

No. 3 Circle Square

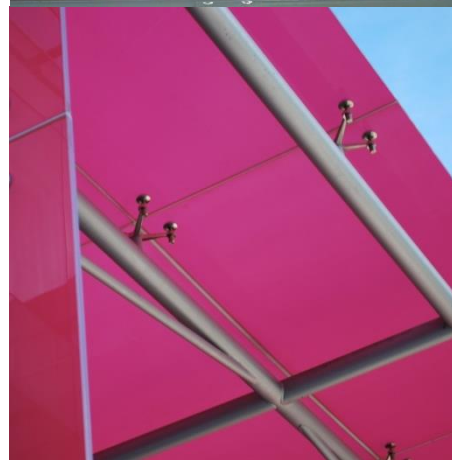
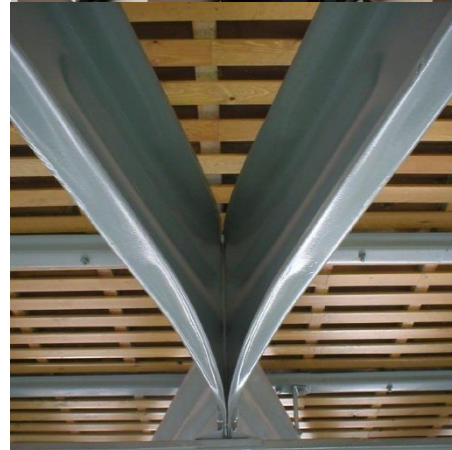
Waste Management Strategy

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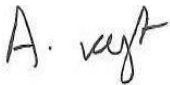


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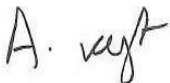
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1.0 Introduction

1.1 Background

- 1.1.1 Curtins has been appointed on behalf of Bruntwood to provide traffic and transportation advice in relation to a development No. 3 Circle Square, off Oxford Road, Manchester.
- 1.1.2 In relation to the Circle Square site, a Strategic Regeneration Framework was prepared and agreed with the Manchester City Council (MCC) Executive Committee in 2013. This was reinforced with a masterplan and phasing strategy which was endorsed by the MCC Executive Committee in July 2015.
- 1.1.3 The proposed development forms Phase 2 of the endorsed masterplan, and comprises a 15-storey office building (Use Class E(g)) with ground floor retail / commercial uses (Use Class E(a, b, c)). The proposed floorspace for these uses is c. 23,894 m² and c. 964 m² Net Internal Area (NIA) respectively.
- 1.1.4 The proposed ground floor layout and landscape plan is included in **Appendix A**.

1.2 Planning History

- 1.2.1 The site was formerly known as Plot 12 and has previously received consent for a similar development (Manchester City Council (MCC) application reference: 125451/FO/2019). Curtins prepared a Transport Statement and Interim Travel Plan to support the application, and consent was granted in February 2020 for the following:

“Erection of new 15 storey building plus basement to include basement plant room, ground floor reception, cycle store and commercial space (flexible Use Classes A1 (Shop), A2 (Financial and Professional Services), A3 (Restaurant and Cafe), A4 (Drinking Establishment), D1 (Non-residential Institutions - Creche only) and D2 (Assembly and Leisure - Gym only) and 14 storeys of offices (Use Class B1) together with rooftop lounge and terrace, associated means of access and external landscaping around base of building | Plot 12 Circle Square Masterplan Land Bound By Princess Street And Newman Street (Formerly Brancaster Road) Manchester M1 7ED.”

- 1.2.2 The consented development comprised a 14-storey office building (Use Class E(g), formerly Use Class B1) with ground floor retail / commercial uses (Use Classes E(a, b, c), Sui Generis, E(g), and E (d, e, f) and F2(c, d), formerly A1, A2, A3, A4, A5, B1, D1 and D2). The proposed floorspace for these uses were 20,289m² and 582m² Net Internal Area (NIA) respectively.
- 1.2.3 The previous consent envisaged service vehicles and refuse vehicles travelling through the neighbouring Multi-Storey Car Park (MSCP) at the south of the building (entering via the A34 Brook Street) and then heading north along the western edge of the site, towards Newman Street (formerly Brancaster Road). Vehicles then either had the option of traveling ahead to the northern part of Circle Square, or turning right onto Newman Street and then exiting onto the A34 Princess Street.

- 1.2.4 The main changes within the proposed scheme in comparison to the consented scheme is the creation of a new public realm to the west of the building, which will include areas of hard and soft landscaping and tree planting, designed to complement the site-wide landscaping strategy and provide external spill out space associated with the café / restaurant unit at ground floor level.
- 1.2.5 As a result, vehicular access to Newman Street, and areas of Circle Square to the north of the site, from the west of the site will be restricted as part of the proposed scheme. A new access road is therefore envisaged immediately to the north of the MSCP / south of the site, broadly following the former alignment of Cloak Street (which was stopped up to accommodate construction vehicle access for the wider Circle Square site).
- 1.2.6 This would be a one-way service road for a very low volume of service and refuse vehicles. All vehicles would exit onto the A34 Princess Street from Cloak Street, which would be reinstated as part of the proposed development.
- 1.2.7 A new outdoor bin store, with space for c. 30 no. 1,100 L Eurobins, is to be provided under the Mancunian Way which will serve as central bin store for the Bruntwood element of Circle Square. This space is proposed as a back-of-house area for Circle Square, housing extra bins, car parking spaces (effectively controlled with use permitted only for Circle Square's estate management, operations team, and maintenance staff), a container storage area serving as a loading area, with a vehicular turning circle for use if necessary.

1.3 Purpose of the Report

- 1.3.1 This Waste Management Strategy (WMS) has been prepared to consider the potential refuse and recyclable waste volumes of No. 3 Circle Square, including organic waste and for all uses of this development. This WMS also provides details of the collection arrangements.

1.4 Structure of the Report

- 1.4.1 Following this introduction, **Section 2** of the report provides a comprehensive description of the site location, including use and highway network surroundings whilst relevant local and national waste policy is summarised in **Section 3**.
- 1.4.2 **Section 4** contains the waste forecasting methodology used to establish the likely refuse generation associated with the development proposals, providing details of recycling, waste management and collection procedures.
- 1.4.3 The report is summarised and concluded in **Section 5**, with the completed MCC waste pro forma included in **Appendix B** to the rear of the report.

2.0 Site Location and Highway Layout

2.1 Site Location

2.1.1 The site is located within Manchester City Centre. At the time of writing, the site is bound to the north by Newman Street (formerly Brancaster Road) and the VITA student accommodation block beyond (Phase 1A of Circle Square), to the south by a 1,100-space Multi-Storey Car Park (MSCP) (part of Phase 1B of Circle Square), and to the east by the A34 Princess Street and the Manchester Institute of Biotechnology beyond.

2.1.2 The Circle Square masterplan area is being delivered by Bruntwood and Select Property Group. The scheme is delivering a mixed-use development comprising of leisure, retail, student accommodation, residential, office, hotel, public realm and multi-storey car park uses, envisaged to be fully completed by the end of 2023.

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

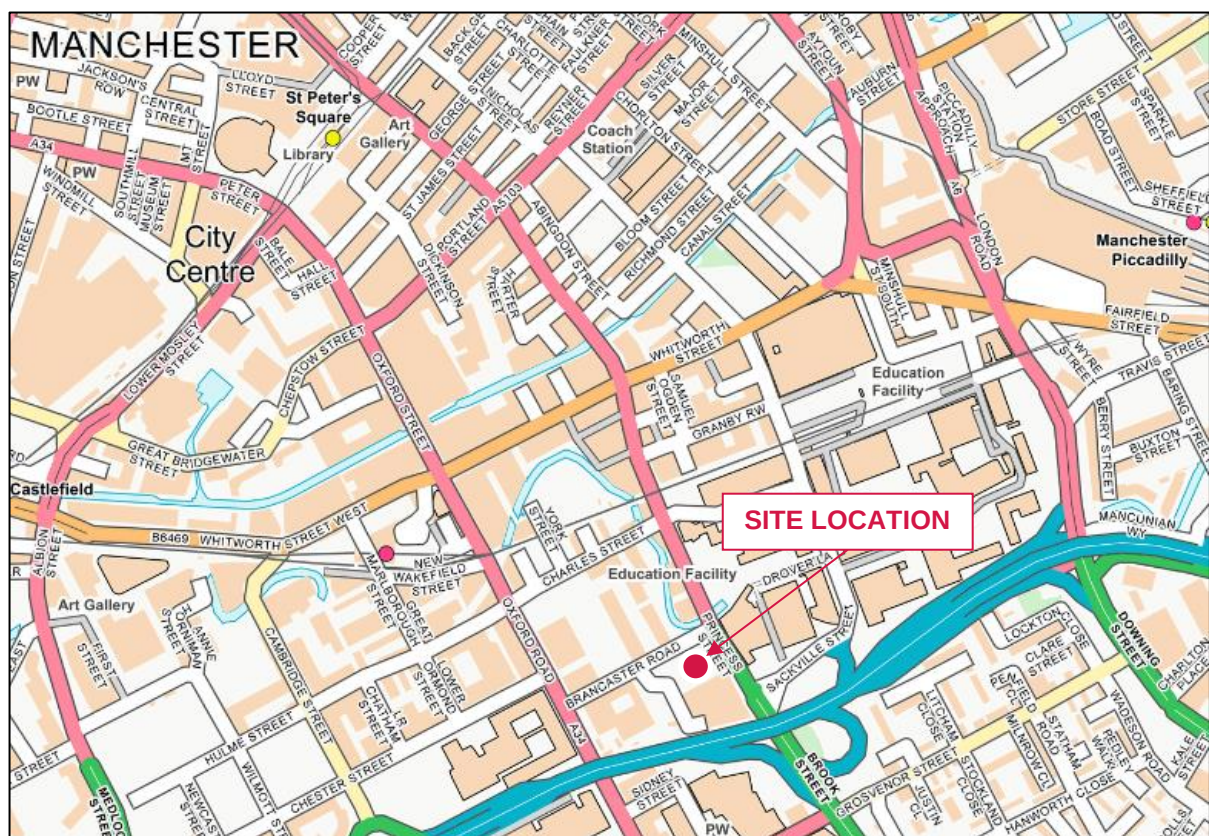


Figure 2.1 – Site Location in Relation to the Local Network
(Source: OS Maps, 2022)

2.2 Existing Use

- 2.2.1 The site is primarily vacant and is bound by Newman Street (formerly Brancaster Road) to the north, Princess Street to the east, Premier Inn and MSCP and the Mancunian Way to the south and Manchester Technology Centre to the West.
- 2.2.2 Part of the site, where the proposed office building will sit, most recently comprised the construction compound for Sisk, the contractors developing the other plots on the Circle Square Masterplan. It is now cleared and hoarded, awaiting development.
- 2.2.3 Outside of the hoarding, there is an area of temporary grass adjacent to the MCSP and car parking adjacent to Manchester Technology Centre used by Bruntwood staff, in addition car parking is included under the Mancunian Way again solely used by Bruntwood staff.
- 2.2.4 Sorton Street and Cloak Street also served as a continuous link through the site, however both roads have been stopped up. In addition, there is an access off Newman Street to the car parking associated with Manchester Technology Centre.
- 2.2.5 A substation is located to the south of the site adjacent to the Mancunian Way. There are no trees on or adjacent to the site.

2.3 Existing Access Arrangements

Vehicular Access

- 2.3.1 The site is currently accessed primarily by construction vehicles turning in from the B5117 Oxford Road into the western terminus of Newman Street. These then egress to the east onto the A34 Princess Street. It is clearly signed that there is no entry from A34 Princess Street.
- 2.3.2 To the south of the site, Cloak Street is also closed to the public as construction vehicles enter from Oxford Road and follow the perimeter of the site to access this storage area. Construction vehicles can also egress from the eastern terminus of Cloak Street onto A34 Princess Street, where there is also adequate signage prohibiting entry of regular vehicles.

Pedestrian and Cycle Access

- 2.3.3 The site is mostly hoarded up to prevent public access, however there are some gates fronting Newman Street which construction workers and site operatives can use to access the site, as shown in **Figure 2.2** below.



Figure 2.2 – Existing Site Frontage, Viewed from Newman Street Eastbound

- 2.3.4 The entirety of Newman Street comprises wide footways and clearly signed diversions (if any), which links pedestrians between the University of Manchester North Campus and the Oxford Road Corridor.
- 2.3.5 Cyclists can also utilise the entire road and must abide by the similar one-way eastbound traffic rule.

2.4 Surrounding Highway Network

Newman Street (formerly Brancaster Road)

- 2.4.1 Forming the northern boundary of the site, Newman Street 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.
- 2.4.2 The carriageway is approximately 4m wide, with a wide footway of c. 4m on the southern side of the road. This is separated from the road by an area of hardstanding. There is a crossing point at the western terminus of Newman Street with dropped kerbs and tactile paving, where adequate signage is provided to alert pedestrians of vehicles turning in.
- 2.4.3 Towards the eastern terminus of the road, the northern side of the footway blends into the public realm of the completed Phase 1A development, as such pedestrian infrastructure is in good condition.
- 2.4.4 Traffic Regulation Orders (TROs) are present in the form of double yellow parking line restrictions (no waiting at any time) along the entire length of Newman Street.
- 2.4.5 Historically, Newman Street was subject to a 30mph speed limit. Since then, the speed limit has been significantly lowered to 5mph considering traffic generated by construction vehicles. Sorton Street and Cloak Street also served as a continuous link through the site, however both roads have since been stopped up to accommodate development.

B5117 Oxford Road

- 2.4.6 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.
- 2.4.7 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.
- 2.4.8 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.
- 2.4.9 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.
- 2.4.10 Oxford Road is subject to a speed limit of 20mph throughout. TROs are present in the form of double yellow parking line restrictions along the entirety of the road.
- 2.4.11 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.

A34 Princess Street

- 2.4.12 Forming the eastern boundary of the site, the A34 Princess Street commences in Manchester City Centre, at a signalised junction with Albert Square, Cross Street and John Dalton Street. The road then extends in an approximate north-to-south alignment for a length of circa 1.2km through Chinatown and the Manchester Art Gallery, the St Peters Square Memorial, public houses, restaurants, and leisure establishments before terminating at a signalised junction with Brook Street at the southeast of the site, where the road continues as the A34 Upper Brook Street.
- 2.4.13 The A34 Princess Street comprises a two-way, single carriageway of approximately 10m in width with up to three lanes. There are cycle lanes present on certain lengths of the road, in addition to advanced cycle stop lanes at all the traffic light junctions.

- 2.4.14 The road is well-lit and complete with pedestrian infrastructure such as wide footways of approximately 1.5m wide provided on both sides of the road, dropped kerbs and tactile paving, and signalised crossing points at various points along the road. The footways are maintained in good condition.
- 2.4.15 The road is subject to a speed limit of 30mph and hosts several bus stops along its length. The road is busy and bordered by many retail, leisure, and entertainment facilities due to its proximity to the city centre, therefore traffic calming measures such as 'keep clear' and yellow hatched boxes are present to prevent congestion.
- 2.4.16 TROs are present in the form of double yellow parking line restrictions along parts of the road. The entirety of Princess Street is within Zones 2 and 3 of Manchester City Council's Controlled Parking Zones, with on-street pay-and-display bays available for use along its entire length up to a maximum of 2 and 3 hours respectively with no return within 1 hour from Monday to Sunday, 8am till 8pm, with no charge for parking on a Bank Holiday.

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 proposed development.

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:

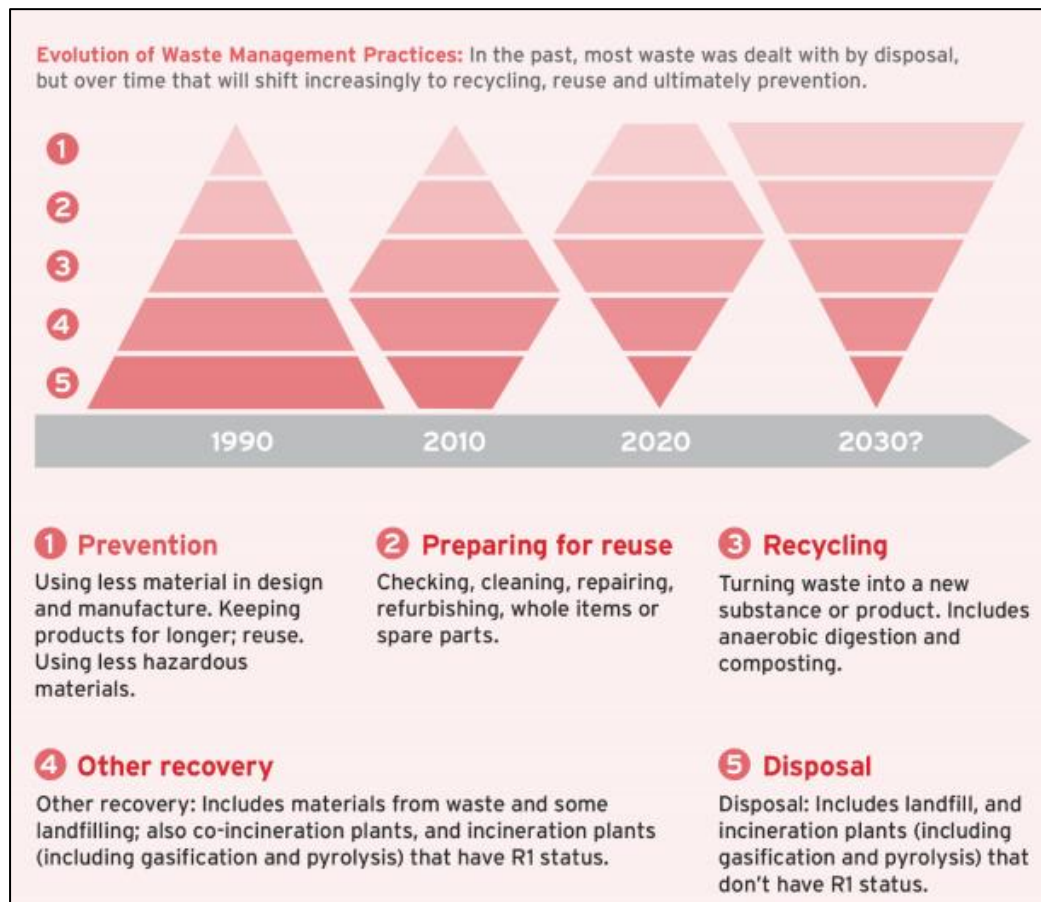


Figure 3.1 – Evolution of Waste Management Practices

(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 – v6.00, Sept 2017)

- 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.
- 3.6.1 The note states that all planning applications for new developments and conversions must include a Waste Management Strategy that includes:
- An estimated storage area for the waste produced by the development, including office and retail uses;
 - Details of internal and external stores for both waste and recycling; and
 - Location of the proposed collection point and details of the route the collection will take.
- 3.6.2 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 The waste forecast has been calculated based on the recommendations set by the Waste Storage and Collection Guidance for New Developments (GD04), Version 6.00.
- 4.2.2 The proposed development will comprise office (Use Class E(g)), food and beverage (F&B) unit off reception (Use Class E(a, b, c)), and retail (Use Class E(a, b, c)) uses. Any reception and management office areas will be ancillary to the main office use. Therefore, these areas have not been considered for calculation purposes.
- 4.2.3 It is also noted that there would also be a new outdoor bin store located under the Mancunian Way to serve the Bruntwood buildings across the wider Circle Square estate. Waste forecasts have not been undertaken for this element of the proposed development, as all of the buildings within the Circle Square estate have been designed to accommodate waste within their respective bin stores, and whereas this outdoor bin store is intended to be used on an ad-hoc basis for any overflow purposes.
- 4.2.4 The associated floorspace / predicted covers for the uses within the proposed development building are as follows:
- Office: 30,204 sqm Gross Floor Area (GFA);
 - F&B off reception: 68 covers internally, optional additional 24 externally, 92 covers total; and
 - Retail units: 566 sqm Net Internal Area (NIA).
- 4.2.5 The waste weekly arisings for the office uses have been calculated based on MCC's GD04 Guidance recommendations for offices of 2,600l per 1,000m² of gross floor space. An initial recycling percentage of 60% has been estimated for calculation purposes. The recycling rate can be updated upon review of the actual recycling rates following occupation.
- 4.2.6 Waste forecasts for the F&B unit have been based on the same local guidance, following the recommendations for Restaurants / Fast Food Outlets of 1,500l per 20 dining spaces. 92 covers have been provided for calculation purposes. At 60%, the recycling rates for these uses are considered to be equal to the office use recycling rates.
- 4.2.7 The retail uses of the proposed development that are located at the ground floor have also been assumed to be F&B uses, as these typically generate more waste than any of the other retail and

commercial classes. Therefore, the retail uses have been based on the same local guidance as above, following the recommendations for Restaurants / Fast Food Outlets of 1,500l per 20 dining spaces.

4.2.8 For robustness, a further 169 dining spaces have been assumed for calculation purposes, in light of likely F&B cover / occupancy rates and considering typical back of house requirements. At 60%, the recycling rates for these uses are considered to be equal to the office use recycling rates.

4.2.9 Based on the above requirements, **Table 4.1** forecasts the waste volume generated by both the proposed office and retail uses associated with the development:

Office Use	
Waste Stream	Refuse Volume (30,204 sqm)
Non-recyclable Waste	31,412 l
Dry mixed Recycling	35,339 l
Glass Recycling	11,780 l
Office Use Total	78,530 l
F&B Use	
Waste Stream	Refuse Volume (92 seats)
Non-recyclable Waste	2,760 l
Dry mixed Recycling	2,484 l
Glass Recycling	1,035 l
Organic Food Recycling	621 l
F&B Use Total	6,900 l
Retail Use (assumed to be F&B use)	
Waste Stream	Refuse Volume (169 seats)
Non-recyclable Waste	5,084 l
Dry Mixed Recycling	4,575 l
Glass Recycling	1,906 l
Organic Food Recycling	1,144 l
Retail Total	12,710 l
Development Total	98,140 l

Table 4.1 – Development Weekly Waste Volume Forecast

4.2.10 The recycling rate can be updated upon review of the actual recycling rates following occupation.

4.3 Bin Types

4.3.1 Given the potential volumes involved for the use of the proposed development, the most suitable containers for the general waste and recycling streams would be a combination of 1,100 l Eurobins, 660 l bins, and 240 l bins.

4.3.2 The collection would be undertaken by a private company, and the frequency has been calculated to be 5 times a week for all of the uses.

- 4.3.3 However, based on the variable nature of the retail uses, this report includes robust calculations as a worst-case scenario, and it is considered that the frequency of these collections will be arranged after occupation / based on the actual waste generation volumes. The management company and staff of the retail uses will be in charge of monitoring bin usage and adjusting the collection frequency accordingly.
- 4.3.4 The following **Table 4.2** summarises the required waste containers per stream for the proposed development. This table has been produced following the recommendations set by MCC's GD04 Waste Guidance Document, assuming the waste collection frequencies summarised above, and described in detail in the following **Section 4.5**.
- 4.3.5 The below table sets out a worst-case scenario in terms of frequency of collections (i.e., the greatest number of collections):

Office Use (5x a week collections)	
Waste Stream	Number of Bins
Non-recyclable Waste	6 x 1,100 l
Dry Mixed Recycling	7 x 1,100 l
Glass Recycling	2 x 1,100 l + 1 x 240 l
Office Use Total	15 x 1,100 l + 1 x 240 l
F&B Uses (5x a week collections)	
Waste Stream	Number of Bins
Non-recyclable Waste	1 x 1,100 l
Dry Mixed Recycling	1 x 1,100 l
Glass Recycling	2 x 240 l
Organic Food Recycling	1 x 240 l
F&B Uses Total	2 x 1,100 l + 3 x 240 l
Retail Uses (5x a week collections)	
Waste Stream	Number of Bins
Non-recyclable Waste	1 x 1,100 l
Dry Mixed Recycling	1 x 1,100 l
Glass Recycling	1 x 1,100 l
Organic Food Recycling	1 x 1,100 l
Retail Uses Total	4 x 1,100 l
Development Total	21 x 1,100 l + 4 x 240 l

Table 4.2 – Number of Required Bins

- 4.3.6 The new outdoor bin store under the Mancunian Way would comprise space for c. 30 no. 1,100 L Eurobins. However, as stated earlier, this bin store would operate independently of the No. 3 Circle Square building and serve the wider Circle Square estate instead for overflow purposes, therefore the designation of the bins to specific waste streams and, by extension, the collection frequency of these bins would be confirmed at a later stage.

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 (Only for potential F&B uses).

4.4.2 The proposals for the development include 3 independent waste stores at the ground floor level for each of the separate uses (office, F&B off reception, and retail).

4.4.3 The waste storage rooms have been sized to accommodate and operate the number of bins required in the above **Table 4.2**. It should be noted that these calculations have been made on worst-case assumptions. It is envisaged that initially at least 60% of the bins in the waste store would be dedicated to recycling. This percentage could be increased at any point based on actual recycling rates.

4.4.4 The outdoor bin store is proposed in a back-of-house area for underneath the Mancunian Way, located alongside car parking spaces (effectively controlled with use permitted only for Circle Square's estate management, operations team, and maintenance staff), a container storage area serving as a loading area, with a vehicular turning circle for use if necessary. **Drawing 80646-CUR-00-XX-DR-TP-05003** 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.

4.4.5 The management company would be responsible for monitoring the recycling rates and promote actively high recycling rates within the staff of the different uses. This could be achieved by giving information on the benefits of recycling and information on how to segregate.

4.4.6 The waste storage areas will be well lit and ventilated, including access to a water feed. The floor will comprise an easily cleaned surface and adequate drainage will be provided.

4.4.7 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 80646-CUR-XX-00-D-TP-06001** shows the location of the waste storage rooms and the routes from the stores to the collection point.

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

- 4.5.3 The collection point for the development would be located along the reinstated Cloak Street. **Drawing 80646-CUR-00-XX-DR-TP-05003** 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 right onto Cloak Street and pulling up on the edge of the carriageway, and exiting onto the A34 Princess Street.
- 4.5.4 It is not envisaged that Cloak Street would be frequented by pedestrians, cyclists, or vehicles other than a very low volume of service and delivery vehicles.
- 4.5.5 The bin store under the Mancunian Way is proposed to allow for a more efficient and coordinated waste management strategy for the Bruntwood element of Circle Square and will prevent refuse vehicles being sat within the public realm throughout the day. The provision of a managed bin store would provide a single point, in a discrete back of house location, for waste to be collected. Bins would remain within the relevant building until full, it would be the responsibility of the building management team to move the bins to the bin store throughout the day as necessary, with waste being collected from a single point under the Mancunian Way.
- 4.5.6 Bruntwood have provided details of refuse collection requirements as stated by their private contractor, whereby rear-end loaders (REL) (typically used to collect general waste and dry mixed recycling (DMR)) would be able to navigate the low headroom of the Mancunian Way (c. 5.6m) to service the outdoor bin store. Notwithstanding, some top-loading refuse vehicles (typically used to collect glass and food recycling) would require additional clearance on top of the vehicle height.
- 4.5.7 Bruntwood's private waste contractor has demonstrated that smaller top loading refuse vehicles are able to service the outdoor bin store under the Mancunian Way. Notwithstanding, as a "worst-case" scenario / in the event that a larger top loading refuse vehicle is not able to service the outdoor bin store under the Mancunian Way, glass and food bins would be required to be pulled to a spot clear of the Mancunian Way before they are unloaded. This area would be near Hatch's back of house delivery gates; therefore, the bin drag distance would be c. 70m.
- 4.5.8 This is acceptable considering transporting of bins away from the bin store to a clear area might only be necessary for glass and food bins (c. 2-3 minutes drag time per bin), and the bins could be pulled to the area in advance of the refuse vehicle arriving to save time. Glass and food recycling are also generally the lesser volume-generating waste streams compared to general waste and DMR, as evidenced by the calculations in **Table 4.1** above.
- 4.5.9 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 existing access route for service and delivery vehicles is shown in **Figures 4.1** and **4.2** as follows:

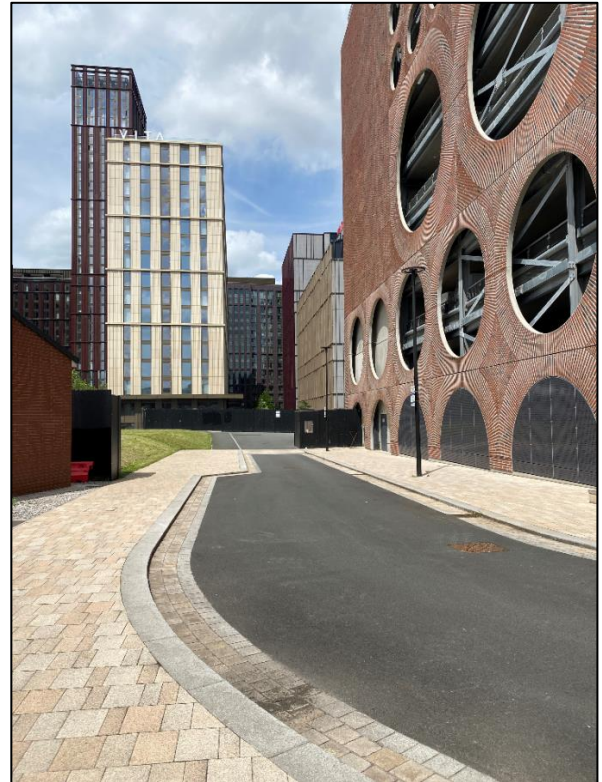


Figure 4.1 (left) – Existing Service and Delivery Vehicle Access from MSCP

Figure 4.2 (right) – Continuation of Existing Service and Delivery Vehicle Access, Northbound towards Newman Street

- 4.5.10 Once the bins have been emptied, containers would be carried immediately back to the bin stores by the management team.
- 4.5.11 Furthermore, it is important to highlight that collections are arranged with private contractors and that timings can be agreed upon. As a result, the bins will await collection along the public realm for a limited amount of time, with the management company returning the bins to the waste stores immediately after collection.

5.0 Summary and Conclusions

5.1 Summary

- 5.1.1 Curtins has been appointed on behalf of Bruntwood to provide traffic and transportation advice in relation to a development No. 3 Circle Square, off Oxford Road, Manchester.
- 5.1.2 The proposed development forms Phase 2 of the endorsed masterplan, and comprises a 15-storey office building (Use Class E(g)) with ground floor retail / commercial uses (Use Class E(a, b, c)). The proposed floorspace for these uses is c. 30,204 m² and c. 999 m² Gross Floor Area (GFA) respectively.
- 5.1.3 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.
- 5.1.4 The waste forecast has been calculated based on the recommendations set by the 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.
- 5.1.5 The office use has been calculated as Office Use (Use Class E(g)), whereas the Food & Beverage (F&B) unit off reception has been calculated as Use Class E(a, b, c). For robustness, the waste generation of the retail uses at ground floor has been calculated as a worst-case scenario (also as F&B – Use Class E(a, b, c)). This space is estimated to have a capacity of 169 seats.
- 5.1.6 The report concludes that all of the uses will be served by private refuse collections. The bins will be transported to the collection point by the management company for the office uses and the staff for the retail uses.
- 5.1.7 The collection point for the development would be located along the reinstated Cloak Street. Refuse vehicles would enter via the neighbouring Multi-Storey Car Park (MSCP) off the A34 Princess Street, turning right onto Cloak Street and pulling up on the edge of the carriageway, and exiting onto the A34 Princess Street.
- 5.1.8 The development is anticipated to be served by five-times-a-week collections. The collection frequency is subject to be updated following occupation, as typically the waste generated by both the office and retail uses varies significantly based on the final occupier.
- 5.1.9 The proposals include 3 independent waste stores at the ground floor level for each of the separate uses (office, F&B off reception, and retail). The size of the bin stores has been determined accordingly whilst consideration to segregation and recycling has been given.

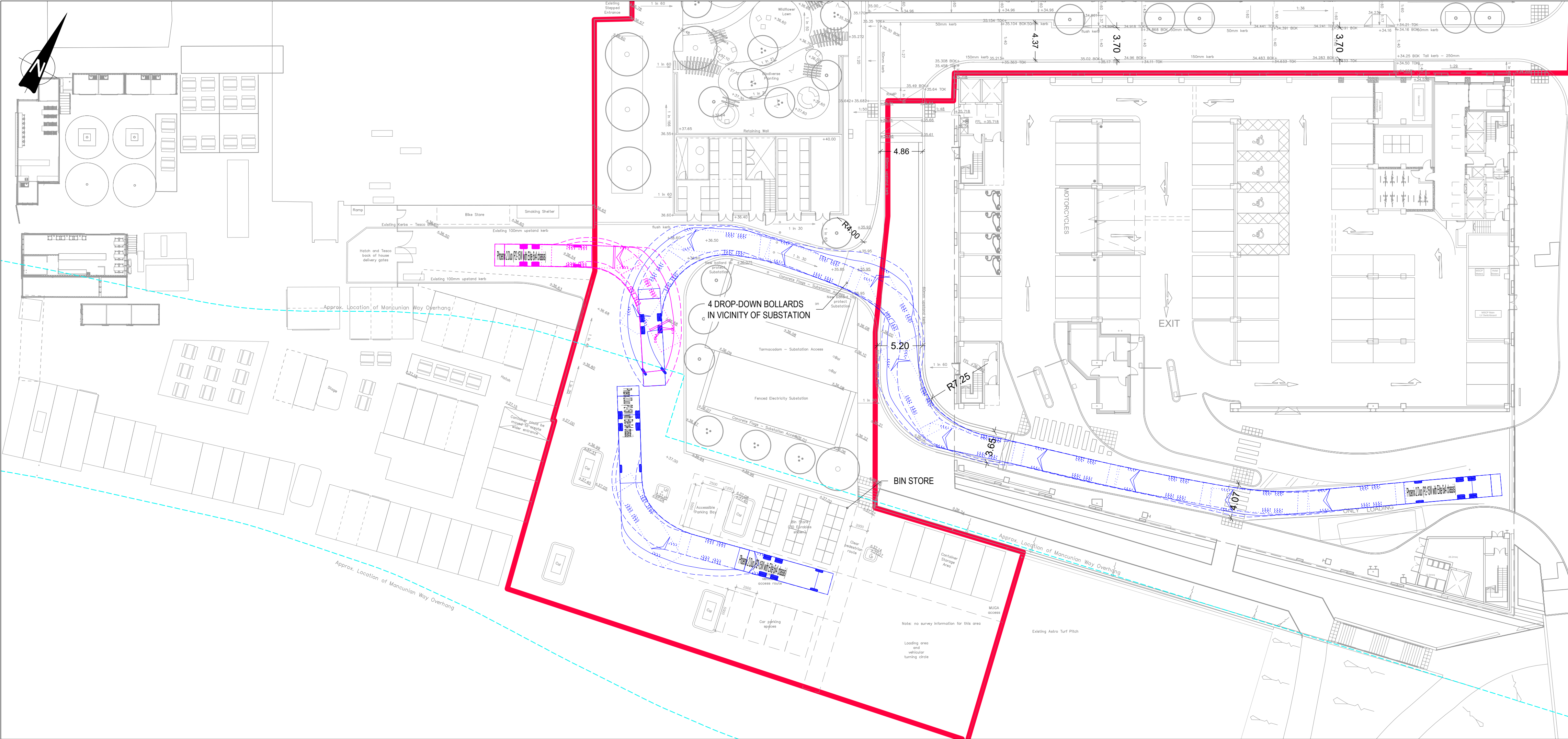
5.2 Conclusions

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

Drawings

Drawing 80646-CUR-00-XX-DR-TP-05003 – (Swept Path Analysis) 11.2m Large Refuse Vehicle

Drawing 80646-CUR-XX-00-D-TP-06001 – Waste Management Strategy

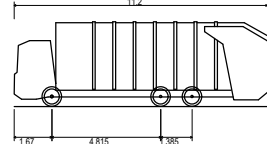


INGRESS

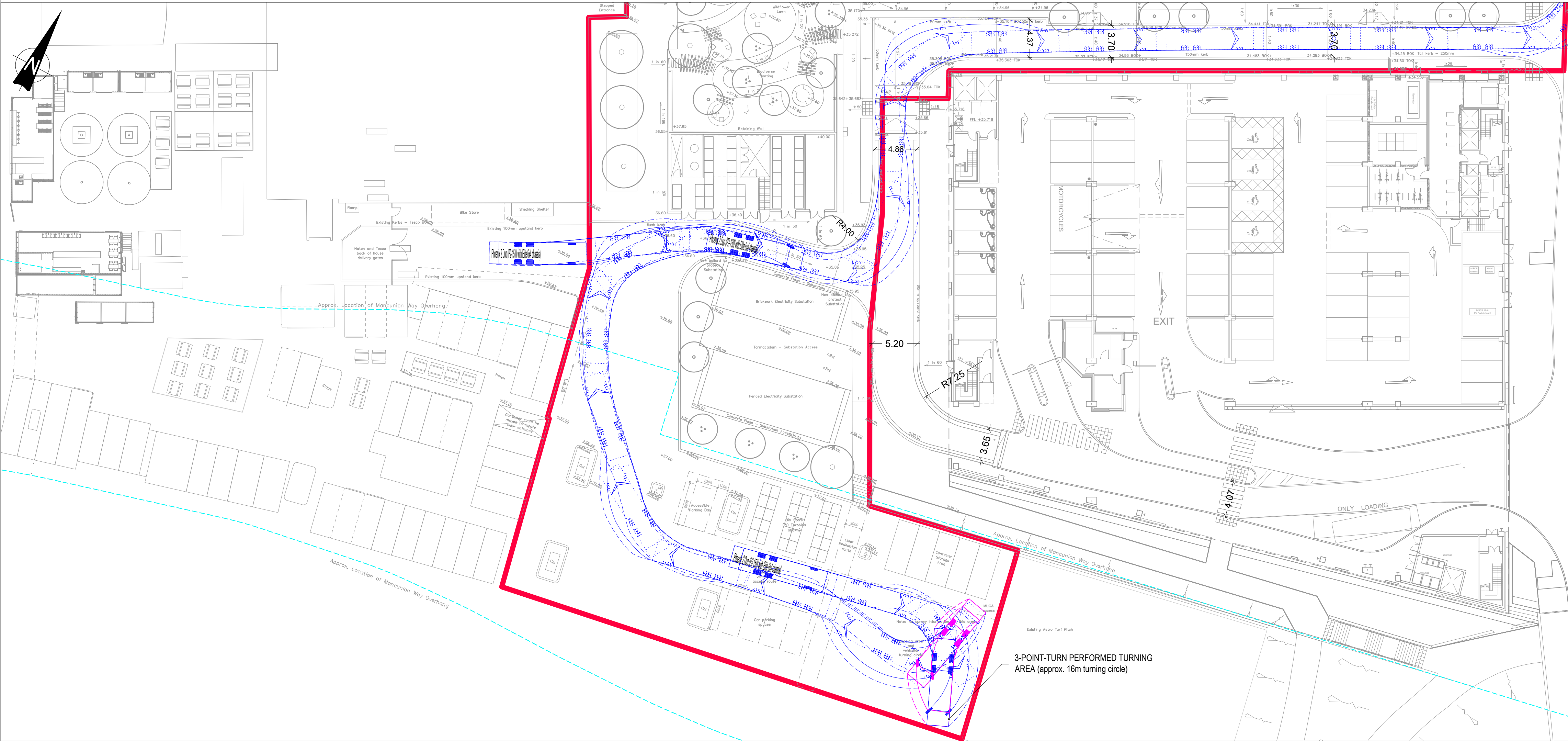
GENERAL NOTES:

1. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTS AND ENGINEERS DRAWINGS AND SPECIFICATIONS.
2. DO NOT SCALE THIS DRAWING. ANY AMBIGUITIES, OMISSIONS AND ERRORS ON DRAWINGS SHALL BE BROUGHT TO THE ENGINEERS ATTENTION IMMEDIATELY. ALL DIMENSIONS MUST BE CHECKED / VERIFIED ON SITE.
3. ALL DIMENSIONS ARE IN METRES UNLESS NOTED OTHERWISE.
4. FOR GENERAL NOTES REFER TO DRAWING.
5. THE CONTENT OF THIS DRAWING IS FOR INDICATIVE INFORMATION ONLY AND NOT SUITABLE FOR CONSTRUCTION PURPOSES
6. LANDSCAPE LAYOUT AND REDLINE BOUNDARY SUPPLIED BY PLANT. DRAWING REFERENCE: '1502a-PLA-XX-XX-DR-L-0002-P03'

VEHICLE PROFILE:



Phoenix 2 Duo (P2-15W with Eke 6x4 chassis)
Overall Length: 11.20m
Overall Width: 2.50m
Wheelbase: 2.50m
Front Overhang: 2.50m
Rear Overhang: 2.50m
Wheel Track: 4.00m
Kerb to Kerb Turning Radius: 9.50m



EGRESS

P05	Mancunian Way overhang indicated	16/06/22	JM	AV
P04	Site layout & swept path analysis updated	01/06/22	DD	DD
P03	Site layout & swept path analysis updated	11/05/22	JM	AV
P02	Site layout & swept path analysis updated	14/04/22	JM	AV
Rev:	Description:	Date:	By:	Chkd:



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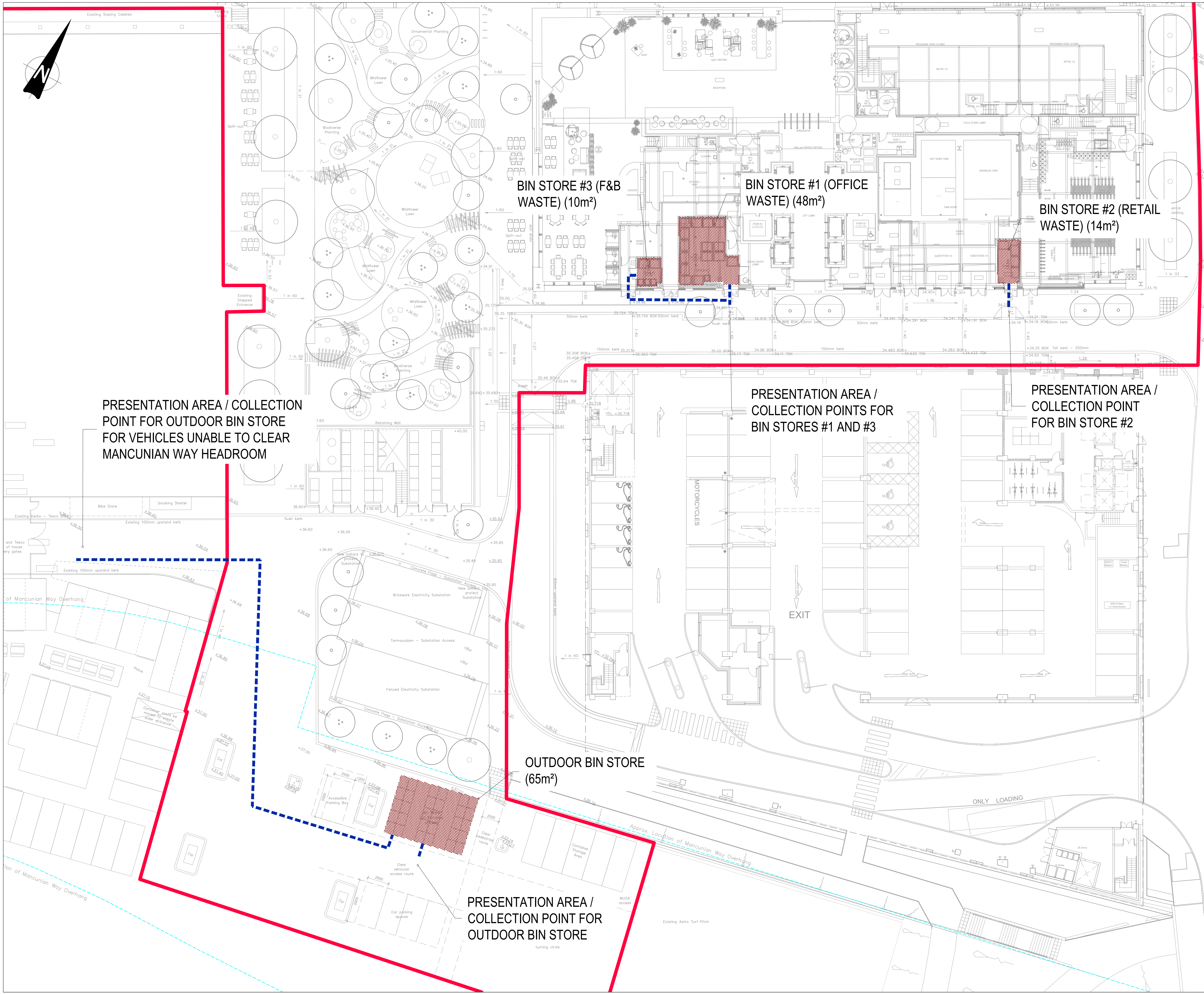
Civils & Structures • Transport Planning • Environmental • Infrastructure • Geotechnical • Conservation & Heritage • Principal Designer
Birmingham • Bristol • Cambridge • Cardiff • Douglas • Dublin • Edinburgh • Glasgow • Leeds • Liverpool • London • Manchester • Nottingham

Status: PRELIMINARY

Project: CIRCLE SQUARE
SERVICING STRATEGY

Orig Title: SWEPT PATH ANALYSIS
11.2m REFUSE VEHICLE

Size:	Date:	Drawn By:	Designed By:	Checked By:
A1	02/12/21	DD	DD	AV
Scale:	1:300			
Project No:	Originator:	Volume:	Level:	Type:
80646	- CUR - 00	- XX - DR - TP -	05003	- P05



GENERAL NOTES:

1. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTS AND ENGINEERS DRAWINGS AND SPECIFICATIONS.
2. DO NOT SCALE THIS DRAWING. ANY AMBIGUITIES, OMISSIONS AND ERRORS ON DRAWINGS SHALL BE BROUGHT TO THE ENGINEERS ATTENTION IMMEDIATELY. ALL DIMENSIONS MUST BE CHECKED / VERIFIED ON SITE.
3. ALL DIMENSIONS ARE IN METRES UNLESS NOTED OTHERWISE.
4. FOR GENERAL NOTES REFER TO DRAWING.
5. THE CONTENT OF THIS DRAWING IS FOR INDICATIVE INFORMATION ONLY AND NOT SUITABLE FOR CONSTRUCTION PURPOSES
6. LANDSCAPE LAYOUT AND REDLINE BOUNDARY SUPPLIED BY PLANT. DRAWING REFERENCE: '1502a-PLA-XX-XX-DR-L-0002-P03'
7. GROUND FLOOR LAYOUT SUPPLIED BY BRIDGE ARCHITECTS, DRAWING REFERENCE: 'TBC'.

KEY: —— RED LINE BOUNDARY
 WASTE STORE
 WASTE ROUTES

PRESENTATION AREA / COLLECTION POINT FOR OUTDOOR BIN STORE FOR VEHICLES UNABLE TO CLEAR MANCUNIAN WAY HEADROOM

PRESENTATION AREA / COLLECTION POINTS FOR BIN STORES #1 AND #3

PRESENTATION AREA / COLLECTION POINT FOR BIN STORE #2

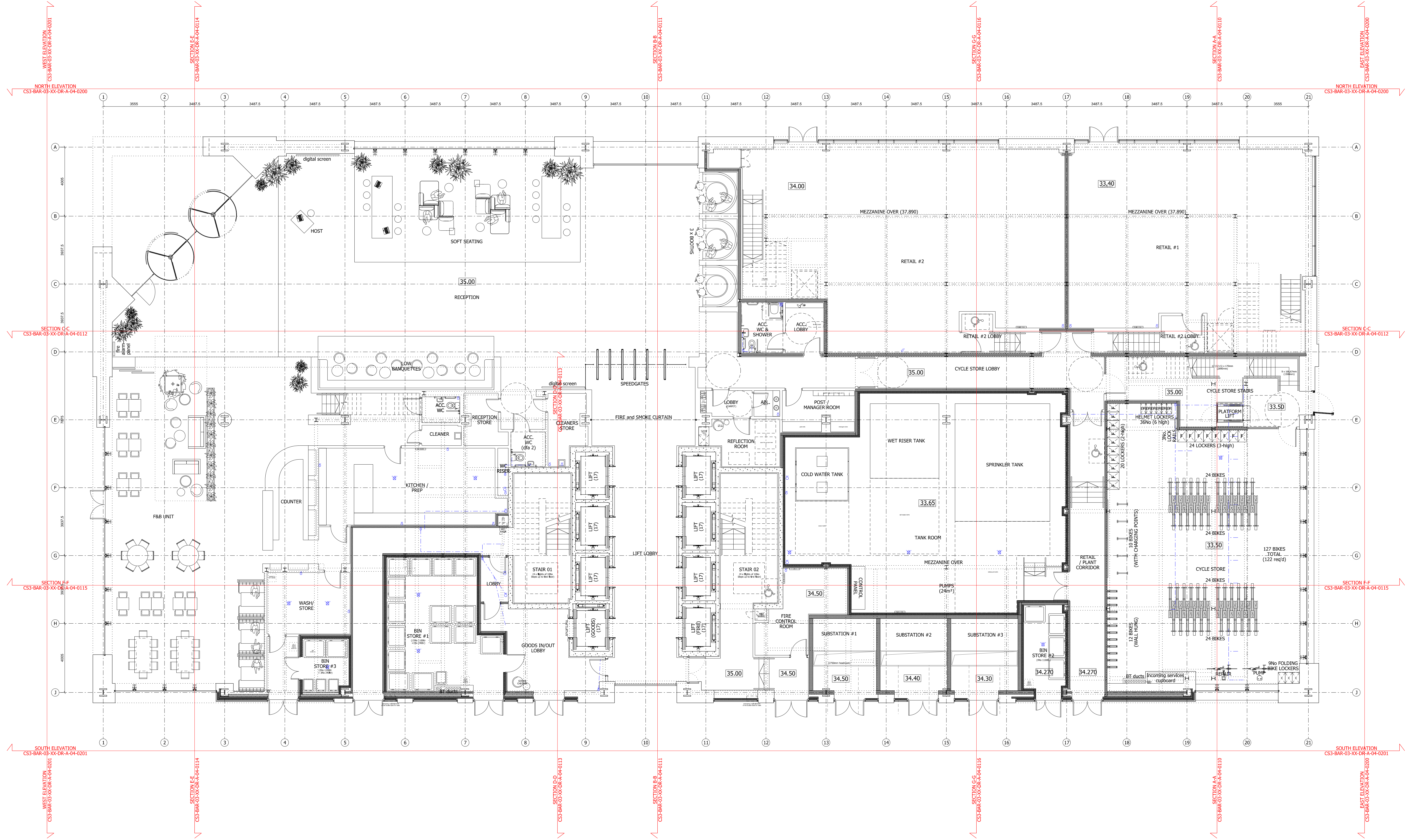
OUTDOOR BIN STORE (65m²)

PRESENTATION AREA / COLLECTION POINT FOR OUTDOOR BIN STORE

Rev:	Description:	Date:	By:	Chk:			
 Merchant Exchange , 17-19 Whitworth Street West, Manchester, M1 5WG 0161 236 2394 manchester@curtins.com www.curtins.com							
Status: PRELIMINARY							
Project: NO. 3 CIRCLE SQUARE							
Orig Title: WASTE MANAGEMENT STRATEGY							
Size: A1	Date: 28/06/22	Drawn By: LL	Designed By: LL	Checked By: AV			
Scale: 1:200							
Project No:	Originator:	Volume:	Level:	Type:	Role:	Category / Number:	Rev:
80646 - CUR - XX - 00 - D - TP - 06001 - P01							

U:\m002\Projects\080001 - 081000\080646 - CS Plot 12 Revised Application\04 Production\44 Models Drawings\TPCAD06

Appendix A – Proposed Ground Floor Layout and Landscape Plan



OXFORD ROAD

SYMPHONY PARK

NEWMAN STREET

MANCHESTER
TECHNOLOGY CENTRE

PRINCESS STREET

NO. 3 CIRCLE SQUARE

CLOAK STREET

MOTORCYCLES

MSCP

HOTEL
(Above)

EXIT

HATCH

- NOTES:
1. Do not scale from this drawing.
 2. Always work to noted dimensions.
 3. All dimensions are in millimetres unless otherwise stated.
 4. All setting out, levels and dimensions to be agreed on site.
 5. The dimensions of all materials must be checked on site before being laid out.
 6. This drawing must be read with the relevant specification clauses and detail drawings.
 7. Order of construction and setting out to be agreed on site.

S1-P03	31-05-22	Access to Newman Street & Spill Out	RM	RM
S1-P02	06-05-22	Cloak Street: Levels & overrun accommodated	RM	RM

Revision	Date	Description	Drawn	Apprvd.
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Client Bruntwood

Project No 3 Circle Square, Manchester

Drg Title Landscape GA

Created on 15-12-21 Created by CL Approved by LH

Scale 1:200 Size A1 Workstage Stage 03

Drg No. 1502a-PLA-XX-XX-DR-L-0002 Suitability S1 Revision P03

Appendix B – MCC Waste Pro Forma

Appendix E Proforma for Planning Applications



**MANCHESTER
CITY COUNCIL**

Planning Application – Waste Management Strategy

Planning Application Number: TBC

Date Submitted: 28/06/22

Estimated volumes/ m² required by the development

Low Rise Domestic

Waste Types	Capacity Required (litres)	Number of bins required per household	Confirm what is to be provided
General refuse	140 / 240	1 x wheeled bin	
Pulpable Recycling	140 / 240	1 x wheeled bin	
Mixed Recycling	140 / 240	1 x wheeled bin	
Garden Waste	140 / 240	1 x wheeled bin	
Food Waste	23	1 x 23 litre caddy	

High Rise Apartment Developments

	Yes/No - how much space has been provided?
0.43m ² has been provided per apartment for the container space. Space to manoeuvre and access containers individually has also been provided so that each container can be accessed and removed for collection individually.	

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

Total - 21 x 1,100l bins + 4 x 240l bins.

Calculations detailed in Waste Management Strategy (Doc Ref: 80646-CUR-XX-XX-T-TP-00003).

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

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

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

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

No. 3 Circle Square: Cleaners / staff of the office and commercial uses will collect waste internally before taking it to the bin store at the ground floor, in close proximity to the core. It is envisaged that a private collection company would collect the waste 5 times a week for all office / F&B / retail uses, subject to revision following occupation. The bin store has been sized to accommodate this frequency of collection.

Bruntwood Outdoor Bin Store: Building management team to move bins from Bruntwood buildings to the bin store throughout the day as necessary, with waste being collected from a single point under the Mancunian Way. Collection frequency TBC.

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 -	Consideration has been given to appropriately ventilate the waste storage facilities. Details have been provided in relevant documentation.
Hygiene -	Storage rooms will be constructed in impermeable materials. The management company will be responsible of 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 and the staff of the commercial units
--

Please ensure that you have attached:

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

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

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