254 KILBURN HR LLP

254 KILBURN HIGH ROAD, CAMDEN

Waste Storage & Collection Report

VN81007

October 2018

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CONTENTS

1 INTRODUCTION

1.1 Introduction

1.1.1 Vectos have been commissioned by 254 KHR LLP to produce a report to assess the impact of the conversion of the top floor into additional residential units.

1.1.2 This predicts the various waste streams generated by the development, the refuse storage provision and the recycling strategy for the residential units and commercial floor space.

1.2 The Proposed Development

1.2.1 The planning application surrounds the redevelopment of the property located at 254 Kilburn High Road. The site was originally occupied by a marble fabricator workshop and associated buildings behind the 3.5 storey terrace.

1.2.2 The scheme provides a high quality commercial and residential development with a mixture of both affordable and market housing, as well as 3 commercial units at ground floor level.

1.3 B1/B8 Use

1.3.1 The layout of the proposed ground floor B1/B8 use is shown in **Dwg 3144_050.**

1.3.2 The ground floor will accommodate 3x B1/B8 units which will have the following floor areas outlined in **Table 1.1**:

Ground Floor Units	Use	Floor Area
Unit 1	B1/B8	448m²
Unit 2	B1/B8	295m²
Unit 3	B1/B8	212m²
Total		**955m²**

Table 1.1: Ground Floor Commercial Use

1.4 Residential Use

1.4.1 The 66 residential units proposed as part of the scheme cover floors 1 to 6 and are shown in the following plans:

- First Floor: **Dwg 360_201**
- Second Floor: **Dwg 360_202**
- Third Floor: **Dwg 360_203**
- Fourth Floor: **Dwg 360_204**
- Fifth Floor: **Dwg 360_205**
- Sixth Floor: **Dwg 20_206**

1.4.2 The residential units are split between 1, 2 and 3 bedroom flats across the 6 floors, as shown in **Table 1.2.**

Floor	1x Bedroom	2x Bedroom	3x Bedroom	Number of Residential Units
Floor 1	2	5	5	12
Floor 2	3	6	4	13
Floor 3	5	7	2	14
Floor 4	3	6	3	12
Floor 5	1	3	5	9
Floor 6	4	1	1	6

Table 1.2: Floors 1-6 Residential Use

1.5 The Report

1.5.1 This Waste Storage & Collection Report establishes the means of recycling the material generated and sets out the following:

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

2 WASTE POLICY CONTEXT

2.1 Introduction

2.1.1 Policy for waste management is detailed within national and local guidance. This is covered by both Camden London Borough Council's Planning Guidance 'Design' and Central Government guidance.

2.2 Camden London Borough Guidance

2.2.1 Local waste and recycling storage guidance is provided in Camden London Borough Council's Planning Guidance 'Design'. This document provides key messages to ensure that developments accommodate the following:

- Adequate space for the storage of waste and recyclables;
- A safe location which is accessible for all users and collectors and minimising nuisance to occupiers/neighbours;
- Suitable refuse collections for any waste contractor which allows for reasonable changes to collection services in the future;
- Designated storage areas for waste containers; and
- Sensitively designed conversion areas.

2.3 National Government Guidance

2.3.1 Central Government's strategy for minimising waste generation and its transfer to landfill is most simply described according to the 'Waste Hierarchy' as shown overleaf. Shown in **Table 2.1** are the interventions 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 building can help meet the government's aspirations.

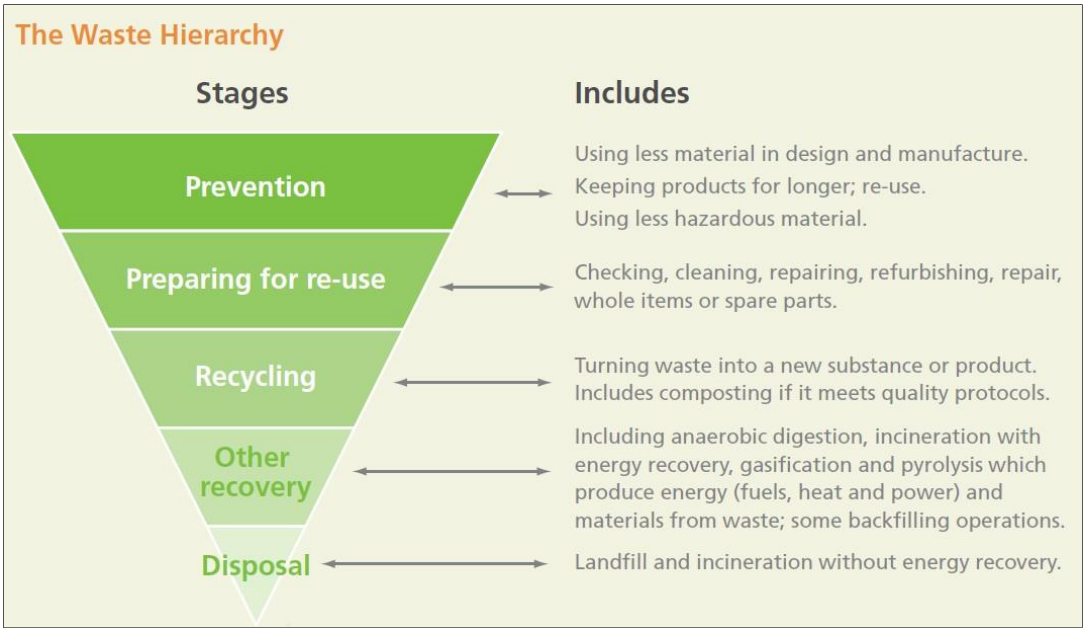


Table 2.1: Waste Hierarchy

2.3.2 The waste collection would be overseen by the developer who will operate and manage the building. They would appoint a licensed 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.

2.3.3 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, Camden London Borough Council.

2.3.4 A record is kept of all waste received or transferred via the licensed carrier through a system of signed Waste Transfer Notes.

2.3.5 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). This may have implications for the types of containers and collections made depending on the nature of the occupier.

2.3.6 The site aims for waste management and also for BREEAM Excellent commercial accommodation. This states that a minimum area of 10 sqm be available for recycling. This criteria is exceeded by some considerable margin with the various waste streams sorted into different bins. The calculation of the storage requirements for the various bins is described next within the report.

3 WASTE FORECAST

3.1 Introduction

3.1.1 The land uses associated with this development comprise 66 residential units and 955m² of B1/B8 floor space. The forecast waste expected to be generated form these land uses are now described.

3.1.2 The waste forecast for the various land uses are derived from BS5906:2005 and is also informed by other surveys of developments undertaken by Vectos.

3.2 Forecast Residential Waste Volumes and Recycling Proportions

3.2.1 Waste storage requirements for residential use have been calculated using BS 5906-2005 (Waste Management in Buildings - Code of Practice). BS5906:2005 estimates of the level of weekly waste generated from Domestic Residences which will be as follows:

Number of Dwellings x ((70 Litres * average number of bedrooms) + 30) = Weekly Waste in Litres

Applying this to the development gives the following calculation:

66 x ((70 litres x 2.03) + 30) = 11,360 Litres of Weekly Waste

3.2.2 Based on the 'WRAP Study of Waste' the proportions of waste result in the following proportions shown in **Table 3.1**, based on a weekly collection:

Waste Stream	%	Litres	Storage Requirement
General Refuse	47%	5,339	5x Eurobins (1,100ltr)
Pulpable	23%	2,613	3x Eurobin (1,100ltr)
Co-mingled	23%	2,613	3x Eurobin (1,100ltr)
Organic	7%	795	4x 240ltr Bin
Total	**100%**	**11,360**	**11x Eurobins & 4x 240ltr Bins**

Table 3.1: Residential Waste Stream

3.2.3 We expect that there will be food waste generated which needs to be covered by the Animal By-Products (Enforcement) (England) Regulations 2011. If that is the case and the volumes of waste are greater than 20kg then such waste needs to be stored in a labelled container and collected by a licensed carrier and records kept.

3.3 B1/B8 Waste Volumes and Recycling Proportions

3.3.1 The B1/B8 use will have an approximate floor area of 955m² and will be situated on the ground floor of the building.

3.3.1 Again, waste storage requirements for commercial use have been calculated using BS 5906-2005 (Waste Management in Buildings - Code of Practice). BS5906:2005 estimates of the level of weekly waste generated from Domestic Residences is based on an occupancy of 1 employee per 10m² and is as follows:

Weekly Waste = 50 litres per employee per week

Applying this to the development gives the following calculation:

(955 / 10 = 95.5) 95.5 x 50 = 4,775

3.3.2 Based on the 'WRAP Study of Waste' the proportions of waste result in the following proportions shown in **Table 3.2**, based on 2 collections per week:

Waste Stream	%	Litres	Storage Requirement
General Refuse	30%	716	1x Eurobin (1,100ltr)
Pulpable	50%	1,194	2x Eurobins (1,100ltr)
Co-mingled	15%	359	1x Eurobin (1,100ltr)
Organic	5%	119	1x 240ltr Bin
Total	**100%**	**2,388**	**4x Eurobins & 1x 240ltr Bin**

Table 3.2: B1/B8 Waste Streams

3.4 Recycling Strategy

3.4.1 The aim of the waste strategy is to divert as much waste as practical from landfill. The forecast recycling rates are derived from WRAP (Waste Resource Action Programme) Studies. To facilitate good recycling behaviour the refuse store will be provided with adequate bins/ containers that accord with the main collection waste streams for disposal.

3.5 Residential Waste Strategy

3.5.1 Residential waste will be carried from its source, i.e. each residential unit will be taken to the ground floor refuse store via the lift where it will be deposited by the residents themselves. From this point residents will be able to deposit waste sacks in the corresponding general refuse/pulpable/co-mingled Eurobin or 240ltr bin allocated for organic waste.

3.5.2 The building's management team will move the waste containers from the ground floor refuse store to the approach alleyway on the day of collection. Waste containers will be taken out immediately prior to the time of collection and taken back into the bin store after the collection takes place in order to minimise the time in which they will be situated in the refuse holding area.

3.6 Lift Breakdown Strategy

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

3.7 B1/B8 Waste Strategy

3.7.1 The ground floor B1/B8 units will be provided with dedicated bin stores within each of the 3 units. Waste would be stored internally and will be separated at source with the provision of bins allocated for paper/card for example. The combined storage for each unit will sufficiently accommodate the volume of waste which is expected to be accommodated by 4x Eurobins and 1x 240ltr bin.

3.7.2 Waste containers will again be left on the approach alleyway for waste to be collected before being returned to their respective units immediately afterwards.

3.8 Refuse Vehicle Route

3.8.1 Waste containers of both residential and commercial use will be wheeled from the building to the refuse holding area on collection day by a member of the building management team. Refuse vehicles will stop on Kilburn High Road and waste containers will be temporarily stored at the refuse holding area. At collection times waste containers will be wheeled to and from the refuse vehicle. Waste containers will be returned to storage areas immediately after refuse collection has taken place.

3.8.2 The waste management company may specify different waste streams depending on the nature of their operation and recycling capability.

3.9 Proposed Delivery Strategy

3.9.1 Service vehicles will serve the site by use of an existing route used by service vehicles serving nearby proporties on Kilburn High Road. Deliveries would take place via the approach alleyway. Service vehicles are expected to enter the site off Kilburn High Road, as shown in **Dwg 3144_050** in order to make deliveries.

4 REFUSE STORAGE AND COLLECTION

4.1 Refuse Store Sizing

4.1.1 The size of the ground floor bin store has been considered against the level of demand identified in Section 3.

4.1.2 It is assumed that the residential waste will be collected at a frequency of once per week and that waste generated by the B1 / B8 units will be collected at a frequency of twice per week.

4.1.3 Based on the volume of waste expected by the two uses and the correspondent number of bins generated, storage for such waste is now described.

4.2 Ground Floor Refuse Store

4.2.1 A refuse store is provided on the ground floor which is shown on **Dwg 3144_050**. This refuse store will be able to deposit waste sacks generated by the residential units in various 1,100 / 240ltr waste containers provided.

4.2.2 The ground floor refuse store and allocation of bins for each waste stream generated is shown in **Figure 4.1**. It is shown that the 11x Eurobins and 4x 240ltr bins generated by residential waste can be sufficiently accommodated.

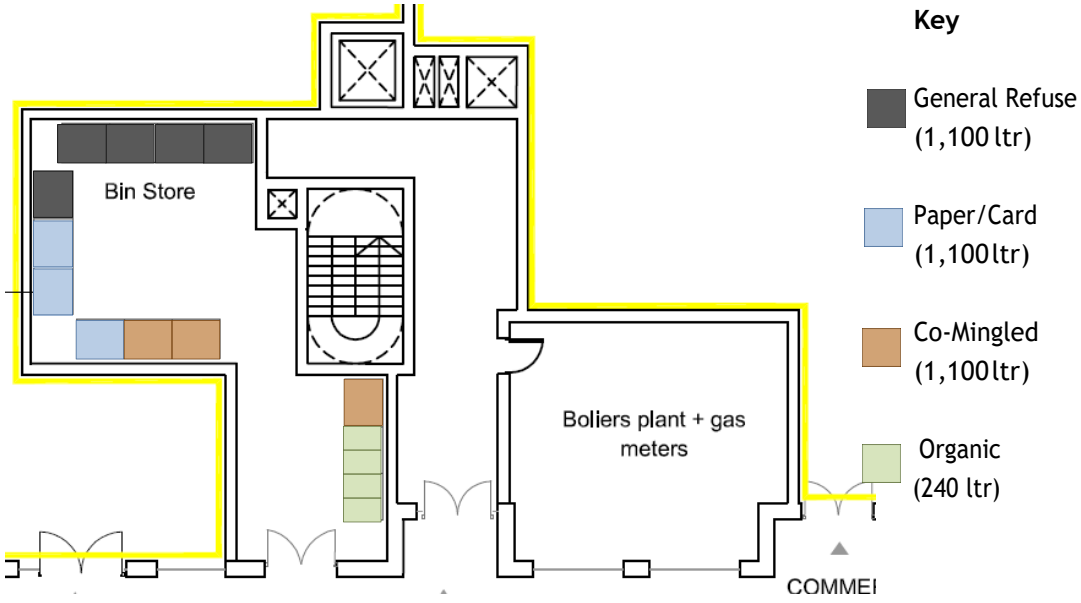


Figure 4.1 Ground Floor Refuse Store Accommodating Residential Waste

4.3 Refuse Vehicle Collection

4.3.1 The refuse collection strategy will involve both residential and commercial waste containers being wheeled out to the refuse holding area by a member of the building management team. On collection days refuse vehicles will stop on Kilburn High Road and collect waste that will be wheeled the short distance from the refuse holding area. Once waste has been deposited in the refuse vehicle, waste containers will be immediately returned to the building in order to minimise the amount of time they are situated in the refuse holding area.

4.3.2 The building management team would have responsibility to ensure bins are taken out for collection and returned immediately after although they may contract the waste operator to undertake that task. The building management team will ensure that the refuse areas and waste transfer routes are kept clean and uncluttered. The distance between waste collection points and a collecting refuse vehicle is not expected to exceed 10m. The waste transfer routes for both the residential and commercial units are shown in **Figure 4.2.**

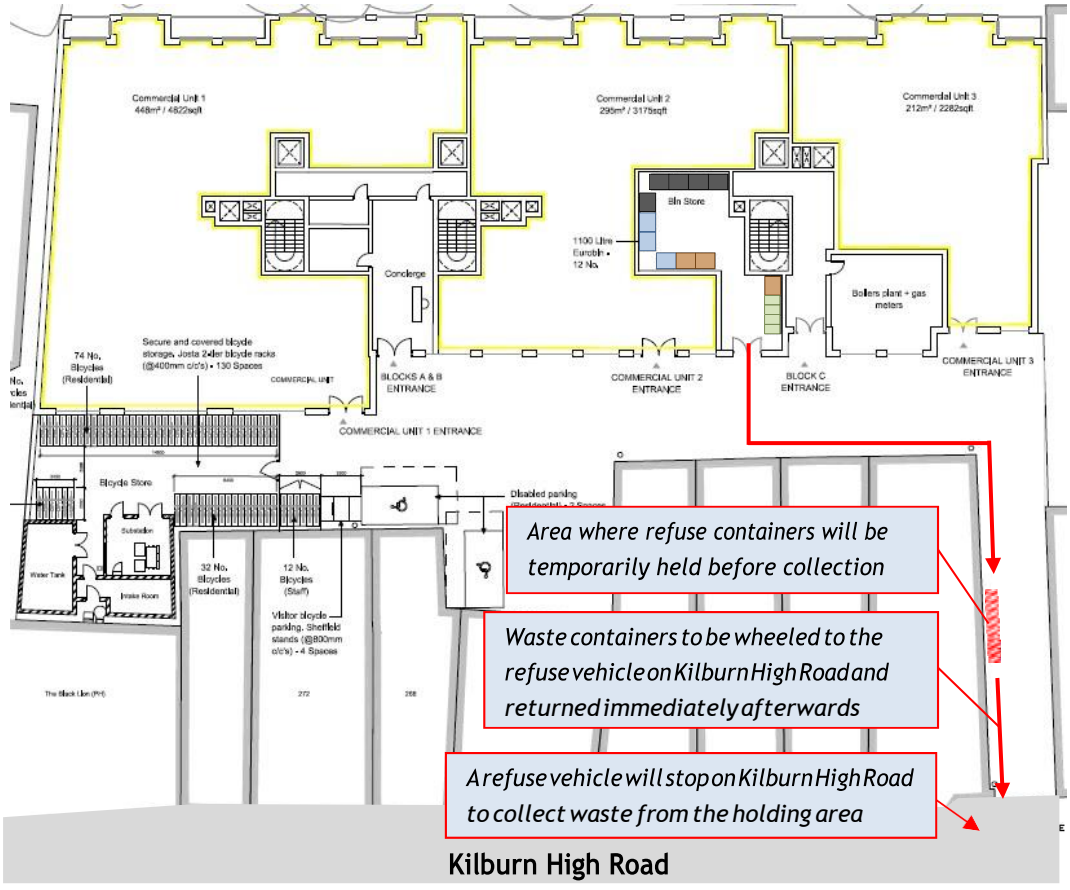


Figure 4.2: Refuse Vehicle Route to Collection

4.4 Internal Waste Transfer Routes

4.4.1 Before waste containers are taken to the refuse storage area on collection days, waste will be transferred from the residential units and commercial space internally. The surfaces that waste will be carried will be flat to ensure an easy transfer of waste.

4.5 Residential Waste Transfer Route

4.5.1 Residential waste will be internally transferred via the lift from levels 1 to 6 to the ground floor in waste sacks. Once at ground floor level waste will be deposited in the refuse store, as shown in **Figure 4.3** and **Figure 4.4.**

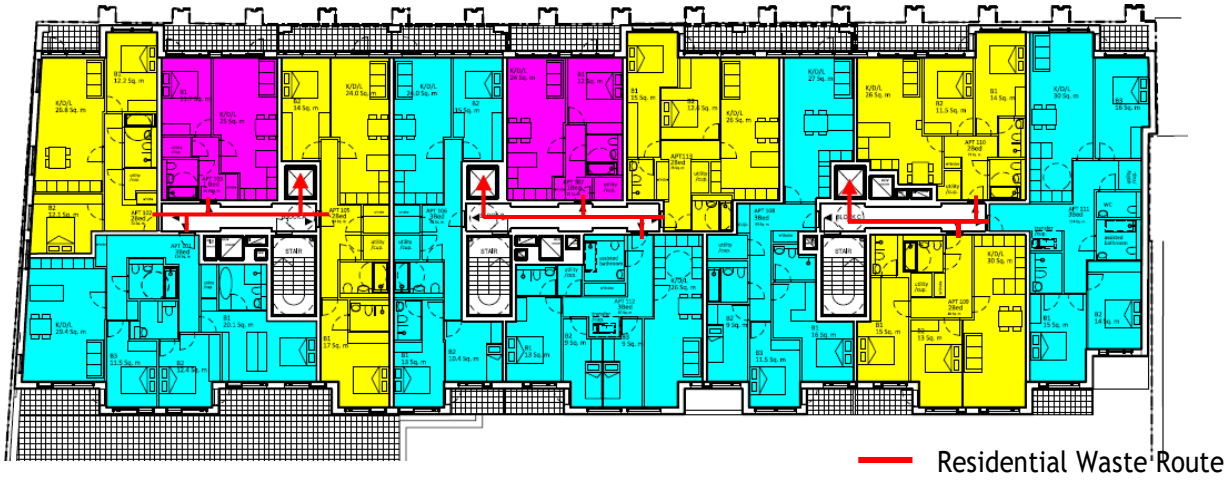


Figure 4.3: First Floor Residential Waste Route (The same route applies for floors 1-6)

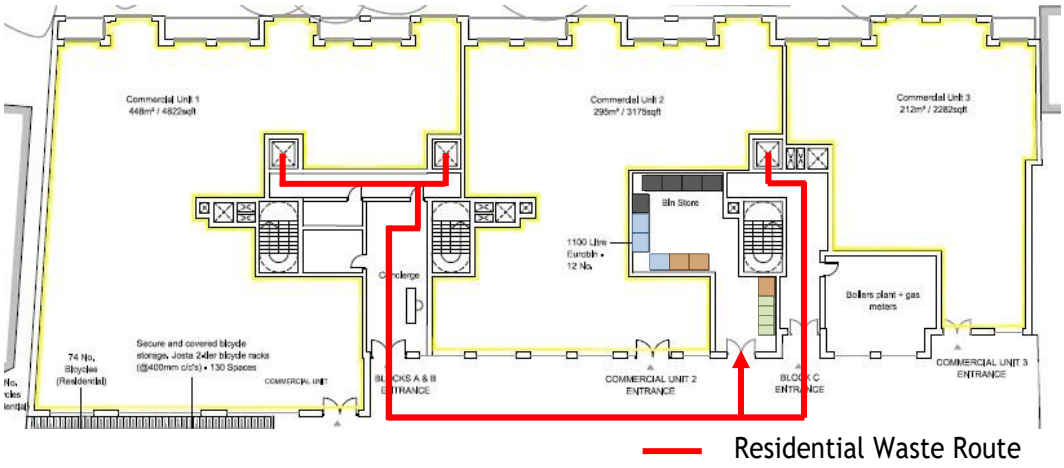


Figure 4.4: Ground Floor Residential Waste Route

4.6 Commercial Waste Transfer Route

4.6.1 As the commercial units will be situated on ground floor level and will store waste within their own demise, the commercial waste transfer route will involve internally stored refuse containers being wheeled out to the refuse holding area on collection days, as shown in **Figure 4.2**. These waste containers will be returned to the 3 commercial units immediately after refuse collection takes place.

5 CONCLUSIONS

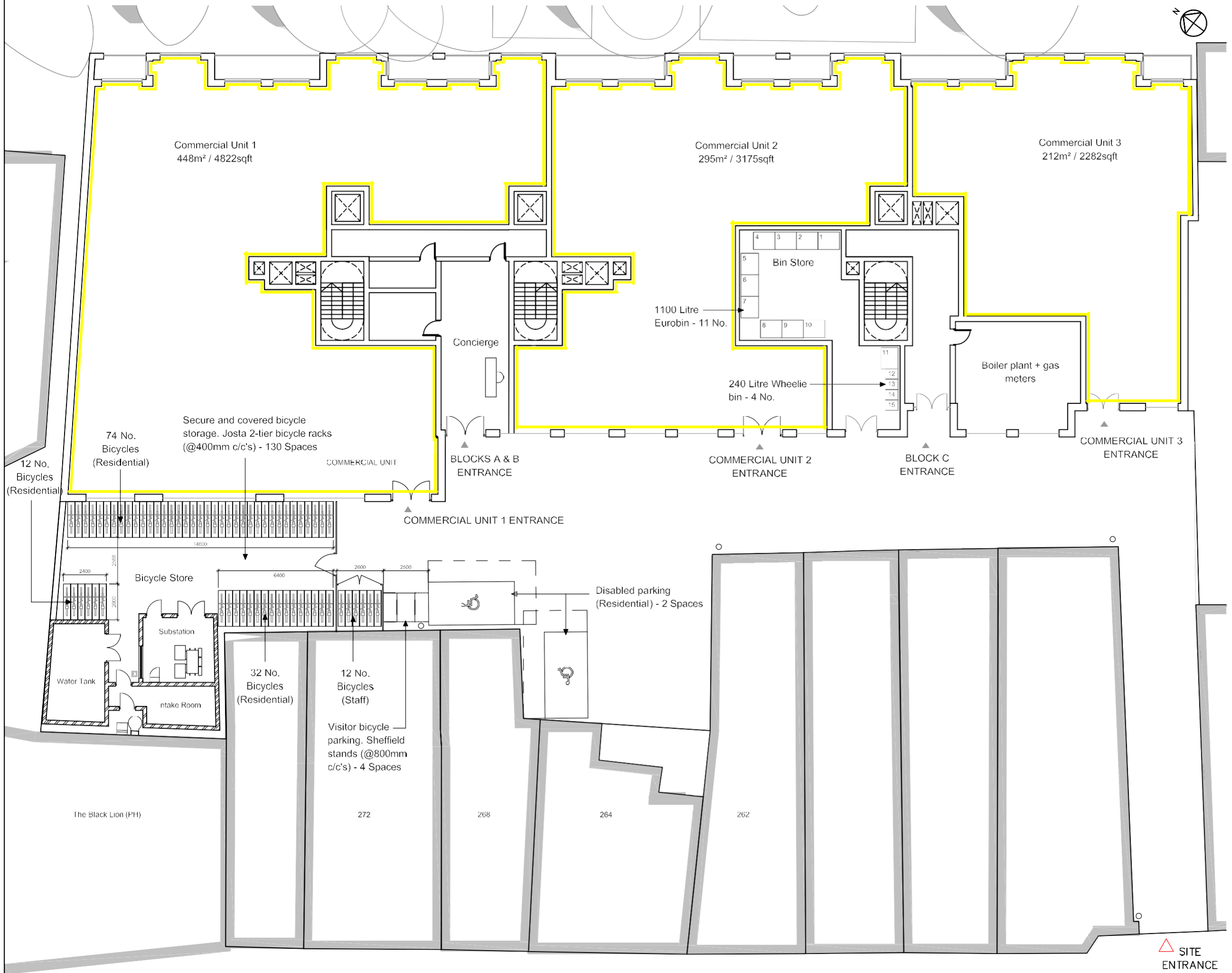
5.1 Summary

5.1.1 This document sets out the waste storage & collection strategy for the mixed-use development at 254 Kilburn High Road, Camden.

5.1.2 This document has also calculated the likely waste generation for each land use proposed within the development, the recycling strategy and the storage requirements as well as internal/external waste routes.

5.1.3 It is concluded that the waste management and refuse collection proposed at 254 Kilburn High Road is appropriate for this scale of development and that servicing and waste collection can be undertaken in an efficient manner.

DRAWINGS



0 1m 2m 3m 4m 5m 6m 7m 8m

1:200

COMMERCIAL AREA:

Unit 1: 448m²
Unit 2: 295m²
Unit 3: 212m²

Total 955m²

Waste Storage

Recyclable & non-recyclable household & commercial waste storage to BS 5906:2005

No. of Apartments = 66
No. of Bedrooms = 134
Average No. of Bedrooms = 2.03
Total collection per week = 11360L

11 No. 1100L Eurobins = 12100L
4 No. 240L Wheelie bins = 960L

Total Commercial Area = 955m²

Collection per week = 4775L
Collection x2 per week = 2388L

4 No. 1100L Eurobins = 4400L
1 No. 240L Wheelie bin = 240L

Cycle Parking

114 Long stay secure residential spaces; 2 short stay spaces for visitors.

11 Long stay staff spaces; 2 short stay spaces for visitors

Total = 125x Secure parking spaces
4x Visitor parking spaces

PLANNING

17/08/18	Client Amendment	F
16/08/18	Client Amendment	E
15/08/18	Client Amendment	D
02/07/18	Client Amendment	C
16/02/18	Increased capacity of bicycle and bin storage	B
21/08/17	General layout revision	A

PROJECT
254 Kilburn High Road
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DRAWING
Ground Floor Plan

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FILE: 3144_050_GROUND FLOOR PLAN (For Planning).dwg

PLANNING

PROJECT
254 Kilburn High Road,
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DRAWING
First Floor Plan

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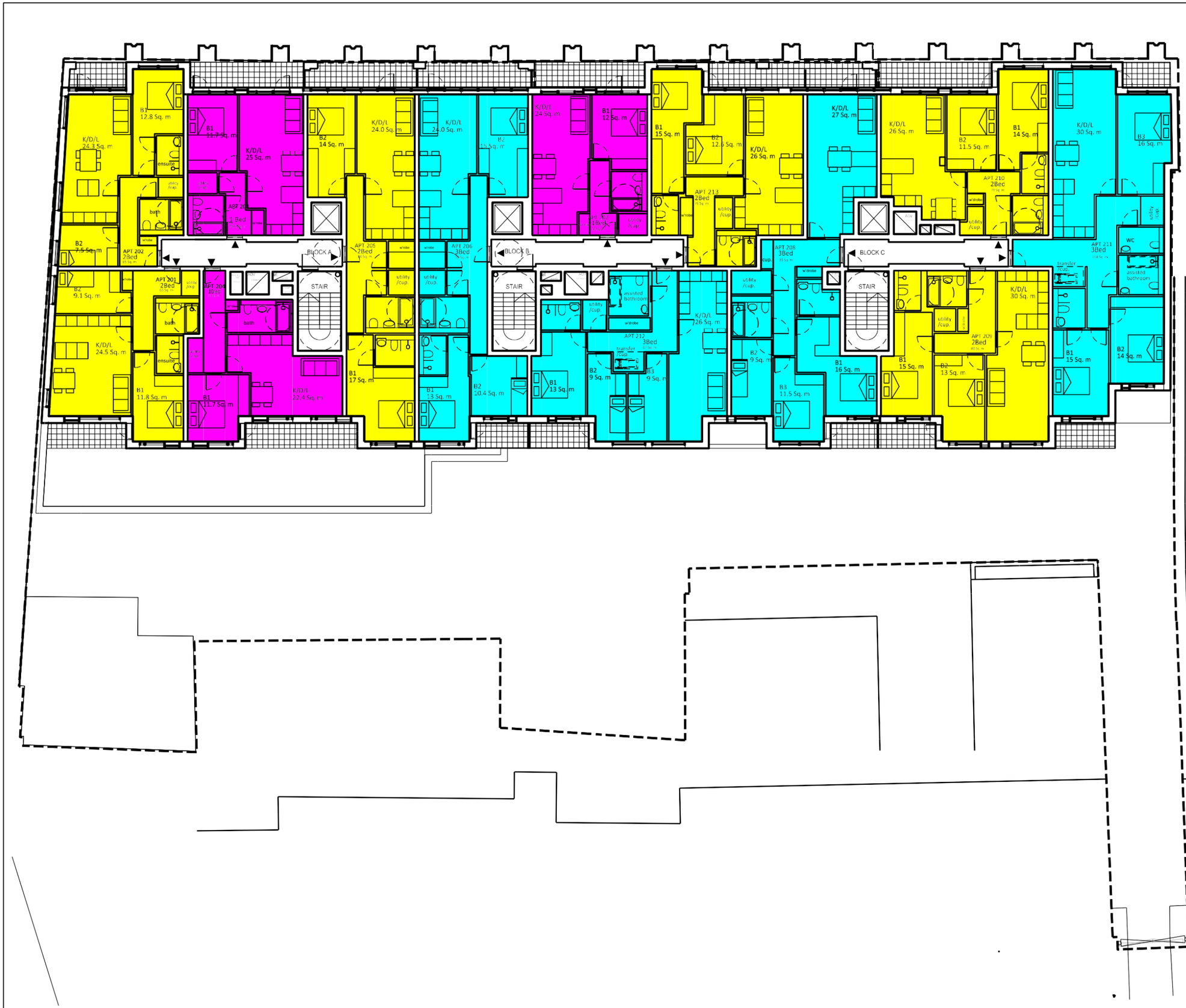

PLANNING

PROJECT
254 Kilburn High Road,
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DRAWING
Second Floor Plan

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PLANNING

PROJECT
254 Kilburn High Road,
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DRAWING
Thirc Floor Plan

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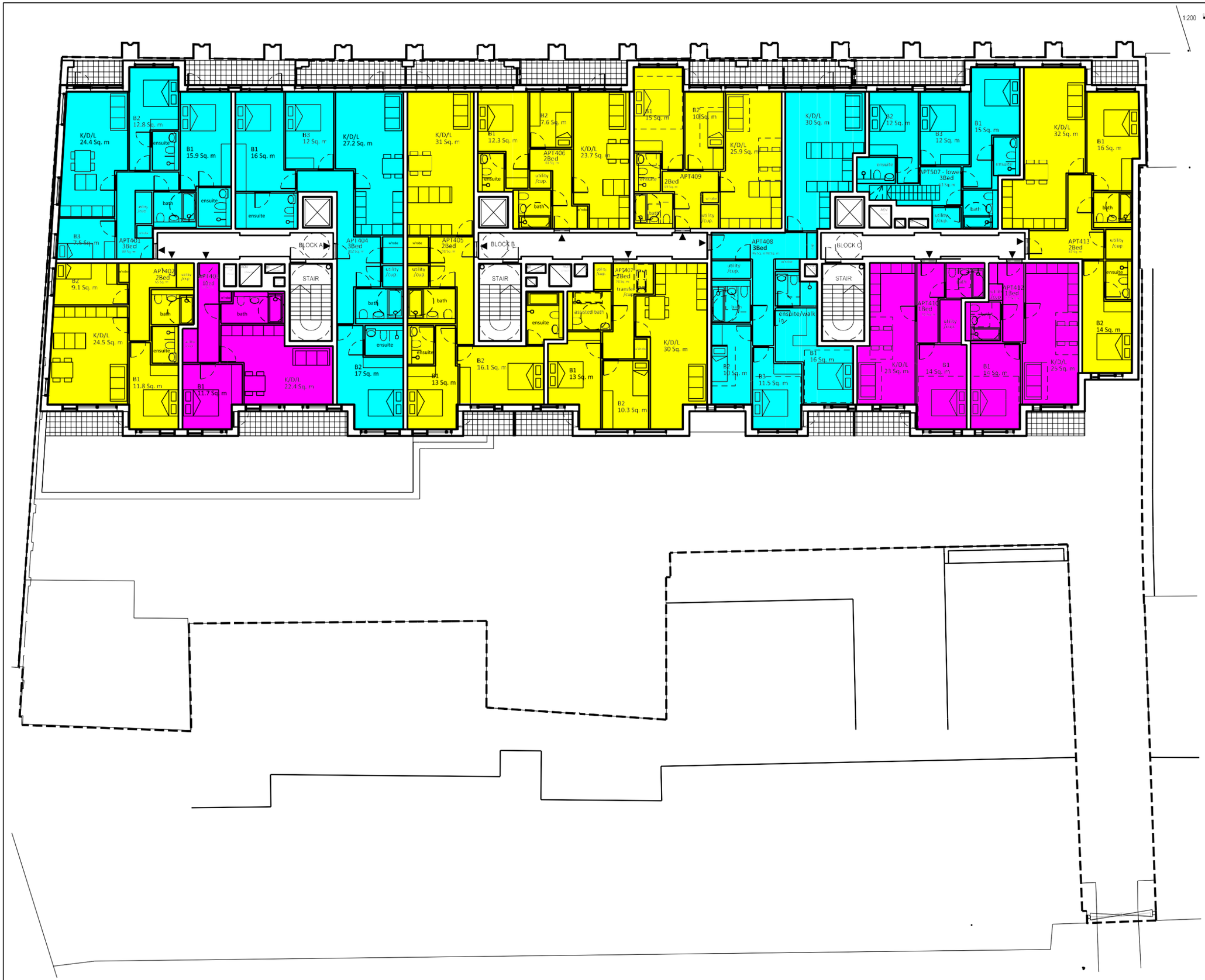

PLANNING

PROJECT
254 Kilburn High Road,
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DRAWING
Fourth Floor Plan

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