vectos.

WASTE & SERVICING STRATEGY

Union Living Ltd

UNION TOWER 2, ST JOHN'S MANCHESTER

January 2022

VN91382

WASTE & SERVICING STRATEGY

vectos.co.uk

Report control

Document:	Waste & Servicing Strategy
Project:	Union, St Johns, Manchester
Client:	Union Living Ltd
Job number:	VN201609
File origin:	N:\Vectos Job Data\2020\VN201609 Tower 2, St Johns\Docs\Reports\Waste\T2 Waste Servicing Strategy v5 12.01.22.docx

Document checking

Primary Author:	Tom Reader	Initialled:	TR
Contributor:	Gareth Davis	Initialled:	GD
Review by:	Gareth Davis	Initialled:	GD

Issue	Date	Status	Checked for issue
1	30.03.20	V1	GD
2	24.02.21	V2	GD
3	05.03.21	V3	GD
4	20.07.21	V4	GD
5	12.01.22	V5	GD

Contents

1 Introduction 1
Background 1
Planning History 1
Site Overview 2
Report Structure 2

2 EXISTING CONDITIONS 4
Local Highway Network 5

3 DEVELOPMENT PROPOSALS 6
Introduction 6

4 SERVICING STRATEGY 9
Introduction 9
Typical Deliveries 9
Proposed Goods Receipt Strategy 9
Delivery Forecasts 10

5 WASTE MANAGEMENT STRATEGY 12
Introduction 12
Co-Living Waste Forecast 13
Co-Work Waste Forecast 13
Flexible Amenity Space 15
Recycling Waste Streams Forecasts 15
Bin Storage and Collection Frequency 16
Residential Waste Management Strategy 17
Co-Work and Flexible Amenity /Commercial Waste Management Strategy 18
Commercial Unit Waste Management Strategy 18
Waste Transfer 19

6 CONCLUSIONS 20

Drawings

Dwg 6555-P-B500-P-00-001 ..... Red Line Plan
Dwg VN201609-TR102A .....Large Refuse Vehicle Swept Path

Appendices

Appendix A .....Scheme Plans - Basement to First Floor Level
Appendix B ..... WASTE PRO-FORMA

1 Introduction

Background

1.1 This Waste Strategy Statement has been prepared by Vectos on behalf of Union Living Ltd in support of the development of Union, Tower 2 (T2), St John's. This co-living development is part of the St John's development area located in Manchester City Centre. The scheme has planning approval, and a number of amendments are proposed to the approved scheme and this report updates the Waste and Servicing Strategy for the development. The planning history and proposed amendments are described below.

Planning History

1.2 Planning consent for a 36-storey tower on the site was granted in 2017 under planning reference 114385/FO/2016, for 305 residential apartments along with retail uses at ground floor. Further planning consent was granted for a revised application for a 36 storey building with one level of basement, to accommodate 372 Co-Living units (806 beds), 2000sqm of Co-Work space over three floors, public and private amenity space and ground floor flexible amenity / commercial space (LPA Ref 126648/FO/2020).

1.3 The proposed amendments include the following components:

- New extension to form new commercial area at ground floor and mezzanine level, with new entrance to commercial unit;
- Introduction of a terrace with outdoor seating to the north and west elevation and canopy incorporated to the north of the new commercial extension. The canopy to the south elevation has also been reduced in length;
- Relocation of post room;
- Mezzanine level reduced to plant rooms only;
- Introduction of a resident's amenity roof terrace at level 1 to the roof of the proposed new commercial extension;
- Ground Floor to Level 01 floor to floor height reduced by approximately 1.0m;
- Windows to Level 01 increased in height; and
- Silver/grey grid - frame to main tower revised at Level 01 on south and west elevation.

1.4 This Waste & Servicing Strategy has been prepared to appraise the Local Authority, Manchester City Council (MCC), of the associated waste management and servicing implications of the Site. It builds on the approved Waste & Servicing Strategy for site to account for the extended flexible commercial floorspace.

1.5 The approved development incorporates flexible commercial space across the ground the mezzanine floors of the building that will be curated by Vita as part of the integrated commercial and residential amenity offer of the building. Whilst the specific use of these spaces was not known at that time, to ensure a robust assessment, it was assumed that the extended flexible commercial space would operate as a Food & Beverage (F&B) outlet in the approved scheme. The amended proposals confirm this use and extend the amount of F&B floorspace by c.170 sq m.

Site Overview

1.6 The Site comprises previously developed land. **Figure 1.1** illustrates the location of the Site within the context of Manchester city centre. The red line boundary plan for the consented application is shown in **Dwg 6555-P-B500-P-00-001.**

1.7 It lies to the west of Water Street and south of the Manchester & Salford Junction Canal head and to the west of the Manchester Goods Yard (MGY) development site. MGY is being developed as an eleven-storey mixed use building under planning reference 121511/FO/2018, approved in December 2018.

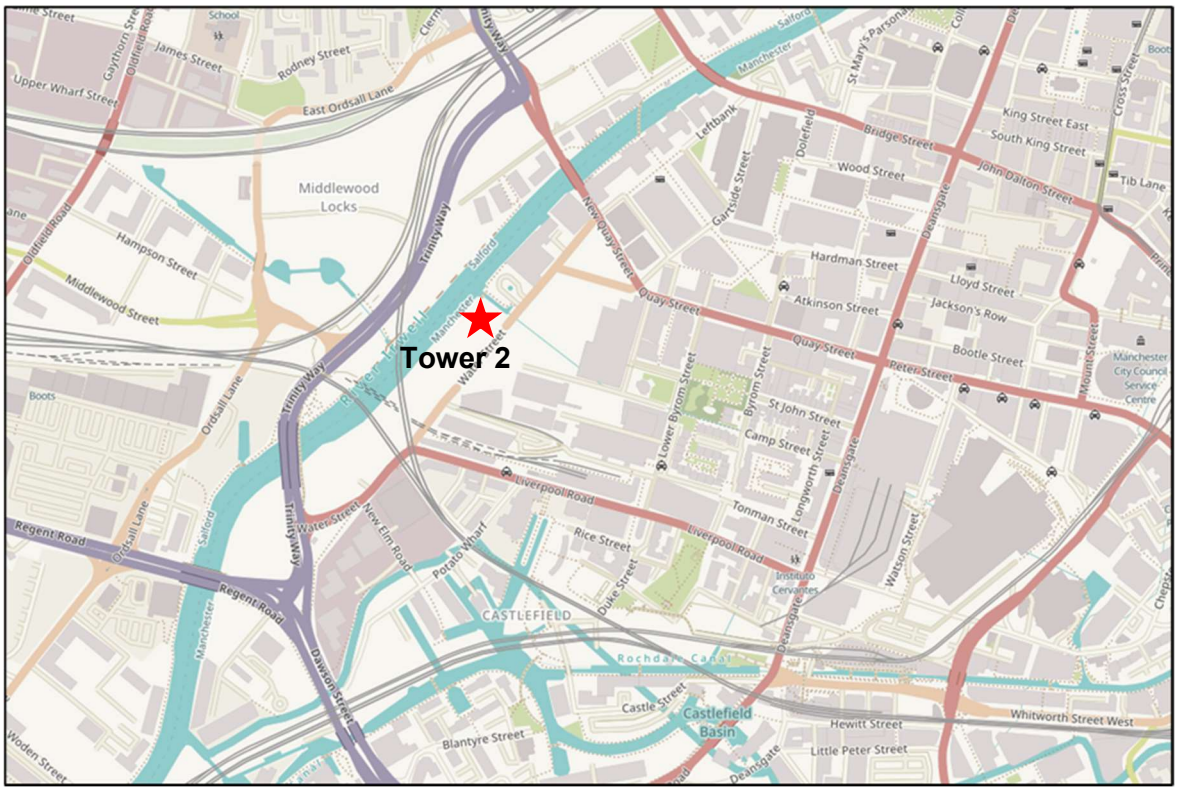


Figure 1.1. Site Location (local context)

Report Structure

1.8 This report forecasts the number of likely deliveries needed to serve the site and the arrangements for deliveries and sets out the policy context for waste management. It goes on to predict the various waste streams generated by occupiers of the development, the refuse storage provision and sets out the strategy for minimising waste generation and the collection of waste.

1.9 The servicing strategy sets out the movement of vehicles to and from the building and includes:

- Calculation of the number of deliveries to Union; and
- Service Strategy for goods to be delivered to the occupiers.

1.10 The waste strategy sets out the means of recycling the material generated and sets out the:

- Estimated waste generation;
- Proposed waste management strategy; and
- Proposed waste storage facilities.

1.11 Following this introductory chapter, this Waste and Servicing strategy considers the following:

- **Section 2** - Discusses the existing nature of the site;
- **Section 3** - Outlines the development proposals;
- **Section 4** - Presents the servicing strategy including the forecast of vehicle arrivals;
- **Section 5** - Considers the Waste Management Strategy for the building, forecasting the Waste streams, recycling and waste collection procedures; and
- **Section 6** - Presents a summary and conclusions to this report.

2 EXISTING CONDITIONS

2.1 The Union T2 site has previously operated as a surface car park associated with ITV Granada Studios and is currently used as a construction site compound. An aerial view of the Site as formerly used by ITV is given in **Figure 2.1.**

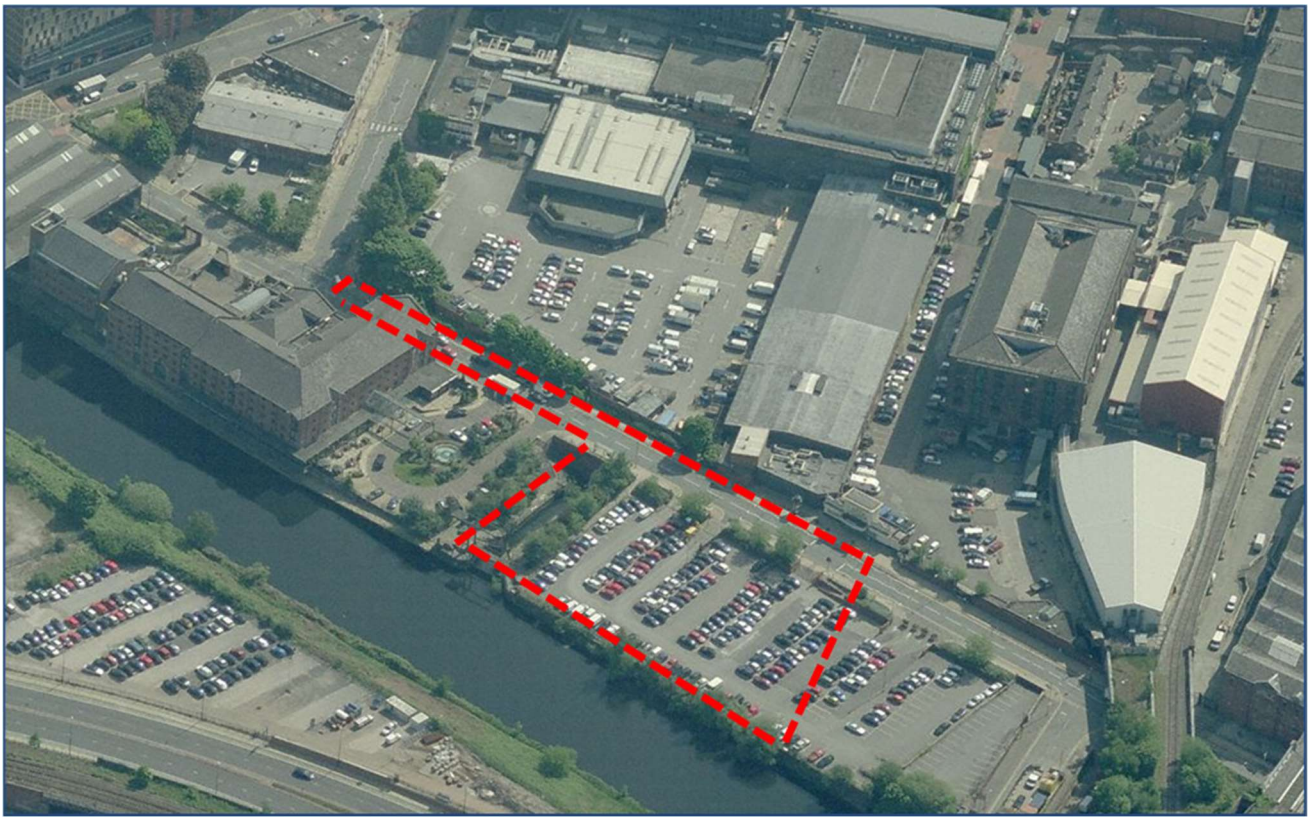


Figure 2.1. Aerial View of the Site (former use by ITV)

2.2 The Site comprises developed land located entirely within the Castlefield Conservation Area and forms part of a wider Masterplan and Strategic Regeneration Framework for the area, which is known as St. John's.

2.3 Parts of the St John's masterplan development are being constructed at the time of writing, including the Factory development to the south of the site and the Manchester Goods Yard development to the east of the site. Immediately to the north of the Site lies the Manchester & Salford Junction Canal head and beyond that the Grade II Listed Victoria and Albert Hotel. The River Irwell forms the western boundary of the site.

2.4 The Site lies to the south of the Spinningfields commercial district of Manchester City Centre, an exemplar of City Centre economic regeneration and the largest City Centre office scheme in the UK. Continuing south of the Site is Castlefield, an established residential district, set within the City's legacy industrial infrastructure and buildings, and infused with leisure, retail and heritage attractions.

2.5 To the east of the Site is the St. John Street district, a mixed-use district characterised by Georgian buildings used as residences and space for professional businesses including legal, accountancy and medical professions.

2.6 Immediately beyond the St. John Street district is the south Deansgate area, which comprises retail facilities, leisure attractions and the City Centre's conference facilities.

2.7 There are a number of current mixed-use regeneration initiatives underway on the Salford side of the River Irwell, including Salford Central and Middlewood Locks (both mixed use schemes including office, retail and residential).

Local Highway Network

2.8 **Water Street** borders the Site to the east and provides a single lane in each direction, with a footway provided along either side of the road. It is subject to a 20mph speed limit.

2.9 Various changes are being implemented to highways in the local area as part of the St John's masterplan works, being delivered under a Section 278 agreement. Just to the north of T2, Water Street will be narrowed from 7.5m to 6m to provide additional trees and public realm space in front of Union, Tower 1. In this location there are two on-street drop-off bays that are time limited to 20mins (no return within 40 mins). There will be six on-street parking bays provided on Water Street to the north of the Marriott Hotel. These pay and display parking bays are around 100m north of T2 and disabled drivers can also park in these locations for free. Around 220m to the south on Water Street are 10 disabled parking bays.

2.10 To the south of T2 the alignment of Water Street passes by Festival Square and Factory, a major new cultural venue for Manchester. When construction finishes at Factory and opens up to audiences, it is proposed that Water Street will be formally closed to through traffic with a Prohibition of Driving Order (PoD) as part of the Factory works. A key aspect is that only vehicles serving Factory will be able head south along Water Street and into Festival Square. Water Street will rise up to a raised table and there will be automatic bollards access controls to manage vehicle movements. This PoD and the associated highway works are to be delivered by others.

2.11 That access strategy for Water Street will mean that all servicing vehicles to and from T2 would arrive via the north. With Water Street to be stopped up to through traffic, a turning facility is required. While designed as circle, it will not operate as a standard roundabout as larger vehicles accessing Factory or T2 will carry on the current Water Street alignment and not circulate round. The central island is designed to be run over apart from the area accommodating the tree located there.

2.12 Alongside these highway works there is proposed new footway links along the River Irwell tying in with the new Factory Square and the new river crossing at the Ordsall Chord footway/cycleway bridge and T2 helps facilitate that by providing the link through to the canal head to the north of the site.

3 DEVELOPMENT PROPOSALS

Introduction

3.1 Planning Permission has been granted for the erection of a 36-storey building plus basement, comprising 372 co-living units and studios (806 beds) mixed use building (Sui Generis), comprising Co-Living units, amenity space, 1995m^2 (NIA) of Co-Working space and flexible amenity/commercial space, landscaping, access and other associated works.

3.2 The amended scheme enlarges the commercial space at the base of the consented T2 scheme. The proposal aims to reconcile the consented T2 design with the surrounding plots by enlarging the commercial unit and opening it out onto the historic canal basin forming a more integral relationship with its surroundings. As well as a larger ground floor footprint, the mezzanine level has been reduced to just plant rooms, there is a new entrance to proposed commercial area, a terrace with outdoor seating and canopy and a roof terrace.

3.3 The proposed layout is shown in **Appendix A** for the Basement, Ground, Mezzanine and First Floor Levels, respectively.

3.4 The change in floor areas is relatively limited in floor area once the Mezzanine area reduction is accounted for. The proposed floor area compared to the approved layout is given below:

APPROVED SCHEME	LOBBY/RECEPTION	FLEXIBLE AMENITY /COMMERCIAL	COMMERCIAL F&B	AMENITY	ROOF TERRACE
GROUND	166sqm	341sqm			
MEZZANINE		274sqm			
LEVEL 01				654sqm	
TOTAL	**166sqm**	**615sqm**		**654sqm**	

PROPOSED SCHEME	LOBBY/RECEPTION	FLEXIBLE AMENITY /COMMERCIAL	COMMERCIAL F&B	AMENITY	ROOF TERRACE
GROUND	166sqm	84sqm	511sqm		
MEZZANINE					
LEVEL 01				654sqm	230sqm
TOTAL	**166sqm**	**84sqm**	**511sqm**	**654sqm**	**230sqm**

3.5 It can be seen that internally there is a reduction in the flexible amenity space at Ground Floor level to just 84m^2 and the removal of the Flexible/Amenity space at the Mezzanine level. There is then an additional 511m^2 for the extended commercial unit so overall internally there is a reduction in floor area of 20m^2. Finally, there is a roof terrace which will provide 230m^2 of amenity space for residents.

3.6 For robustness, we have included the roof terrace in the forecasts for waste generation and servicing activity and overall, there is an increase in the Extended Commercial and Amenity floorspace of 210m^2.

3.7 Externally there is a change in the public realm around building amended to integrate with the new extended building footprint. The proposed ground floor and external public realm plan for T2 is shown in **Figure 3.1** below.

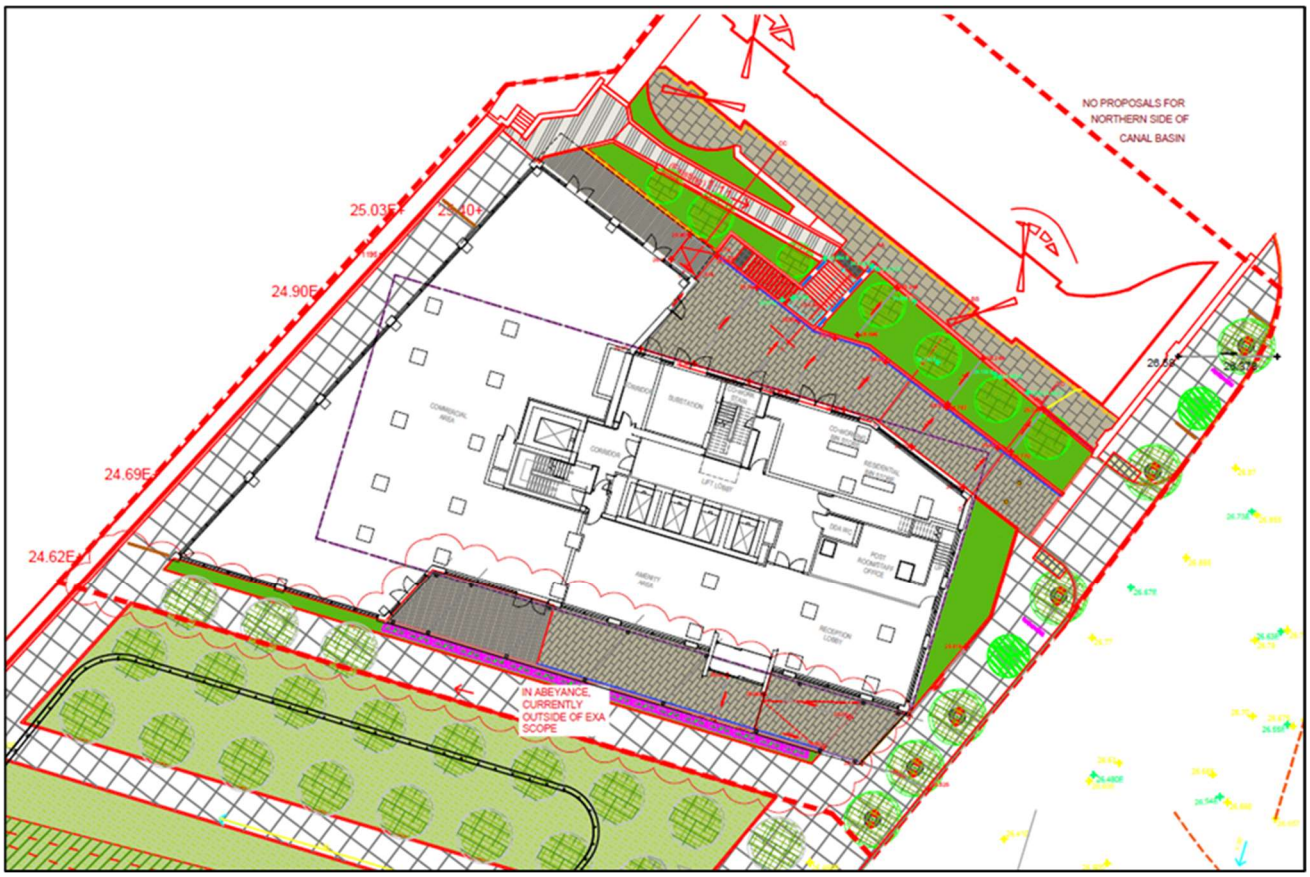


Figure 3.1 Landscaping Proposals

3.8 The nature of the changes are as follows:

- Layout of canal basin amended. Existing ramp to canal basin retained, together with additional stepped access.
- Stepped terrace access to the south replaced with terrace and ramped access from Water Street.
- Western terrace overlooking river replaced by Green Room, new terrace provided on northern elevation overlooking the basin.
- The Riverside walkway is retained and widened compared to the approved scheme.
- Trees reduced to accommodate extended building footprint and provide better circulation around the site in anticipation of future development of T3.
- Final tree locations are now confirmed after the second wind tunnel assessment.

- The Vehicular access has been designed to integrate with updated road layout arising from MCC/Allied London proposals for the Factory and Festival Square. Formal approval for layout to be secured by MCC/Allied London.

3.9 Water Street will be stopped up to through traffic with a prohibition of driving order to the south under the Factory building. To facilitate this a turning facility is provided. While designed as circle, it will not operate as a standard roundabout, as larger vehicles accessing Factory or T2 will carry on the current Water Street alignment and not circulate round. The central island is designed to be run over apart from the area accommodating the tree located there. The servicing strategy is considered next.

4 SERVICING STRATEGY

Introduction

4.1 The proposed ground floor plan shows a service area to the north of the building where large vehicles can reverse in and unload or collect waste. It is expected that regular larger vehicles would be coordinated and timed to stagger their activities. Access into this service area will be controlled by automatic bollards to prevent fly parking with CCTV and a comms unit and regular vehicles benefitting from Automatic Number Plate Recognition.

4.2 There is scope for smaller couriers/vans to reverse into the area before the bollards and service from there. The service area will be shared with pedestrians and cyclists so any vehicles reversing will need to be mindful of this.

4.3 The tracking of a large refuse vehicle (11.5m) reversing into this service area is shown in **Dwg VN201609-TR102A**. It can be seen that the vehicle runs over the central island of the turning circle as described in Section 3.

Typical Deliveries

4.4 The typical deliveries for Union T2 are as follows:

- Residential: Online Groceries, post /courier deliveries, occasional furniture deliveries.
- Flexible Amenity space, Gym & Commercial Units: consumables, retail products, food, drink, stationary.

Proposed Goods Receipt Strategy

4.5 The proposed goods receipt strategy is described below:

- Deliverers/drivers will arrive at the service access point where they would communicate via intercom /CCTV system linked to each occupier or arrive at reception.
- In general deliverers/ drivers will take goods to reception whereupon the occupier will be called for collection.
- Deliverers/Drivers will generally have their own material-handling equipment.

Delivery Forecasts

4.6 The estimated waste and servicing vehicle trips generated by Union T2 have been based upon information from the TRICS database and are consistent with the trips rates used for the wider St Johns masterplan which is described more fully in the Transport Statement.

4.7 The forecasts are split between light goods vehicles (LGVs), primarily vans and other heavier goods vehicles (OGVs) that are in excess of 7.5tonnes. Many deliveries are coordinated with deliveries to other premises and the post/courier and waste operations can serve all the individual land uses within a building as well as making multiple drops as vehicles move from one building to the next. For this reason, the number of deliveries overall has been reduced by one third to avoid double counting of delivery activity based on rates of multiple drops from a study of activity of commercial premises along Regent Road, London.

4.8 A summary of service vehicle trip forecasts is provided in **Table 4.1** overleaf.

Table 4.1. Servicing Trip Forecasts – Union T2, St John's

	Tower 2 Light Vehicles		Tower 2 Heavy Goods Vehicles	
Time Range	ARR	DEP	ARR	DEP
00:00-01:00	0.0	0.0	0.0	0.0
01:00-02:00	0.0	0.0	0.0	0.0
02:00-03:00	0.0	0.0	0.0	0.0
03:00-04:00	0.0	0.0	0.0	0.0
04:00-05:00	0.0	0.0	0.0	0.0
05:00-06:00	0.0	0.0	0.0	0.0
06:00-07:00	0.0	0.0	0.0	0.0
07:00-08:00	0.2	1.5	0.2	0.2
08:00-09:00	1.2	0.2	0.2	0.0
09:00-10:00	1.0	1.5	1.0	1.0
10:00-11:00	2.7	2.5	0.9	1.2
11:00-12:00	2.2	2.7	0.1	0.1
12:00-13:00	4.4	2.5	1.1	0.9
13:00-14:00	4.2	4.2	0.4	0.9
14:00-15:00	3.0	3.7	0.7	0.2
15:00-16:00	1.8	1.9	0.2	0.2
16:00-17:00	2.7	3.3	0.3	0.5
17:00-18:00	1.7	0.9	0.2	0.2
18:00-19:00	1.0	1.4	0.1	0.0
19:00-20:00	0.3	0.3	0.0	0.0
20:00-21:00	0.4	0.1	0.0	0.0
21:00-22:00	0.0	0.0	0.0	0.0
22:00-23:00	0.0	0.0	0.0	0.0
23:00-24:00	0.0	0.0	0.0	0.0
Daily Trip Rates:	**26.9**	**26.7**	**5.7**	**5.6**

4.9 It can be seen that we forecast just under 6 HGVs a day and just under 27 light goods vehicles. The activity occurs throughout the daytime hours with the busiest hour around lunchtime. The deliveries for residents are the largest proportion of servicing activity and this influences the timing of deliveries towards the middle part of the day.

4.10 Compared to the approved proposals this amendment results in just a marginal change in servicing activity compared to the previously approved development scheme.

4.11 These deliveries in the context of deliveries to the wider St Johns area is described in **Figure 4.1** for the Daily Flows.

4.12 It can be seen that most deliveries are expected to be made by vans. The overwhelming majority of deliveries would be made within 5-10 minutes and the vehicle would move on. Refuse collections would also take around 10 minutes. Occasionally vehicles may stay for longer, such as those making furniture deliveries say up to 40 minutes or for maintenance and in these circumstances, they should be planned in advance to avoid congestion.

4.13 The service yard access is around 4.5m wide and it widens internally to a depth of around 7m and can accommodate a large 10m rigid goods vehicle plus a van. Further vehicles can reverse in and serve the building although they would end up blocking the access.

5 WASTE MANAGEMENT STRATEGY

Introduction

5.1 The site 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. 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.

5.2 Central Government's strategy for minimising waste generation and its transfer to landfill is most simply described according the 'Waste Hierarchy' as shown in **Figure 5.1**. Interventions are needed in all stages of the process to minimise waste going to landfill. The minimisation of waste and recycling interventions by occupiers and the management company for the site can help meet the government's aspirations.

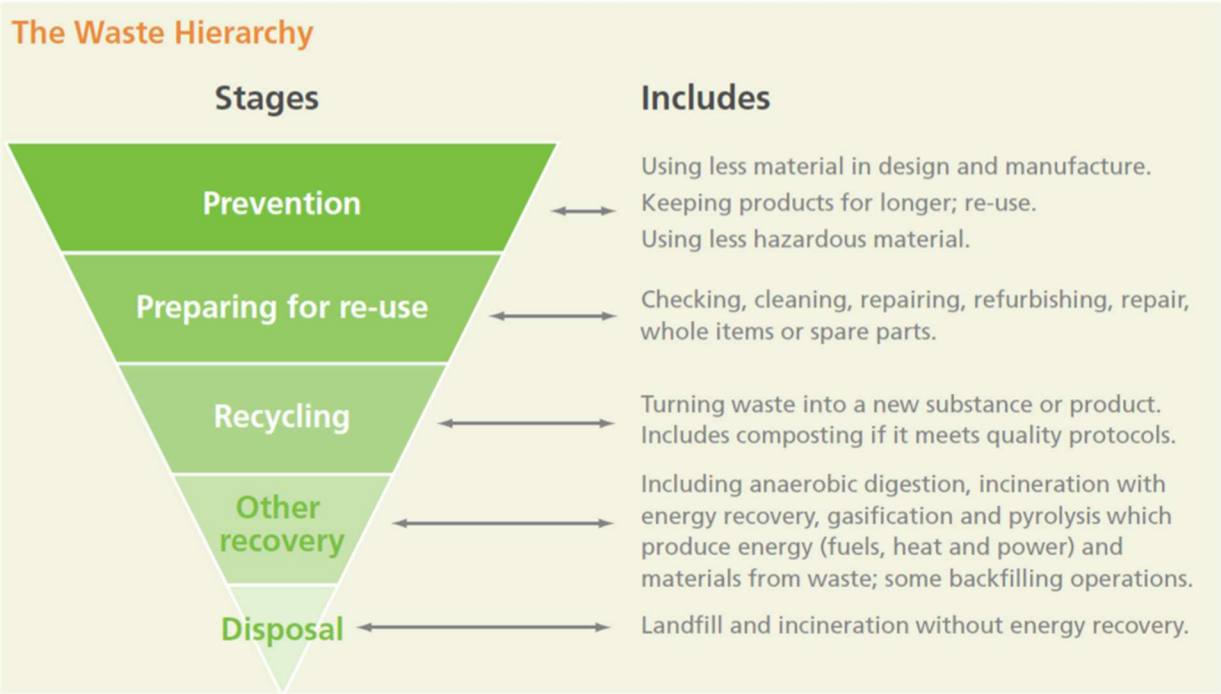


Figure 5.1: Waste Hierarchy

5.3 The waste collection would be overseen by the management company for Union T2, and they would appoint a licenced waste carrier to remove the waste. The management company would have responsibility to ensure the internal and external areas are kept clean and to move the bins in coordination with the occupiers. Refuse store areas would also be subject to appropriate ventilation.

5.4 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.

5.5 MCC publishes Guidance on the Waste Storage and Collection (GD04) and the advice in that document has been incorporated into this strategy. This guidance requires a Waste Pro-Forma to be prepared and this is presented in **Appendix B**. The waste forecast assumptions are described below for each type of land use.

Waste Chute

5.6 In a change from the previous consented proposals the development will no longer have a waste chute. This requires the occupiers to bring their waste to the Bin Store and deposit it in the appropriate bin. Generally occupiers will not have access to the bin store so there are 3 refuse hopper doors on the ground floor where residents can drop off their waste into a waiting bin located on the other side of the wall. Each of these hoppers/doors will be colour coded to help waste allocation.

Co-Living Waste Forecast

5.7 As outlined in Section 1, the planning permission sought is Sui Generis and is not a standard residential or aparthotel development and this may influence the volume of waste generated. The Duo, Trio and Quad (2, 3 and 4 bed) apartments are considered most likely to form a primary residence and will only be available on tenancies from 6-months upwards in length.

5.8 It is expected therefore to differ from standard residential apartments with a different demographic, different occupancy levels due to the greater turnover of occupants, a greater propensity for eating out, or potentially they may have more communal meals than normal, all of which could affect the volume waste generation.

5.9 To provide a robust assessment, the standard residential waste forecasts of 110 litres of waste per week per apartment from the British Standard 'Waste Management in Buildings — Code of Practice' (BS5906:2005) has been used. This equates to the following waste generation:

- 40,920 litres per week for 372 units or 5846 litres per day

Co-Work Waste Forecast

5.10 The space for Co-Working covers 1995sqm NIA and it is assumed that this would provide accommodation for around 312 employees over 3 floors, assuming a typical 80% occupancy rate. BS5906:2005 forecasts a typical office waste generation at 50 litres per employee per week or 10 litres per day. Applying this to the Co-Work space gives:

- 3,120 litres per day for 312 employees

Extended Commercial Unit Waste Forecast

5.11 The extended commercial unit is assumed to be occupied by a Food and Beverage operator providing in the region of 200 food covers. This is considered to provide a robust forecast as it is considered likely to incorporate a mix of bar and restaurant use. BS5906:2005 forecasts a restaurant waste generation at 75 litres per cover per week. Applying this to the commercial unit gives:

- 15,000 litres per week
- We apply a factor to account for a peak day to give around 3,000 litres on a peak day.

Flexible Amenity Space

5.12 The flexible amenity space at the Ground Floor level, level 1 and roof terrace is assumed to include a rate based on general retail use. BS5906:2005 gives forecasts for retail at 10 litres per 1m^2 per week. Based on Amenity space of 968m^2 gives the following waste forecast:

Flexible Amenity Space

- 9,680 litres of waste per week
- Applying a factor for a peak day gives or around 2000 litres per peak day.

Recycling Waste Streams Forecasts

5.13 The waste forecasts and the recycling streams for Union T2 calculated on a daily basis and are described in **Table 5.1** overleaf. The proposed development's recycling streams have been outlined above.

5.14 It is also noted that the General Refuse will be further processed by the Waste Contractor to reduce the amount going to landfill.

Table 5.1: Forecast Recyclables

Co-Living Waste	(%) Volume of Waste generated	Waste Generated litres per day
Pulpable	23.5%	1,373
Mixed	23.5%	1,373
General Waste (inc Food)	53%	3,098
Daily Co-Living Waste	**5,845 litres per day**	
Co-Work Waste	**(%) Volume of Waste generated**	**Waste Generated litres per day**
Pulpable	50%	1,560
Mixed	15%	468
Food Waste	5%	156
General Waste	30%	936
Daily Co-Work Waste	**3,120 litres per day**	
Flexible Amenity/Comm Retail Waste	**(%) Volume of Waste generated**	**Waste Generated litres per day**
Pulpable	25%	500
Mixed	25%	500
General Waste (inc food)	50%	1,000
Daily Commercial Waste	**2,000 litres per day**	
Extended Commercial Unit (Assumed F&B) Waste	**(%) Volume of Waste generated**	**Waste Generated litres per day**
Pulpable	22%	660
Mixed	28%	840
Food Waste	40%	1200
General Waste	10%	300
Daily Commercial Waste	**3,000 litres per day**	

Bin Storage and Collection Frequency

5.15 The Bin Storage is shown below in **Figure 5.2**. It can be seen that the residential bin store can accommodate 20 Eurobins and the adjacent Co-Work/Commercial bin stores can accommodate 5 Eurobins.

5.16 The Extended Commercial unit is yet to confirm its layout for the Kitchens and Bin Storage.

5.17 In addition, the smaller flexible amenity/commercial land uses are assumed to initially store waste within their own demise and bring that through daily for collection.

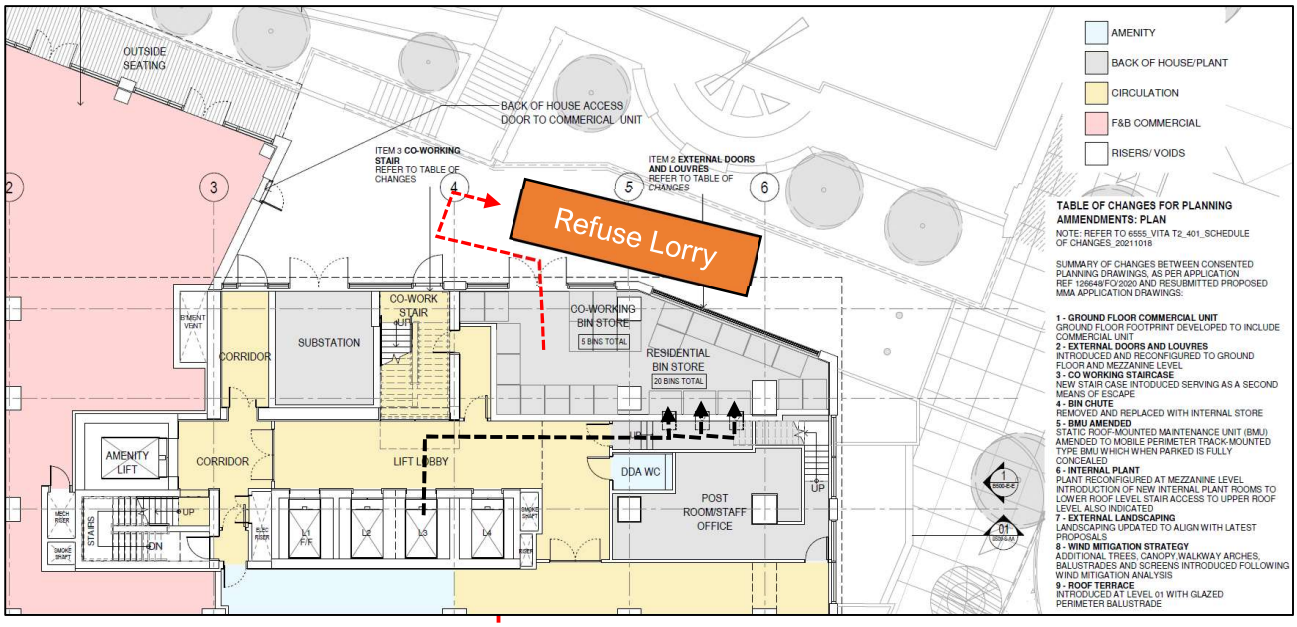


Figure 5.2 Bin Store and Waste Transfer Routes

5.18 The bin store will benefit from ventilation, impermeable surfaces and a nearby water tap to assist in cleaning. There is no intention to compact or process the waste on site.

Residential Waste Management Strategy

5.19 As described in Section 3, this development provides a unique offer which is not a standard residential apartment tower. It provides accommodation for people who might be new to the city but whose needs do not fit into the standard offer for rented apartments or a hotel/aparthotel. Bins within the apartments/kitchens will be colour-coded to assist in the correct separation of waste at source.

5.20 As stated, the building will not have a Refuse Chute so occupiers will be required to bring their waste to the Ground Floor, they will deposit their waste via the colour coded hoppers to waiting bins on the other side of the wall. For any large or unusual waste items, the residents would contact reception and arrange for a bespoke collection which may incur a charge.

5.21 Waste will be collected by a licensed waste carrier in accordance with government legislation requiring the appropriate documentation to ensure that waste is disposed of in a hygienic and environmentally sustainable way. This arrangement with a private waste management company will be maintained in perpetuity at the sole cost of the owner.

5.22 Waste collection for Union T2 will be supervised by the on-site building management team and involves bins being brought out immediately prior to collection and returned immediately after and to ensure areas are kept clean.

Co-Work and Flexible Amenity /Commercial Waste Management Strategy

5.23 Waste from the Co-Work, and the flexible amenity/commercial units would be initially stored within their own demise and then either brought out directly for collection by the occupiers or taken to the T2 bin store. As well the main waste streams there may be specific waste streams such as Waste Electrical and Electronic Equipment recycling (WEEE), printer cartridges, confidential waste that is collected separately from the main waste and this is typically stored internally by the occupier and collected with an occasional specific collection.

Commercial Unit Waste Management Strategy

5.24 The Extended Commercial unit will store waste within its own demise. Assuming that this is a Food & Beverage operation, the location of the kitchen and the bin store is not confirmed therefore we have not shown the bin store or the waste transfer route. However, this waste is expected to be stored in 360litres wheeled bins or 240litre for the heavier food waste. The waste would be brought out for collection by the occupiers immediately prior to and returned immediately after collection.

5.25 Food Waste is subject to the animal by-products controls. Developments which generate food waste will have to comply with the requirements of the 'Animal By-Product' Regulations (Defra 2011).

5.26 There may be additional waste streams that are managed separately from the main waste streams such as a cooking oil collection.

5.27 There are different ways of managing these specific waste streams and the Building management would ensure there are suitable procedures in pace to ensure that this waste is managed according to best practice.

5.28 The forecast number of bins and the collection frequency is given in **Table 5.2** below.

Table 5.2 Bin Storage and Collection Frequency

Co-Living Waste	No. Bins	Collection Frequency
Pulpable	2 x Eurobins	Daily
Mixed	2 x Eurobins	Daily
General Waste (inc Food)	3 x Eurobins	Daily
Co-Work/Flexible Amenity/Commercial Waste	**No. Bins**	**Collection Frequency**
Pulpable	2 x Eurobins	Daily
Mixed	1 x Eurobin	Daily
Food Waste	1 x 240litre bin	Daily
General Waste	2 x Eurobins	Daily
Commercial Unit (Assumed F&B) Waste	**No. Bins**	**Collection Frequency**
Pulpable	2 x 360litre bins	Daily
Mixed	2 x 360 litre bins	Daily
Food Waste	5 x 240litre bins	Daily
General Waste	1 x 360 litre bin	Daily

Waste Transfer

5.29 The refuse containers will be wheeled a short distance from the refuse store to the collection vehicle. The path between the ground floor refuse store and the collection vehicle using the service road to the east of the building.

5.30 The route will be step free and will have a minimum width of 1.54m, ensuring adequate manoeuvring space. It is also noted that waste collection for T2 could be aligned with the wider collection activities taking place at St Johns to improve efficiency and reduce the number of refuse vehicles needing to serve the site.

5.31 These bin stores would be kept clean and there will be a water tap in the bin store to help with spills.

5.32 Management will oversee the waste operations and as well as direct observations, they will use CCTV to ensure compliance and to monitor how full each bin becomes.

5.33 In general, it is expected that waste from each waste stream will be collected every other day from the service area to the rear. However, some different waste streams can be collected at the same time such as the Pulpable and Mixed Recyclables.

5.34 It is noted that the General Refuse will be further processed by the Waste Contractor to reduce the amount going to landfill.

6 CONCLUSIONS

6.1 Planning consent was granted for a 36-storey tower with one level of basement, to accommodate 372 Co-Living units (806 beds), 2000m^2 of Co-Work space over three floors, public and private amenity space and ground floor flexible amenity / commercial space (LPA Ref 126648/FO/2020). A number of amendments are proposed to the approved scheme and this report has provided an update to the Waste and Servicing Strategy for the development.

6.2 The proposed amendments include the following components:

- New extension to form new commercial area at ground floor and mezzanine level, with new entrance to commercial unit;
- Introduction of a terrace with outdoor seating to the north and west elevation and canopy incorporated to the north of the new commercial extension. The canopy to the south elevation has also been reduced in length;
- Relocation of post room;
- Mezzanine level reduced to plant rooms only;
- Introduction of a roof terrace amenity space for residents at level 1 to the roof of the proposed new commercial extension;
- Ground Floor to Level 01 floor to floor height reduced by approximately 1.0m;
- Windows to Level 01 increased in height;
- Silver/grey grid - frame to main tower revised at Level 01 on south and west elevation, and
- The development no longer includes a Waste Chute and so the Waste is deposited by occupiers on the ground floor through 3 x Colour Coded Hopper Doors to bins located on the other side of the wall in the Bin Store.

6.3 The development provides an extended commercial unit which we have assumed to be occupied by a Food and Beverage operation and a roof terrace providing residents amenity space. This report has set out the arrangements for deliveries and tracked the service vehicles accessing the space. There is a small reduction in the flexible commercial floor areas compared to the consented scheme with the reduction in space at the Mezzanine level, so the nett change is marginal. In terms of service vehicles accessing the site we forecast a reduction of around 4 lights goods vehicles and an increase of two additional HGVs serving the site.

6.4 The report has set out the policy context for waste management forecast the daily waste generation and has provided a calculation for the various waste streams generated by the development. The refuse storage provision is described including the number of bins for each recycling waste stream.

6.5 The extended commercial unit will store its waste within its own demise. It has not been designed internally so it is not possible to know the location of the kitchen and its bin store.

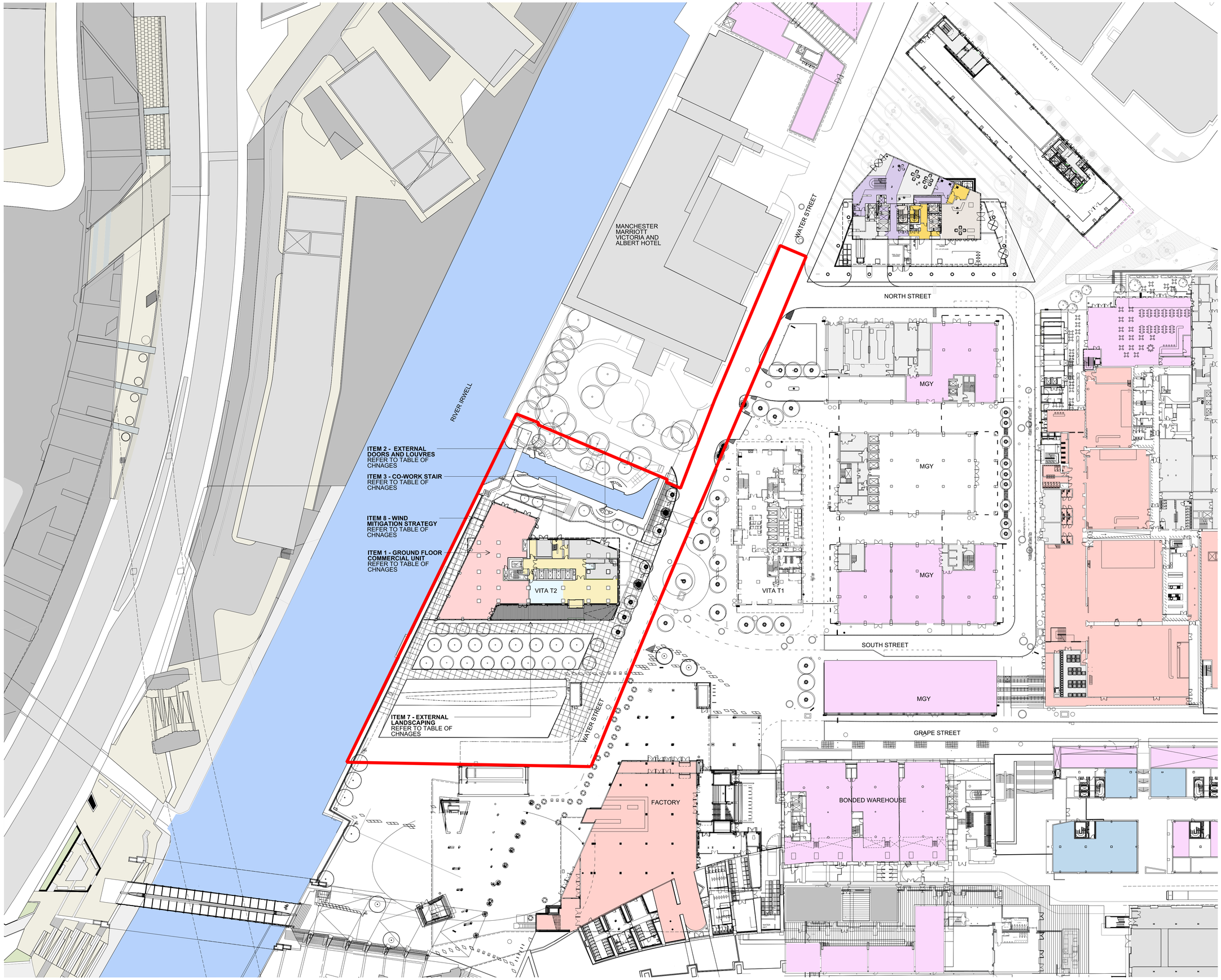
6.6 Notwithstanding this, we have forecast the waste generation from the full development. We have forecast the daily waste volumes into the main waste streams and determined a refuse collection frequency to manage the waste in an efficient manner.

6.7 Overall, the changes are expected to give rise to a small increase in waste generation due to the extended ground floor commercial unit. This change is marginal and does not significantly change the refuse collection strategy.

6.8 This development provides a unique offer which is not a standard residential apartment tower. It provides accommodation for people who might be new to the city but whose needs do not fit into the standard offer for rented apartments or a hotel/aparthotel. Given this nature of occupiers the waste will be treated as in a commercial operation. Waste will be collected by a licensed waste carrier in accordance with government legislation requiring the appropriate documentation to ensure that waste is disposed of in a hygienic and environmentally sustainable way. This arrangement with a private waste management company will be maintained in perpetuity at the sole cost of the owner.

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

Drawings



General Notes
Do not scale from drawing. Use marked dimensions.
To be read in conjunction with all other Consultant's drawings.
The Architect to be immediately notified of any discrepancies.
Copyright on this drawing retained by the Architect.

PLANNING APPLICATION BOUNDARY

TABLE OF CHANGES FOR PLANNNG AMMENDMENTS: PLAN

NOTE: REFER TO 6555_VITA T2_401_SCHEDULE OF CHANGES_20211018

SUMMARY OF CHANGES BETWEEN CONSENTED
PLANNING DRAWINGS, AS PER APPLICATION REF 126648/FO/2020 AND RESUBMITTED PROPOSED

1 - GROUND FLOOR COMMERCIAL UNIT
GROUND FLOOR FOOTPRINT DEVELOPED TO INCLUDE
COMMERCIAL UNIT
2 - EXTERNAL DOORS AND LOUVRES
INTRODUCED AND RECONFIGURED TO GROUND
FLOOR AND MEZZANINE LEVEL
3 - CO WORKING STAIRCASE
NEW STAIR CASE INTODUCED SERVING AS A SECOND
MEANS OF ESCAPE
4 - BIN CHUTE
REMOVED AND REPLACED WITH INTERNAL STORE
5 - BMU AMENDED
STATIC ROOF-MOUNTED MAINTENANCE UNIT (BMU)
AMENDED TO MOBILE PERIMETER TRACK-MOUNTED
TYPE BMU WHICH WHEN PARKED IS FULLY CONCEALED
6 - INTERNAL PLANT
PLANT RECONFIGURED AT MEZZANINE LEVEL
INTRODUCTION OF NEW INTERNAL PLANT ROOMS TO
LOWER ROOFLEVEL STAIR ACCESS TO UPPER ROOF
LEVEL ALSO INDICATED
7 - EXTERNAL LANDSCAPING
LANDSCAPING UPDATED TO ALIGN WITH LATEST
PRPOPOSALS
8 - WIND MITIGATION STRATEGY
ADDITIONAL TREES, CANOPY,WALKWAY ARCHES,
BALUSTRADES AND SCREENS INTRODUCED FOLLOWING
WIND MITIGATION ANALYSIS
9 - ROOF TERRACE
INTRODUCED AT LEVEL 01 WITH GLAZED PERIMETER BALUSTRADE
.

No.	Date	Dwn	Chk	App	Revision or reason for issue
E	20211015	JG	GS	JR	ISSUED FOR PLANNING
D	20200328	GS	GS	JR	ISSUED FOR PLANNING
C	20200327	PT	PT	JR	ISSUED FOR PLANNING
B	20200320	PT	PT	JR	ISSUED FOR PLANNING
A	20200313	PT	PT	JR	ISSUED FOR INFORMATION - DESIGN FREEZE First Issue

DENTON CORKER MARSHALL

Architect
Denton Corker Marshall LLP
3.04 The Frames 1 Phipp Street
London EC2A 4PS
Telephone 020 7833 2020
Email mail@dentoncorkermarshall.co.uk

Project Title
T2 VITA LIVING, ST.JOHNS

Client
VITA
The Box, Horseshoe Lane
Alderly Edge, SK9 7QP
Telephone:
Email info@selectproperty.com

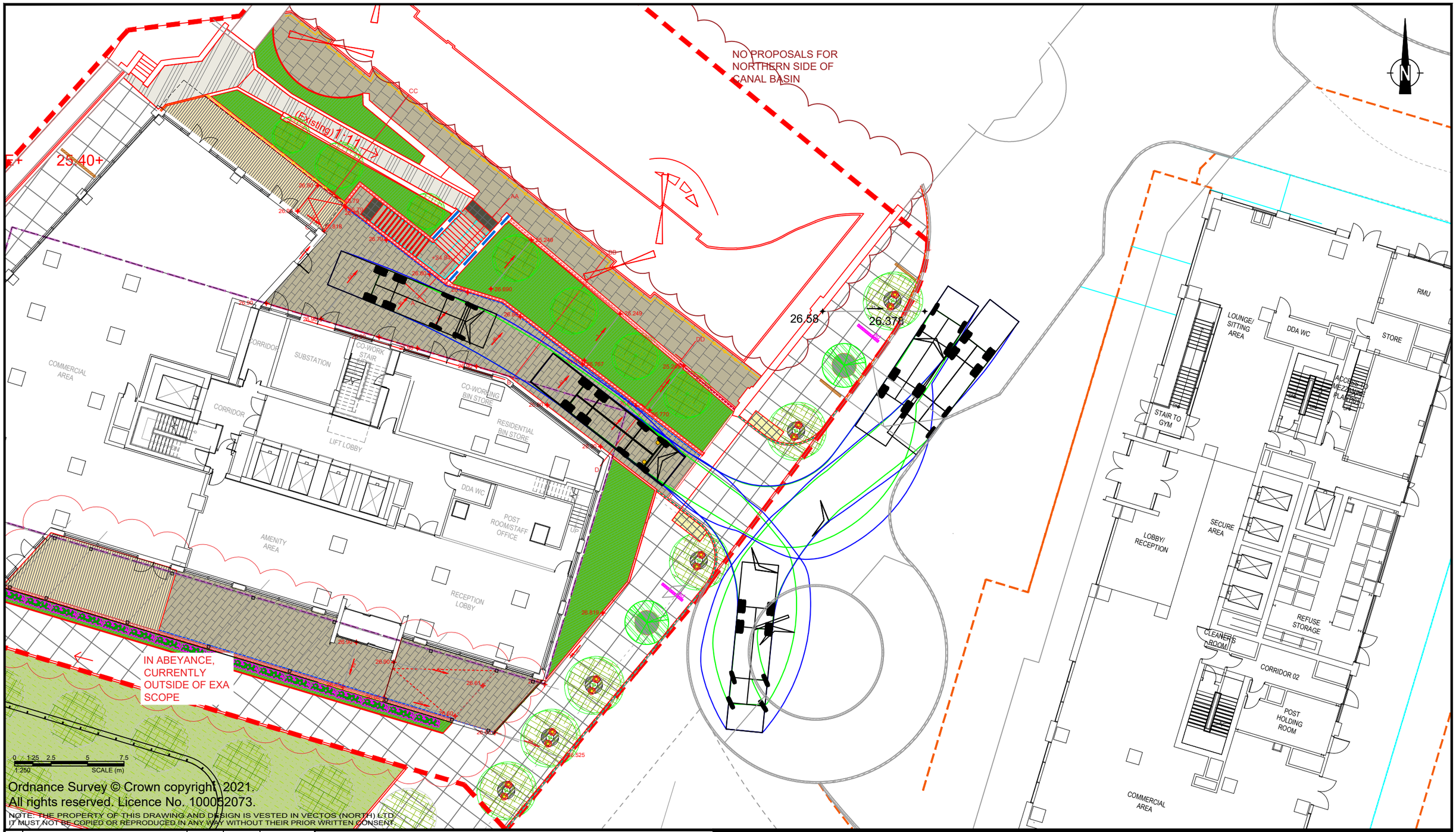
Scale / North Point
1:1000 @ A3
0 5 10 15 25m
1:500 @ A1
0 5 10 15 25m

Drawing Title
LEVEL 00
PROPOSED SITE PLAN

Drawing Number
6555-P-B500-P-00-001

Revision
E

Drawing Status
PLANNING



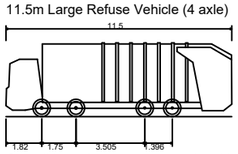
Ordnance Survey © Crown copyright 2021.
All rights reserved. Licence No. 100052073.
NOTE: THE PROPERTY OF THIS DRAWING AND DESIGN IS VESTED IN VECTOS (NORTH) LTD.
IT MUST NOT BE COPIED OR REPRODUCED IN ANY WAY WITHOUT THEIR PRIOR WRITTEN CONSENT.

REV.	DETAILS	DRAWN	CHECKED	DATE
A	Layout updated	WD	GD	05.01.22

Notes:

1. This is not a construction drawing and is intended for illustrative purposes only.
2. White lining is indicative only.

11.5m Large Refuse Vehicle (4 axle)



Overall Length	11.500m
Overall Width	2.500m
Overall Body Height	3.751m
Min Body Ground Clearance	0.304m
Track Width	2.500m
Lock to lock time	6.00s
Wall to Wall Turning Radius	11.330m

Tower 2, St Johns

Union Living Ltd

Swept Path Analysis - Large Refuse Vehicle

vectos.

4th Floor Oxford Place, 61 Oxford Street, Manchester, M1 6EQ
0161 228 1008 e: manchester@vectos.co.uk

DRAWN:	CHECKED:	DATE:	SCALES:	DRAWING NUMBER:	REVISION:
WD	GD	23.12.21	1:250 at A3	VN201609-TR102	A

Appendix A

Scheme Plans – Basement to First Floor Level

AREA USE KEY

- BACK OF HOUSE/PLANT
- CIRCULATION
- RISERS/ VOIDS
- STORAGE

TABLE OF CHANGES FOR PLANNING AMMENDMENTS: PLAN

NOTE: REFER TO 6555_VITA T2_401_SCHEDULE OF CHANGES_20211018

SUMMARY OF CHANGES BETWEEN CONSENTED PLANNING DRAWINGS, AS PER APPLICATION REF 126648/FO/2020 AND RESUBMITTED PROPOSED MMA APPLICATION DRAWINGS:

1 - GROUND FLOOR COMMERCIAL UNIT
GROUND FLOOR FOOTPRINT DEVELOPED TO INCLUDE COMMERCIAL UNIT
2 - EXTERNAL DOORS AND LOUVRES
INTRODUCED AND RECONFIGURED TO GROUND FLOOR AND MEZZANINE LEVEL
3 - CO WORKING STAIRCASE
NEW STAIR CASE INTODUCED SERVING AS A SECOND MEANS OF ESCAPE
4 - BIN CHUTE
REMOVED AND REPLACED WITH INTERNAL STORE
5 - BMU AMENDED
STATIC ROOF-MOUNTED MAINTENANCE UNIT (BMU) AMENDED TO MOBILE PERIMETER TRACK-MOUNTED TYPE BMU WHICH WHEN PARKED IS FULLY CONCEALED
6 - INTERNAL PLANT
PLANT RECONFIGURED AT MEZZANINE LEVEL INTRODUCTION OF NEW INTERNAL PLANT ROOMS TO LOWER ROOF LEVEL STAIR ACCESS TO UPPER ROOF LEVEL ALSO INDICATED
7 - EXTERNAL LANDSCAPING
LANDSCAPING UPDATED TO ALIGN WITH LATEST PROPOSALS
8 - WIND MITIGATION STRATEGY
ADDITIONAL TREES, CANOPY,WALKWAY ARCHES, BALUSTRADES AND SCREENS INTRODUCED FOLLOWING WIND MITIGATION ANALYSIS
9 - ROOF TERRACE
INTRODUCED AT LEVEL 01 WITH GLAZED PERIMETER BALUSTRADE

No.	Date	Dwn	Chk	App	Revision or reason for issue
A	20200313	PT	PT	JR	ISSUED FOR INFORMATION - DESIGN FREEZE First Issue
B	20200320	PT	PT	JR	ISSUED FOR PLANNING
C	20200327	PT	PT	JR	ISSUED FOR PLANNING
D	20211014	JG	ML	JR	ISSUED FOR PLANNING

General Notes
Do not scale from drawing. Use marked dimensions.
To be read in conjunction with all other Consultant's drawings.
The Architect to be immediately notified of any discrepancies.
Copyright on this drawing retained by the Architect.

Client
VITA

Select Property Group
The Box, Horseshoe Lane
Alderley Edge, SK9 7QP
Telephone +44 (0) 207 123 4000 Facsimile +44 (0) 161 332 7718
Email info@selectproperty.com

DENTON CORKER MARSHALL

Architect
Denton Corker Marshall LLP
4th Floor, 6 St Ann's Passage
Old Exchange Buildings, Manchester M2 6BE
Telephone 0161 834 3511
Email mail@dentoncorkermarshall.co.uk

Project Title
T2 VITA LIVING, ST. JOHNS

Scale / North Point
1:100 @ A1 0 1 2 3 5M
1:200 @ A3

Drawing Title
BASEMENT LEVEL GA PLAN

Drawing Number
6555-P-B500-P-B

Revision
D

Drawing Status
PLANNING

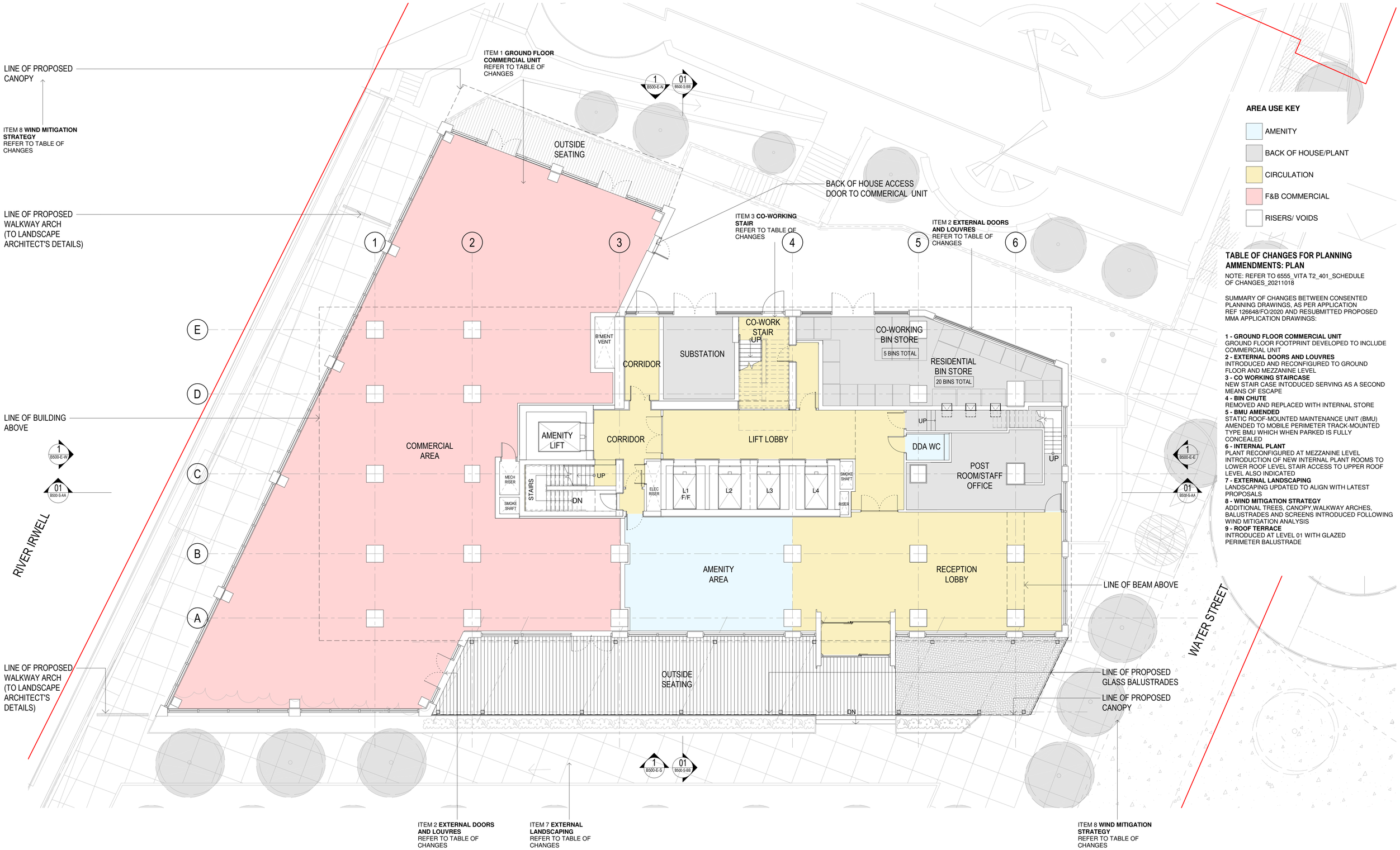


TABLE OF CHANGES FOR PLANNING AMMENDMENTS: PLAN

NOTE: REFER TO 6555_VITA T2_401_SCHEDULE OF CHANGES_20211018

SUMMARY OF CHANGES BETWEEN CONSENTED PLANNING DRAWINGS, AS PER APPLICATION REF 126648/FO/2020 AND RESUBMITTED PROPOSED MMA APPLICATION DRAWINGS:

1 - GROUND FLOOR COMMERCIAL UNIT
GROUND FLOOR FOOTPRINT DEVELOPED TO INCLUDE COMMERCIAL UNIT
2 - EXTERNAL DOORS AND LOUVRES
INTRODUCED AND RECONFIGURED TO GROUND FLOOR AND MEZZANINE LEVEL
3 - CO WORKING STAIRCASE
NEW STAIR CASE INTODUCED SERVING AS A SECOND MEANS OF ESCAPE
4 - BIN CHUTE
REMOVED AND REPLACED WITH INTERNAL STORE
5 - BMU AMENDED
STATIC ROOF-MOUNTED MAINTENANCE UNIT (BMU) AMENDED TO MOBILE PERIMETER TRACK-MOUNTED TYPE BMU WHICH WHEN PARKED IS FULLY CONCEALED
6 - INTERNAL PLANT
PLANT RECONFIGURED AT MEZZANINE LEVEL INTRODUCTION OF NEW INTERNAL PLANT ROOMS TO LOWER ROOF LEVEL STAIR ACCESS TO UPPER ROOF LEVEL ALSO INDICATED
7 - EXTERNAL LANDSCAPING
LANDSCAPING UPDATED TO ALIGN WITH LATEST PROPOSALS
8 - WIND MITIGATION STRATEGY
ADDITIONAL TREES, CANOPY,WALKWAY ARCHES, BALUSTRADES AND SCREENS INTRODUCED FOLLOWING WIND MITIGATION ANALYSIS
9 - ROOF TERRACE
INTRODUCED AT LEVEL 01 WITH GLAZED PERIMETER BALUSTRADE

No.	Date	Dwn	Chk	App	Revision or reason for issue
A	20200313	PT	PT	JR	ISSUED FOR INFORMATION - DESIGN FREEZE First Issue
B	20200320	PT	PT	JR	ISSUED FOR PLANNING
C	20200327	PT	PT	JR	ISSUED FOR PLANNING
D	20200327	GS	GS	JR	ISSUED FOR PLANNING
E	20211014	JG	ML	JR	ISSUED FOR PLANNING
F	20211117	JG	GS	JR	ISSUED FOR PLANNING

KEY:
PLANNING APPLICATION BOUNDARY

General Notes
Do not scale from drawing. Use marked dimensions.
To be read in conjunction with all other Consultant's drawings.
The Architect to be immediately notified of any discrepancies.
Copyright on this drawing retained by the Architect.

Client
VITA

Select Property Group
The Box, Horseshoe Lane
Alderley Edge, SK9 7QP
Telephone +44 (0) 207 123 4000 Facsimile +44 (0) 161 332 7718
Email info@selectproperty.com

DENTON CORKER MARSHALL

Architect
Denton Corker Marshall LLP
4th Floor, 6 St Ann's Passage
Old Exchange Buildings, Manchester M2 6BE
Telephone 0161 834 3511
Email mail@dentoncorkermarshall.co.uk

Project Title
T2 VITA LIVING, ST. JOHNS

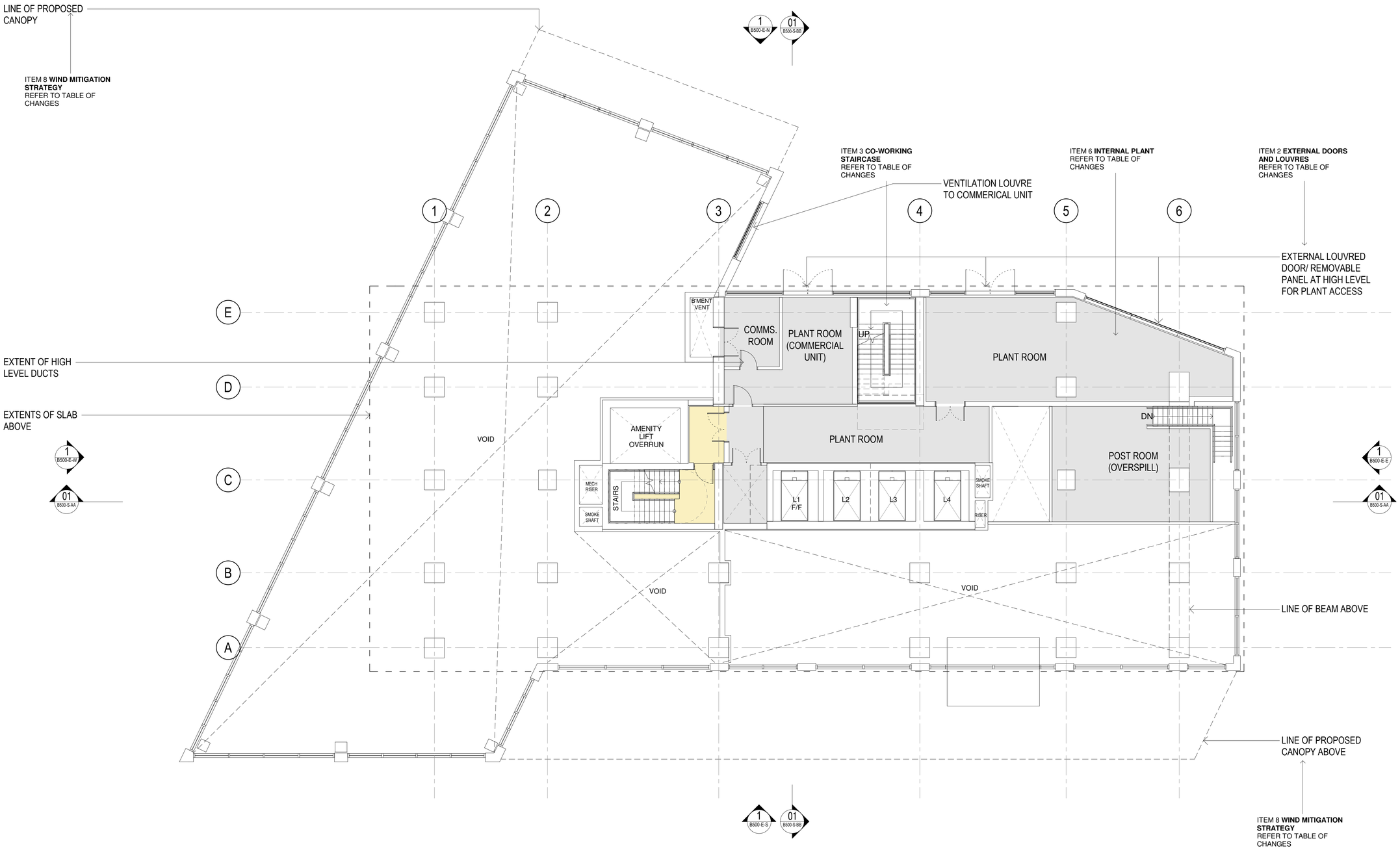
Scale / North Point
1:100 @ A1 0 1 2 3 5M
1:200 @ A3

Drawing Title
GROUND FLOOR PLAN

Drawing Number
6555-P-B500-P-00

Revision
F

Drawing Status
PLANNING



AREA USE KEY

- BACK OF HOUSE/PLANT
- CIRCULATION
- RISERS/ VOIDS

TABLE OF CHANGES FOR PLANNING AMMENDMENTS: PLAN

NOTE: REFER TO 6555_VITA T2_401_SCHEDULE OF CHANGES_20211018

SUMMARY OF CHANGES BETWEEN CONSENTED PLANNING DRAWINGS, AS PER APPLICATION REF 126648/FO/2020 AND RESUBMITTED PROPOSED MMA APPLICATION DRAWINGS:

1 - GROUND FLOOR COMMERCIAL UNIT
GROUND FLOOR FOOTPRINT DEVELOPED TO INCLUDE COMMERCIAL UNIT
2 - EXTERNAL DOORS AND LOUVRES
INTRODUCED AND RECONFIGURED TO GROUND FLOOR AND MEZZANINE LEVEL
3 - CO WORKING STAIRCASE
NEW STAIR CASE INTODUCED SERVING AS A SECOND MEANS OF ESCAPE
4 - BIN CHUTE
REMOVED AND REPLACED WITH INTERNAL STORE
5 - BMU AMENDED
STATIC ROOF-MOUNTED MAINTENANCE UNIT (BMU) AMENDED TO MOBILE PERIMETER TRACK-MOUNTED TYPE BMU WHICH WHEN PARKED IS FULLY CONCEALED
6 - INTERNAL PLANT
PLANT RECONFIGURED AT MEZZANINE LEVEL INTRODUCTION OF NEW INTERNAL PLANT ROOMS TO LOWER ROOF LEVEL STAIR ACCESS TO UPPER ROOF LEVEL ALSO INDICATED
7 - EXTERNAL LANDSCAPING
LANDSCAPING UPDATED TO ALIGN WITH LATEST PROPOSALS
8 - WIND MITIGATION STRATEGY
ADDITIONAL TREES, CANOPY,WALKWAY ARCHES, BALUSTRADES AND SCREENS INTRODUCED FOLLOWING WIND MITIGATION ANALYSIS
9 - ROOF TERRACE
INTRODUCED AT LEVEL 01 WITH GLAZED PERIMETER BALUSTRADE

No.	Date	Dwn	Chk	App	Revision or reason for issue
A	20200313	PT	PT	JR	ISSUED FOR INFORMATION - DESIGN FREEZE First Issue
B	20200320	PT	PT	JR	ISSUED FOR PLANNING
C	20200327	PT	PT	JR	ISSUED FOR PLANNING
D	20211014	JG	ML	JR	ISSUED FOR PLANNING
E	20211117	JG	GS	JR	ISSUED FOR PLANNING

General Notes
Do not scale from drawing. Use marked dimensions.
To be read in conjunction with all other Consultant's drawings.
The Architect to be immediately notified of any discrepancies.
Copyright on this drawing retained by the Architect.

Client
VITA

Select Property Group
The Box, Horseshoe Lane
Alderley Edge, SK9 7QP
Telephone +44 (0) 207 123 4000 Facsimile +44 (0) 161 332 7718
Email info@selectproperty.com

DENTON CORKER MARSHALL

Architect
Denton Corker Marshall LLP
4th Floor, 6 St Ann's Passage
Old Exchange Buildings, Manchester M2 6BE
Telephone 0161 834 3511
Email mail@dentoncorkermarshall.co.uk

Project Title
T2 VITA LIVING, ST. JOHNS

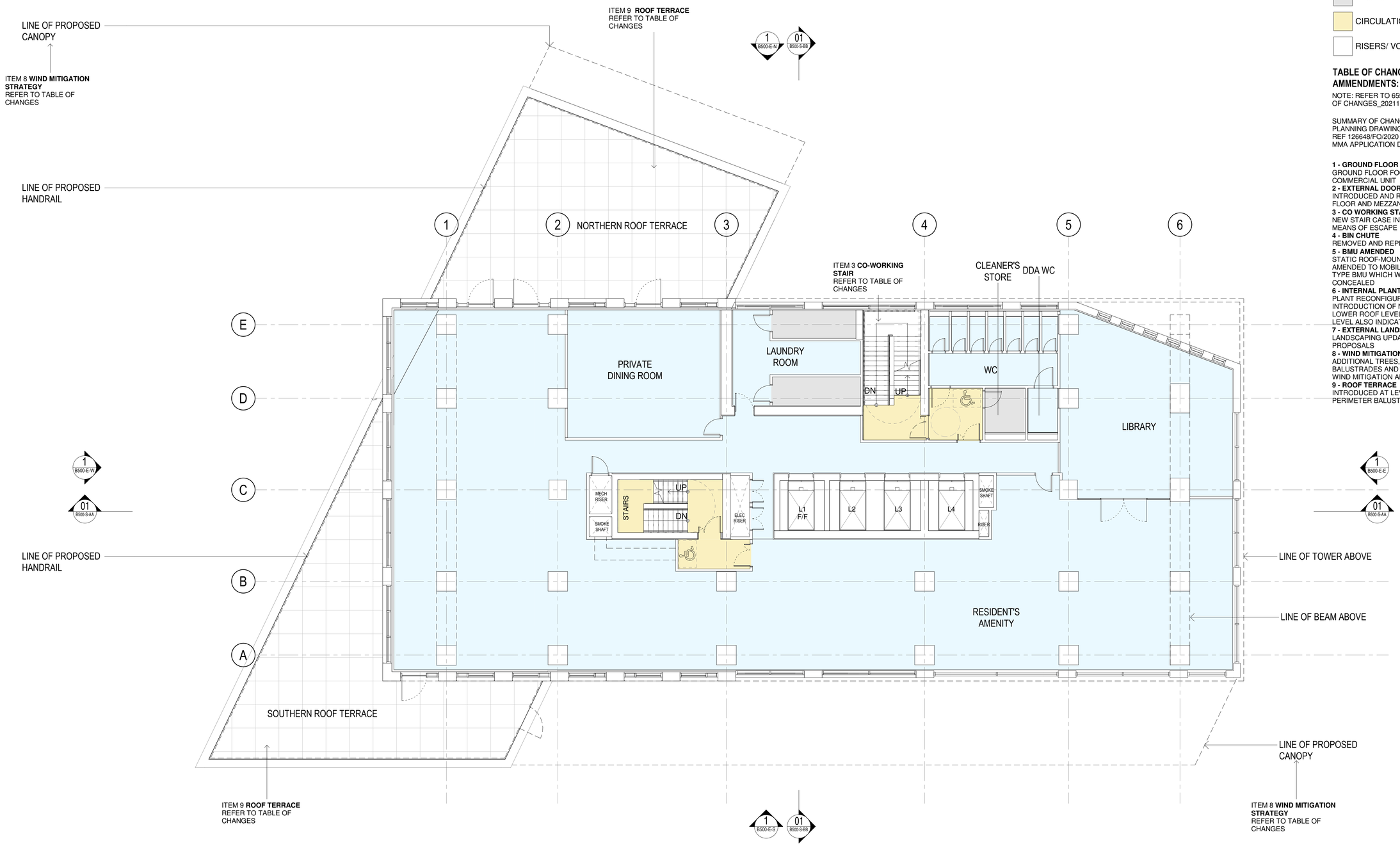
Scale / North Point
1:100 @ A1
1:200 @ A3
0 1 2 3 5M

Drawing Title
MEZZANINE FLOOR PLAN

Drawing Number
6555-P-B500-P-M

Revision
E

Drawing Status
PLANNING



AREA USE KEY

- AMENITY
- BACK OF HOUSE/PLANT
- CIRCULATION
- RISERS/ VOIDS

TABLE OF CHANGES FOR PLANNING AMMENDMENTS: PLAN

NOTE: REFER TO 6555_VITA T2_401_SCHEDULE OF CHANGES_20211018

SUMMARY OF CHANGES BETWEEN CONSENTED PLANNING DRAWINGS, AS PER APPLICATION REF 126648/FO/2020 AND RESUBMITTED PROPOSED MMA APPLICATION DRAWINGS:

1 - GROUND FLOOR COMMERCIAL UNIT
GROUND FLOOR FOOTPRINT DEVELOPED TO INCLUDE COMMERCIAL UNIT
2 - EXTERNAL DOORS AND LOUVRES
INTRODUCED AND RECONFIGURED TO GROUND FLOOR AND MEZZANINE LEVEL
3 - CO WORKING STAIRCASE
NEW STAIR CASE INTODUCED SERVING AS A SECOND MEANS OF ESCAPE
4 - BIN CHUTE
REMOVED AND REPLACED WITH INTERNAL STORE
5 - BMU AMENDED
STATIC ROOF-MOUNTED MAINTENANCE UNIT (BMU) AMENDED TO MOBILE PERIMETER TRACK-MOUNTED TYPE BMU WHICH WHEN PARKED IS FULLY CONCEALED
6 - INTERNAL PLANT
PLANT RECONFIGURED AT MEZZANINE LEVEL INTRODUCTION OF NEW INTERNAL PLANT ROOMS TO LOWER ROOF LEVEL STAIR ACCESS TO UPPER ROOF LEVEL ALSO INDICATED
7 - EXTERNAL LANDSCAPING
LANDSCAPING UPDATED TO ALIGN WITH LATEST PROPOSALS
8 - WIND MITIGATION STRATEGY
ADDITIONAL TREES, CANOPY,WALKWAY ARCHES, BALUSTRADES AND SCREENS INTRODUCED FOLLOWING WIND MITIGATION ANALYSIS
9 - ROOF TERRACE
INTRODUCED AT LEVEL 01 WITH GLAZED PERIMETER BALUSTRADE

No.	Date	Dwn	Chk	App	Revision or reason for issue
A	20200313	PT	PT	JR	ISSUED FOR INFORMATION - DESIGN FREEZE First Issue
B	20200320	PT	PT	JR	ISSUED FOR PLANNING
C	20200327	PT	PT	JR	ISSUED FOR PLANNING
D	20211014	JG	ML	JR	ISSUED FOR PLANNING
E	20211117	JG	ML	JR	ISSUED FOR PLANNING

General Notes
Do not scale from drawing. Use marked dimensions.
To be read in conjunction with all other Consultant's drawings.
The Architect to be immediately notified of any discrepancies.
Copyright on this drawing retained by the Architect.

Client
VITA

Select Property Group
The Box, Horseshoe Lane
Alderley Edge, SK9 7QP
Telephone +44 (0) 207 123 4000 Facsimile +44 (0) 161 332 7718
Email info@selectproperty.com

DENTON CORKER MARSHALL

Architect
Denton Corker Marshall LLP
4th Floor, 6 St Ann's Passage
Old Exchange Buildings, Manchester M2 6BE
Telephone 0161 834 3511
Email mail@dentoncorkermarshall.co.uk

Project Title
T2 VITA LIVING, ST. JOHNS

Scale / North Point
1:100 @ A1 0 1 2 3 5M
1:200 @ A3

Drawing Title
LEVEL 01 GA PLAN

Drawing Number
6555-P-B500-P-01

Revision
E

Drawing Status
PLANNING

Appendix B

WASTE PRO-FORMA

Appendix E Proforma for Planning Applications

MANCHESTER
CITY COUNCIL

Planning Application - Waste Management Strategy

Planning Application Number: LPA Ref 126648/FO/2020
Date Submitted: April 2020

Estimated volumes/ m^2 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	Not applicable for this application.	Not applicable for this application.
Pulpable Recycling	140 / 240	Not applicable for this application.	Not applicable for this application.
Mixed Recycling	140 / 240	Not applicable for this application.	Not applicable for this application.
Garden Waste	140 / 240	Not applicable for this application.	Not applicable for this application.
Food Waste	-	Not applicable for this application.	Not applicable for this application.

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 maneuver and access containers individually has also been provided so that each container can be accessed and removed for collection individually.	Not applicable for this application as the nature of the proposed Co-Living development is not a standard residential tower.

Commercial Developments (inc. recycling strategy)
Please state number of bins you propose, showing calculations where appropriate.

Co-living Units Waste Forecasts
The planning permission sought is Sui Generis and as this is not a standard residential or aparthotel development this may influence the volume of waste generated. BS5906:2005 applies a standard residential waste forecasts of:

Around 110 litres of waste per week per apartment or 40,920 litres per week for 372 units or:
5845 litres per day.

Extended Ground Floor Commercial Unit (Food & Beverage Operation) Waste Forecast
The extended commercial unit is assumed to be a Food and beverage operation providing in the region of 200 food covers. This is a robust figure as there is a bit of flexibility and uncertainty, but this number is considered robust to incorporate the likely mix of bar and restaurant use. BS5906:2005 forecasts a restaurant waste generation at 75 litres per cover per week. Applying this to the extended commercial unit gives:

15,000 litres per week
We apply a factor to account for a peak day to give around **3,000 litres on a peak day**.

Co-Work Waste Forecast
The space for Co-Working covers 1995sqm NIA and it is assumed that this would provide accommodation for around 312 employees over 3 floors, assuming a typical 80% occupancy rate. BS5906:2005 forecasts a typical office waste generation at 50 litres per employee per week or 10 litres per day. Applying this to the Co-Work space gives:

3,120 litres per day

Flexible Amenity Space
The flexible amenity space at the Ground Floor or at level 1 is assumed to include a rate based on general retail use. BS5906:2005 gives forecasts for retail at 10 litres per 1sqm per week. Based on Amenity space of 968m^2 gives the following waste forecast:
9680 litres of waste per week
Applying a factor for a peak day gives or around **2000 litres per peak day**.

Recycling Proportions

Co-Living Waste	(%) Volume of Waste generated	Waste Generated litres per day
Pulpable	23.5%	1,373
Mixed	23.5%	1,373
General Waste (inc Food)	53%	3,098
Daily Co-Living Waste	**5,845 litres per day**	
Co-Work Waste	**(%) Volume of Waste generated**	**Waste Generated litres per day**
Pulpable	50%	1,560
Mixed	15%	468
Food Waste	5%	156
General Waste	30%	936
Daily Co-Work Waste	**3,120 litres per day**	
Flexible Amenity/Comm Retail Waste	**(%) Volume of Waste generated**	**Waste Generated litres per day**
Pulpable	25%	500
Mixed	25%	500
General Waste (inc food)	50%	1,000
Daily Commercial Waste	**2,000 litres per day**	
Extended Commercial Unit (Assumed F&B) Waste	**(%) Volume of Waste generated**	**Waste Generated litres per day**
Pulpable	22%	660
Mixed	28%	840
Food Waste	40%	1200
General Waste	10%	300
Daily Commercial Waste	**3,000 litres per day**	

Bin Store Provision

Co-Living Waste	No. Bins	Collection Frequency
Pulpable	2 x Eurobins	Daily
Mixed	2 x Eurobins	Daily
General Waste (inc Food)	3 x Eurobins	Daily
Co-Work/Flexible Amenity/Commercial Waste	**No. Bins**	**Collection Frequency**
Pulpable	2 x Eurobins	Daily
Mixed	1 x Eurobin	Daily
Food Waste	1 x 240litre bin	Daily
General Waste	2 x Eurobins	Daily
Extended Commercial Unit	**No. Bins**	**Collection Frequency**
Pulpable	2 x 360litre bins	Daily
Mixed	2 x 360 litre bins	Daily
Food Waste	5 x 240litre bins	Daily
General Waste	1 x 360 litre bin	Daily

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

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.

Co-Living Waste

In the apartments and kitchens within the Co-Living space three bins will be provided which will be colour coded to match the waste streams directed through the waste hopper system located on the ground floor.

Extended Commercial Unit

Waste from the Extended Commercial unit will be stored within its demise. The internal layout has yet to be designed so the internal bin store location is not known.

Co-Work Waste

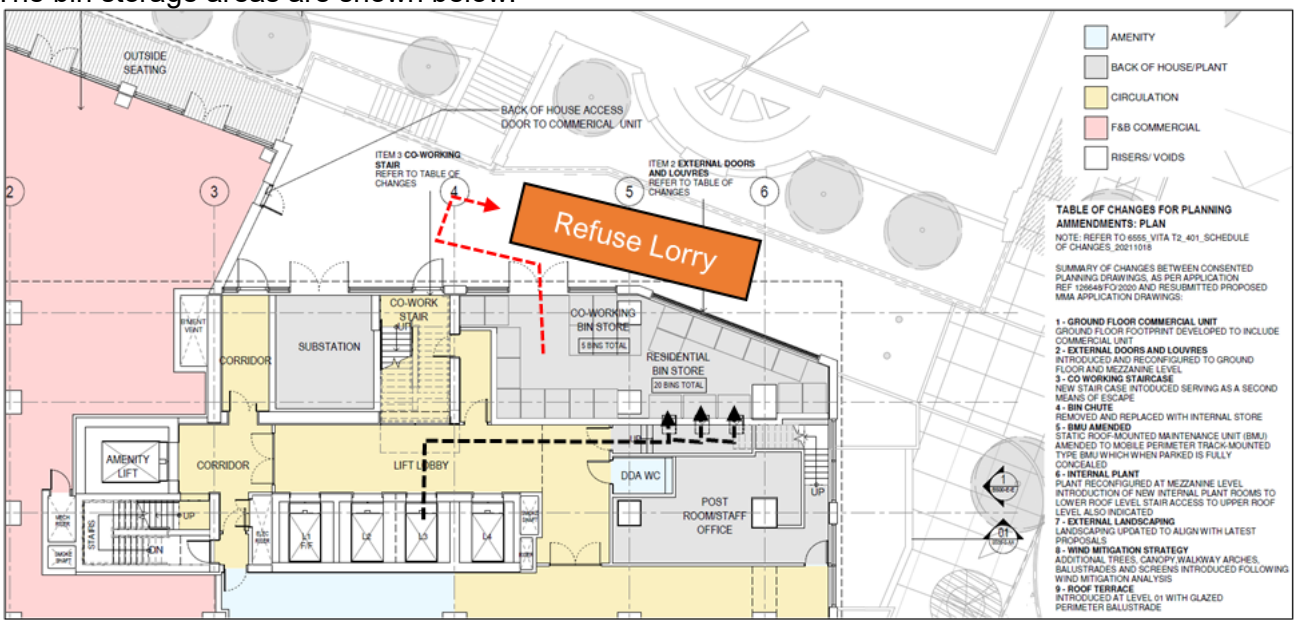
Waste in the Co-Work space will be stored in bins split into the 4 recycling streams in the offices and communal areas

Flexible Amenity /Commercial Space
This waste will be stored within the demise of flexible amenity /commercial units.

Storage Areas for Waste Containers

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

The bin storage areas are shown below.



Waste Storage and Collection Route

For Clarity the development no longer has a refuse chute. Therefore occupiers will bring their waste to the ground floor and deposit their waste in the bin hoppers. This deposits waste on the waiting bins within the bin store. The waste will be split into three waste streams:

Waste Stream 1 - General Refuse (including Organic)
Waste Stream 2 - Pulpable Waste (Paper & Card)
Waste Stream 3 - Mixed Recyclables (Glass, Metals, Plastics)

The Waste Hoppers will be colour coded to help occupiers deposit waste into the correct waste stream.

The usage of the waste hopper system will be monitored using CCTV to ensure compliance and to monitor how full each bin becomes. This will be supported by an automatic alarm that will alert management as each bin approaches capacity.

Ensure all bins in the store are accessible The bin storage area includes space for manoeuvring, and the doors are designed to be wider than the 1.3m minimum. Residents with Large or unusual waste that cannot or should not be sent via the Waste Chute will arrange with reception for a collection which may incur a charge.	Residents will not generally have access to Bin Store
Ensure recycling facilities are as easy to access as general refuse	Yes

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

Ventilation
The bin store will benefit from ventilation, impermeable surfaces and a nearby water tap to assist in cleaning. There is no intention to compact or process the waste on site.

Hygiene
The floor and walls of the bins store will be constructed and finished in materials that are impervious and easily kept clean and a tap would be available. Overall waste management would be undertaken by the on-site staff member/management company who would monitor the cleanliness on a regular basis and would ensure that all areas of the site are kept clean as required.

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

Refuse containers will be brought out immediately prior to collection and returned immediately after by the on-site building management team.

Refuse containers will be wheeled a short distance from the refuse store to the collection vehicle. The path between the ground floor refuse store and the collection vehicle using the service road to the east of the building. The route will be step free and will have a minimum width of 1.54m, ensuring adequate manoeuvring space.

It is also noted that waste collection for the development could be aligned with the wider collection activities taking place at St Johns to improve efficiency and reduce the number of refuse vehicles needing to serve the site.

The waste contract can be provided through Manchester City Council's own residential waste collection regime with increased collections agreed through a legal agreement/planning condition, via Manchester City Council or a private contractor.

Please ensure that you have attached:

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

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

vectos.

Contact

London
Network Building,
97 Tottenham Court Road,
London W1T 4TP.
Tel: 020 7580 7373

Bristol
5th Floor, 4 Colston Avenue,
Bristol BS1 4ST
Tel: 0117 203 5240

Cardiff
Helmont House, Churchill Way,
Cardiff CF10 2HE
Tel: 029 2072 0860

Exeter
6 Victory House,
Dean Clarke Gardens,
Exeter EX2 4AA
Tel: 01392 422 315

Birmingham
Great Charles Street,
Birmingham B3 3JY
Tel: 0121 2895 624

Manchester
Oxford Place, 61 Oxford Street,
Manchester M1 6EQ.
Tel: 0161 228 1008

Leeds
7 Park Row, Leeds LS1 5HD
Tel: 0113 512 0293

Bonn
Stockenstrasse 5, 53113,
Bonn, Germany
Tel: +49 176 8609 1360
www.vectos.eu

Registered Office
Vectos (North) Limited
Oxford Place
61 Oxford Street
Manchester M1 6EQ.
Company no. 07794057