions from Vectos' own data.

5.1.3 The weekly waste forecast of each land use within Hatch Phase 2 has been calculated for retail, food & beverage and office use.

5.1.4 The total waste generated in one peak day has also been forecasted. This figure assumes the peak trading day provides 30% of the trade for the week.

Retail Use

5.1.5 The standard non–food retail operation is assumed to generate waste at a rate of 10 litres per square metre per week based on a standard rate for retail given in BS5906:2005.

5.1.6 Floorspace allocated for retail use equates to a total of 161m². The relevant calculation is as follows:

Weekly Waste in Litres: 161m² x 10 litres per week	**= 1,610 litres per week**
Peak Daily Waste	**= 483 litres per week**

5.1.7 It is estimated that on a peak day this land use is expected to generate approximately 483 litres of waste, equating to 30% of the above figure.

Food & Beverage Use

5.1.8 The waste assumptions for the food and beverage units have been based on the typical waste for restaurants which is 75 litres per cover per week. As the nature of Hatch is not a standard restaurant we have applied a forecast based around British Standards.

5.1.9 The food and beverage units are expected to accommodate approximately 37 covers within units FB1 and FB2, as shown on **Figure 3.1**. Also shown on the figure are various timber picnic benches located in the amenity space adjacent to these units.

5.1.10 It is assumed that each bench will have sufficient space to accommodate a maximum 6 covers. Given the number of picnic benches provided, it is expected that around 180 covers will be accommodated, although not every cover will be eating. The total number of covers therefore equates to around 217 based on this methodology.

5.1.11 Given the informal nature of the food and beverage units, in order to provide a robust assumption it is considered that a proportion of food and beverage will be consumed whilst stood up. It has therefore been assumed a further 217 covers will be eating/drinking in this manner.

5.1.12 The total number of covers at the proposed development is therefore estimated to be as follows:

- Sitting covers = 217
- Standing covers = 217
- Total number of covers = 434

5.1.13 Based on the above assumptions a forecast on food and beverage waste generation is provided below:

Weekly Waste in Litres: 434 covers x 75 litres per week = 32,550 litres per week

Peak Daily Waste = 9,765 litres per week

5.1.14 It has again been estimated that on a peak day this land use is expected to generate approximately 9,765 litres of waste, equating to 30% of the above figure.

Office

5.1.15 The standard office operation is assumed to generate waste at a rate of 50 litres per employee per week, based on 1 employee per 10sqm as given in BS5906:2005.

5.1.16 A total of 150m² of office floorspace will be provided as part of the development for site management and commercial use. The weekly waste generation is therefore calculated as follows:

Weekly Waste in Litres: (150/10 = 15) x 50 = 750 Litres per week

5.2 Waste Recycling Rates

5.2.1 The waste streams vary according to the end user and what materials can be co-mingled. The main waste streams are described below.

- **Pulpable recycling (Paper/Cardboard/Tetrapak etc)**



- **Mixed Recycling (Glass/Cans/Plastics)**



- **Food Waste**



- **Non-Recoverable General Refuse - All waste not identified above**

5.2.2 The proportion of waste in the various waste streams varies according to the land use. The data on the expected waste comes from a variety of sources including WRAP studies of waste in the hospitality sector and also surveys undertaken by Vectos. The forecast presented below is based on the peak trading day as this represents the worst-case scenario.

5.2.3 Based on 5x collections per week, the forecast recycling rates for the various land uses are given in **Table 5.1** to **5.3**, with **Table 5.4** displaying the total waste generated by the development.

Retail A1 *Daily peak = 483 litres (1,610 litres per week)*	**General Refuse**	**Paper/Card**	**Co-Mingled Glass/Metal/Plastics**
Percentage	50%	25%	25%
Volume (Litres)	241	121	121

Table 5.1: Retail Recycling Proportions

Retail A3 (Food & Beverage) *Daily Peak = 9765 litres (32,550 litres per week)*	**General Refuse**	**Paper/ Card**	**Plastics & Packaging**	**Metals**	**Glass**	**Organic**
			Co-Mingled			
Percentage	12%	24%	4%	3%	14%	43%
Volume (Litres)	1172	2344	391	293	1367	4199

Table 5.2: Food & Beverage Recycling Proportions

Office *750 litres per week*	**General Refuse**	**Paper/Card**	**Co-Mingled Glass/Metal/Plastics**	**Organic**
Percentage	30%	50%	15%	5%
Volume (Litres)	225	375	112	38

Table 5.3: Office Recycling Proportions

Total	**General Refuse**	**Paper/ Card**	**Co-Mingled**	**Organic**
Volume (Litres)	1638	2840	2284	4237

Table 5.4: Total Waste Streams

5.2.4 It should be also noted that general refuse is not necessarily destined for landfill as the private waste operator will typically process that waste to recover as many recyclables as possible and recycling rates are constantly improving.

5.2.5 It is noted that the development may potentially have a daily collection, however by assuming 5x collections per week the assessment is considered robust.

5.3 Food Waste

5.3.1 The government has initiated a number of food waste minimisation and recycling initiatives for the hospitality sector. Notably they include the Hospitality and Food Service Agreement (HaFSA) from careful ordering, menu planning, using nose to tail preparation, portion sizing and auditing the returns waste amongst others.

5.3.2 It is expected that the occupiers of the units that generate food waste would be a signatory to the HaFSA and seek to employ best practice in minimising waste.

http://www.wrap.org.uk/sites/files/wrap/HaFSA_signatory_pack_SEPT_2014.pdf.

5.3.3 The government/WRAP targets for recycling are to achieve a minimum of 70% food waste recycling rates for the hospitality sector and with good practice employed it is expected that recycling rates of 70% can be achieved at the development and in fact it is hoped that this could be exceeded.

5.4 Glass Waste

5.4.1 Given the nature of the development, it is likely that a dedicated 1,100ltr Eurobin may need to be used to store glass waste. It is noted however that waste operatives Amey require glass waste to be stored in 240ltr bins due to weight constraints. Therefore, 4x 240ltr bins have been added to the following storage calculations.

6 REFUSE STORAGE & COLLECTION

6.1 Introduction

6.1.1 The size of the refuse store has been considered against the level of demand identified in **Section 5**. It is assumed that waste will potentially be collected daily, however this report has calculated waste storage requirements based on 5x collections per week, providing a more robust assessment.

6.1.2 Based on the volume of waste expected to be generated, the correspondent number of bins generated is now described.

6.2 Refuse Store

6.2.1 A refuse store is provided at ground floor level for bins allocated to each waste stream, as shown on **Figure 6.1**. The refuse store will be able to accommodate various 1,000ltr Eurobins and 240ltr bins.

6.2.2 It is shown that the 7x Eurobins and 22x x240ltr bins generated by the retail, food and beverage and office waste can be sufficiently accommodated.

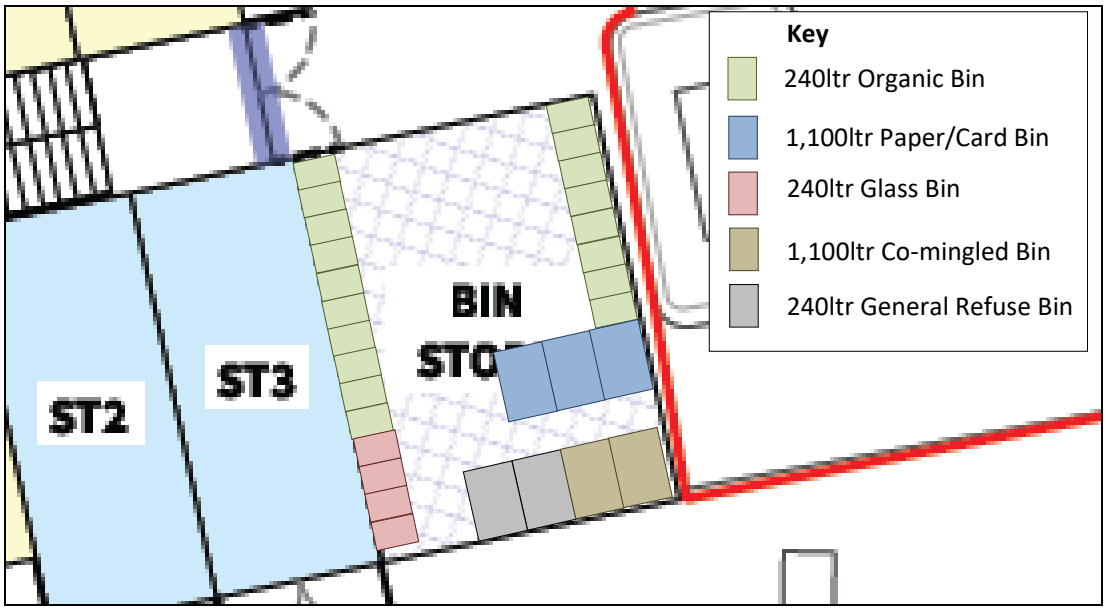


Figure 6.1: Bin Storage Provision

Bin Requirements

6.2.3 A shown in **Figure 6.1**, the refuse store has sufficient capacity to store the following bins based on a daily peak of 30% of weekly waste and a collection rate of 5x times per week:

Total Bin Requirements for Retail, Office and Food & Beverage Uses

General Refuse	1,638 Litres	2x Eurobins (collected x5 times per week)
Paper/Card	2,840 Litres	3x Eurobin (collected x5 times per week)
Co-Mingled	2,284 Litres	2x Eurobin (collected x5 times per week)
Organic	4,237 Litres	18x 240ltr bins (collected x5 times per week)
Glass		4x 240ltr bins for glass waste has been included

6.2.4 The waste demands for a busy day will typically be over a weekend. While there will be waste generated on a weekday this will not be as high as the peak periods. Therefore there is some scope to share the bin requirements.

6.2.5 The above forecast may need to be kept under review, particularly as robust assumptions have been made regarding peak demands. There is there option for the management to call an extra collection on a peak day.

6.2.6 The on-site management will have responsibility for keeping the bin stores clean. They will also have responsibility for ordering waste collections and the waste collection operatives will manage the waste collection itself. The refuse lorry will access the bins as they currently do to collect for the Manchester Technology Centre bins and reverse to the collection point.



Figure 6.2 Waste Transfer Route

6.3 Waste Collection

6.3.1 The proposals will use the same servicing route as the existing Manchester Technology Centre, which accesses the site from the east via the A34 Brook Street. A refuse vehicle will be able to reverse to the refuse store, before then heading out of the site in forward gear and re-joining the A32 Brook Street.

6.3.2 The current waste operator Amey will continue to collect the waste for the combined Manchester Technology Centre and the retail development. This means that coordinated collections can be made from the site which will reduce the number of additional refuse vehicles to serve the site.

6.4 Waste Pro-Forma

6.4.1 MCC require that a Waste Pro-Forma be prepared to support the planning application. Using the information presented in this chapter, this has been completed and is presented in **Appendix A**.

7 SUMMARY & CONCLUSIONS

7.1 Summary

7.1.1 This document sets out the Waste Management Strategy for the proposed Hatch Phase 2 retail development providing a mixed-use retail, food & beverage and events venue to the vacant courtyard adjacent to Oxford House and extending to a vacant area below the Mancunian Way, adjacent to Oxford Road.

7.1.2 It has set out the likely waste generation for each of the proposed uses, the recycling strategy and the storage requirements for bins. It describes how these will be collected and the frequency over the course of a week.

7.1.3 The scheme will offer a range of pop-up and semi-permanent occupiers within former shipping containers and will occupy the vacant courtyard area. The retail/food and drink offer will be constantly evolving so that customers visiting the site find different operators on a regular basis.

7.2 Conclusion

7.2.1 As with the previously approved scheme, it is concluded that the waste management and refuse collection proposed is appropriate for this scale of development and that waste collection can be undertaken in an efficient manner.

APPENDICES

APPENDIX A – WASTE PRO FORMA

Bruntwood Ltd

HATCH PHASE 2, MANCHESTER

Waste Proforma Addendum Report

April 2019

REPORT CONTROL

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1 HATCH PHASE 2 WASTE PRO FORMA

1.1 Introduction

1.1.1 This Waste Proforma has been prepared by Vectos on behalf of Bruntwood Ltd in support of the Hatch retail scheme, which will provide a mixed-use retail, food & beverage and events venue to the vacant courtyard adjacent to Oxford House and extending to a vacant area below the Mancunian Way, adjacent to Oxford Road.

1.1.2 The scheme will offer a range of pop-up and semi-permanent occupiers within former shipping containers and will occupy the vacant courtyard area. The retail/food and drink offer will be constantly evolving so that customers visiting the site find different operators on a regular basis.

MANCHESTER CITY COUNCIL

Planning Application – Waste Management Strategy

Planning Application Number: 120050/FO/2018 (Resubmission)
Date Submitted: To be confirmed.

Estimated volumes and types of waste produced by the development

Low Rise Domestic N/A

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

High Rise Apartment Developments N/A

N = Number of Apartments

Waste Types	(V) Volume of Waste Generated	Capacity Required (litres)	Number of Bins required	Number of Bins proposed by applicant
General refuse	V = N x 110	V =	V / 1100 =	Not Applicable
Pulpable Recycling	V = N x 55	V =	V / 1100 =	Not Applicable
Mixed Recycling	V = N x 55	V =	V / 1100 =	Not Applicable
Food Waste	V = N x 5	V =	V / 240 =	Not Applicable

Commercial Developments

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

The proposals comprise the following as outlined below.

Land Use	Total Floorspace
Retail	161m²
Food & Beverage	720m²
Office	150m²
Storage	60m²

Hatch Phase 2 Bin Storage:

7x 1,100 litre Eurobins
22x 240 litre bins

Estimated frequency of collection per week:

Pulpable Paper/Card = 5 collections per week
Co-mingled Plastic/Metal/Glass = 5 collections per week
Glass Bar Waste = 5 collections per week
Organic Food Waste = 5 collections per week
General Waste = 5 Collections per week

Potentially the site may warrant a daily refuse collection. Waste storage requirements are therefore considered robust as it has been assumed that the site will have a collection frequency of 5x times per week.

Waste Assumptions and Calculations

ASSUMPTIONS

Retail
The weekly requirement for A1 retail land use in litres is based on the floor area and equates to 10 litres per square metre (BS 5906:2005).

Food & Beverage
The weekly requirement for A3 restaurant land use in litres is based on the number of dining spaces that are proposed within the development. It has been assumed that 75 litres of waste is generated per cover per week. It is estimated that this development will accommodate approximately 434 covers (BS 5906:2005).

Office
The weekly requirement for workspace land use in litres set out in GD04 is 2,600 per 1,000m². 50% of all waste generated by the workspace element of the development should be retained for recycling (BS 5906:2005).

Calculations

Retail 161m²
Using BS 5906:2005 in forecasting the expected level of waste generated by this land use demonstrates that it will generate 1,610 litres per week.

Food and Beverage 434 covers (approx.)
For robustness we have assessed this land use as restaurant use. BS 5906:2005 calculations equates to a weekly waste generation of 32,550 litres per week considering that it is expected there will be approximately 434 covers.

Office 150m²
Using BS 5906:2005 the level of office waste is calculated at a rate of the total floorspace/10 x 50 and therefore equates to 750 litres per week.

Recycling of Waste

The waste streams allocated for recycling for each land use in Hatch Phase 2 are now below:

Recycling of Retail (A1) Waste
General (50%) = 241
Pulpable Paper/Card (25%) = 121
Comingled (Plastic, Metal, Glass) (25%) = 121

Recycling of Food & Beverage Waste
General (12%) = 1172
Pulpable Paper/Card (24%) = 2344
Comingled (4%) = 684
Glass (17%) = 1367
Organic (43%) = 4199

Recycling of Office Waste
General (30%) = 225
Pulpable Paper/Card (50%) = 375
Comingled (15%) = 112
Organic (5%) = 38

Total Waste Streams for Hatch Phase 2
General = 1638
Pulpable Paper/Card = 2840
Comingled = 2284
Organic = 4237

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

Mixed Use Developments

Are the stores for residential and commercial separate from each other?	**N/A**

Internal Stores

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

Occupiers of each unit within the Hatch Phase 2 development will be encouraged to separate waste at the source to aid recycling.

In particular, occupiers of food and beverage units will store internal bins which are likely to be placed under the counter/serving area of each unit which will initially store waste before it taken to the refuse store.

Smaller bins will be dotted around the layout of the site for users to deposit food and beverage packaging.

It is noted that occupiers may also have other waste streams such as cooking oil collections.

Storage Areas for Waste Containers

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

The location of the refuse store for the Hatch Phase 2 is shown on the plan below.



The proposals will use the same servicing route as the existing Manchester Technology Centre, which accesses the site from the east via the A34 Brook Street. A refuse vehicle will be able to reverse to the refuse store, before then heading out of the site in forward gear and re-joining the A32 Brook Street.

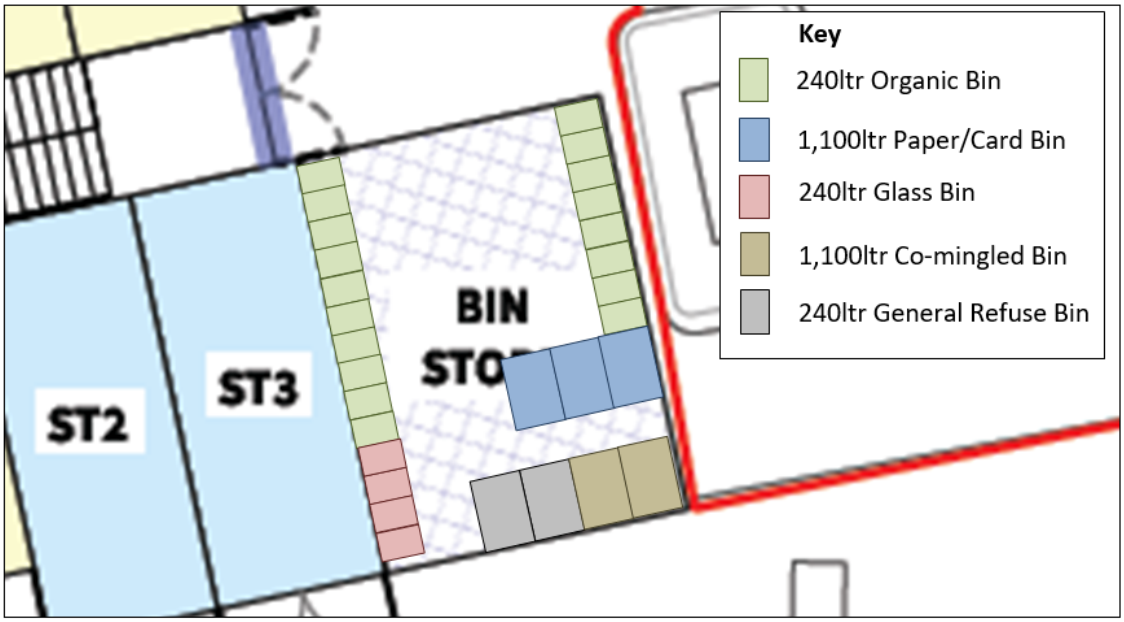
The route that a refuse vehicle will take is shown below:



This refuse store provides space for 7 Eurobins and 18 x 240 litre wheeled bins and can therefore adequately accommodate demand.

It should be noted that 4x 240ltr bins will be used to store glass waste which have also been total bin provision in case this is needed to store high levels of glass bottles given the site's predominant food and beverage offer.

The allocation of bins in the refuse store is shown overleaf.



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

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

The site management team would be expected to take waste to the refuse store at the end of each day.

The individual occupiers of the various retail and food & beverage units will be expected to initially store waste within their own demise before it is taken to the refuse store.

Overall waste management would be undertaken by the on-site staff member/management company who would ensure that all areas of the site are kept clean and would call the refuse collection companies when required.

Please ensure that you have attached:

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

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

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