



Stag Brewery, Mortlake

Operational Waste Management Strategy

For Reselton Properties

February 2018

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Contents

- 1 Introduction 1**
 - 1.1 Background 1
 - 1.2 Purpose of the report..... 1
 - 1.3 Structure of the report 2
- 2 Site in Context 3**
 - 2.1 Site Location 3
 - 2.2 Development Proposals 3
 - 2.3 Descriptions of Development 5
- 3 Policy and Legislative Background..... 7**
 - 3.1 Introduction 7
 - 3.2 European and National Policy and Guidance 7
 - 3.3 Regional Policy and Guidance 8
 - 3.4 Local Policy and Guidance 9
 - 3.5 Summary 11
- 4 Estimated Waste Arising 12**
 - 4.1 Introduction 12
 - 4.2 Estimated Waste Volumes Guidance 12
 - 4.3 Application A – Development Area 1..... 13
 - 4.4 Application A – Development Area 2..... 15
 - 4.5 Application B – School 16
- 5 Waste Separation and Recycling Proposals 17**
 - 5.1 Introduction 17
 - 5.2 Application A – Development Area 1..... 17
 - 5.3 Application A – Development Area 2..... 19
 - 5.4 Application B – School 20
- 6 Storage and Servicing Logistics 21**
 - 6.1 Introduction 21
 - 6.1 Application A – Development Area 1..... 21
 - 6.2 Application A – Development Area 2..... 24
 - 6.3 Application B – School 27
- 7 Summary 28**
 - 7.1 Introduction 28
 - 7.2 Application A - Development Area 1 28
 - 7.3 Application A – Development Area 2..... 29
 - 7.4 Application B – School 29

Figures

Figure 2.1: Site boundaries for Application A and B 3
Figure 3.1: The Waste Hierarchy (Defra, 2011) 7

Tables

Table 2.1: Development Quantum 4
Table 2.2 Detailed Application residential summary 5
Table 2.3 Maximum floor areas for flexible land uses 5
Table 2.4 Outline Application anticipated residential mix summary 6
Table 4.1: Estimated Waste Volumes for the Residential Use in Development Area 1 13
Table 4.2: Estimated Waste Volumes for the Non-Residential Use in Development Area 1 13
Table 4.3: Estimated Waste Volumes for the Residential Use in Development Area 2 15
Table 4.4: Estimated Waste Volumes for the Non-Residential Use in Development Area 2 16
Table 4.5: Estimated Waste Volumes for the School 16
Table 5.1: Recycling storage provisions for residential units 17
Table 6.1: Estimated Container Requirements – Household Waste – Application A – Development Area 1 21
Table 6.2: Estimated Container Requirements – Household Waste – Application A – Development Area 2 24
Table 6.3: Estimated Container Requirements – Application B – School 27

Appendices

Appendix A Consultation with LBRuT
Appendix B Servicing Plans

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1 Introduction

1.1 Background

- 1.1.1 This Operational Waste Management Strategy has been prepared by Peter Brett Associates LLP (PBA) on behalf of Reselton Properties Limited ('the Applicant') in support of two linked planning applications for the comprehensive redevelopment of the former Stag Brewery Site in Mortlake ('the Site') within the London Borough of Richmond Upon Thames ('LBRuT').
- 1.1.2 The former Stag Brewery Site is bounded by Lower Richmond Road to the south, the river Thames and the Thames Bank to the north, Williams Lane to the east and Bulls Alley (off Mortlake High Street) to the west. The Site is bisected by Ship Lane. The Site currently comprises a mixture of large scale industrial brewing structures, large areas of hardstanding and playing fields.
- 1.1.3 The redevelopment will provide homes (including affordable homes), accommodation for an older population, complementary commercial uses, community facilities, a new secondary school alongside new open and green spaces throughout. Associated highway improvements are also proposed, which include works at Chalkers Corner junction.
- 1.1.4 This Strategy will support the following two planning applications:
- **Application A:** hybrid planning application for comprehensive mixed-use redevelopment of the former Stag Brewery site consisting of:
 - Land to the east of Ship Lane applied for in detail (referred to as 'Development Area 1' throughout); and
 - Land to the west of Ship Lane (excluding the school) applied for in outline detail (referred to as 'Development Area 2' throughout)
 - **Application B:** detailed planning application for the school (on the land to the west of Ship Lane).
- 1.1.5 Full details and scope of all three planning applications are described in the submitted Planning Statement, prepared by Gerald Eve LLP.

1.2 Purpose of the report

- 1.2.1 The purpose of this report is to:
- Identify relevant waste management policy and guidance the development needs to consider and support;
 - Set the waste management aspirations for the development;
 - Identify the waste expected to arise during operation;
 - Present how waste will be separated and stored on Site; and
 - Demonstrate how waste will be collected/serviced.

- 1.2.2 This Strategy has been produced through consultation with LBRuT¹ (see **Appendix A**).
- 1.2.3 This Strategy discusses operational waste only, whilst matters relating to the management of waste during construction are considered separately within the wider Framework Construction Management Statement, prepared by AECOM and submitted in support of these Applications.

1.3 Structure of the report

- 1.3.1 The report is set out in the following format:
- **Section 2:** Site in Context;
 - **Section 3:** Policy and Legislative Background;
 - **Section 4:** Estimated Waste Arising;
 - **Section 5:** Waste Separation and Recycling Proposals
 - **Section 6:** Storage and Servicing Logistics; and
 - **Section 7:** Summary.

¹ This Strategy has been developed and produced through consultation with LBRuT waste team. Meeting with Roland Copley (Inspection and Enforcement Manager), Rita Csonka (Waste Projects Officer) and Lucy Thatcher (Planning Officer) on Wednesday 29th November 2017.

2 Site in Context

2.1 Site Location

- 2.1.1 The former Stag Brewery Site is bounded by Lower Richmond Road to the south, the river Thames and the Thames Bank to the north, Williams Lane to the east and Bulls Alley (off Mortlake High Street) to the west. The Site is bisected by Ship Lane. The Site currently comprises a mixture of large scale industrial brewing structures, large areas of hardstanding and playing fields.
- 2.1.2 The surrounding area is primarily residential but there are also a wide range of local facilities, including primary and nursery schools, local shops and restaurants and the Barnes Hospital, all within easy walking distance of the Site.
- 2.1.3 **Figure 2.1** identifies the Site boundaries within Mortlake for Application A and B.

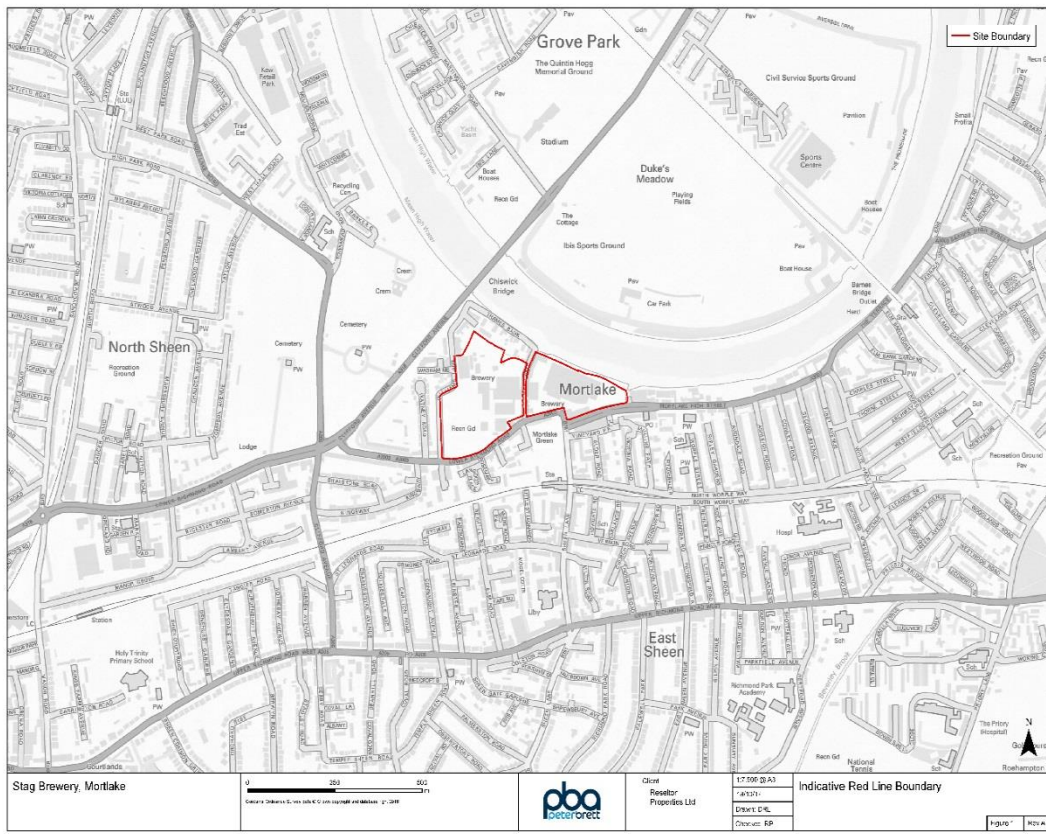


Figure 2.1: Site boundaries for Application A and B

2.2 Development Proposals

- 2.2.1 The Site is the former Stag Brewery, which ceased brewery operations in December 2015. The development proposals have been guided by LBRuT's Planning Brief which was adopted as an SPG in July 2011 as well as the emerging Site Allocation contained within LBRuT's emerging Local Plan (Policy SA 24). The redevelopment will provide homes (including affordable homes), accommodation for an older population, complementary commercial uses, community facilities, a new secondary school alongside new open and green spaces throughout. Associated highway improvements are also proposed, which include works at Chalkers Corner junction.

2.2.2 As outlined in **Section 1**, this Strategy supports the following applications:

- **Application A:** hybrid planning application for comprehensive mixed-use redevelopment of the former Stag Brewery site consisting of:
 - Land to the east of Ship Lane applied for in detail (referred to as ‘Development Area 1’ throughout); and
 - Land to the west of Ship Lane (excluding the school) applied for in outline detail (referred to as ‘Development Area 2’ throughout).
- **Application B:** detailed planning application for the school (on the land to the west of Ship Lane).

2.2.3 **Table 2.1** provides a summary of the development proposals for the hybrid application and the separate application for the school.

Table 2.1: Development Quantum

Land Use	Development Quantum
Application A (Development Area 1)	
Residential	443 units
Unspecified Flexible Floor Areas inc, Retail/Restaurant/Office/Community/Boathouse	4,664 m ²
Hotel	1,668 m ² (16 rooms)
Office	2,424 m ²
Cinema	2,120 m ² (3 screens, 370 seats)
Gym	740 m ²
Management Office	33m ²
Application A (Development Area 2)	
Residential	Up to 224 units
Residential/Assisted Living	Up to 150 assisted living units
Care Home	Up to 80 units
Application B (School Application)	
School	9,319m ² (1,200 pupils)

2.3 Descriptions of Development

Application A – Development Area 1

- 2.3.1 The detailed application, which relates to the area to the east of Ship Lane (Development Area 1), would provide 443 residential units as well as the majority of the non-residential uses within the site, including local shops, restaurants and bars, and leisure and community uses. This is in keeping with the Planning Brief and emerging Site Allocation which sought the creation of a new vibrant centre for Mortlake in this area.
- 2.3.2 Accordingly, the main retail uses will be centred around a new “high street” running parallel to Mortlake High Street through the centre of the Site and the development will also create a more active frontage to the river including new bars and restaurants. The development includes a new 370 seat cinema with three screens, a small hotel / pub with 16 bedrooms and office floor space all of which are located along the Mortlake High Street/Lower Richmond Road frontage. It is also anticipated that this frontage will include a new local convenience store.
- 2.3.3 **Table 2.2** provides a breakdown of the residential development within the detailed application. All residential accommodation in this part of the development will be in the form of apartments.

Table 2.2 Detailed Application residential summary

	1 Bed	2 Bed	3 Bed	4 Bed	Total
Total Residential Units	65	232	138	8	443

- 2.3.4 Development Area 1 reflects the need to maintain a degree of flexibility regarding the end use of some of the non-residential space to allow for the land use to take account of market forces. Accordingly, an area amounting to 4,664 m² at ground floor level has been identified for flexible uses for the provision of local retail, restaurants and bars, community floor space, office and other services. In order to provide sufficient variety and the vitality of the area, maximum floor areas have been identified within this overall flexible space, as set out in **Table 2.3**. For retail only a minimum floor area of 1,255m² has also been identified in order to ensure that the new high street provides an appropriate amount of A1 retail use as part of any mix.
- 2.3.5 The community use is expected to occupy two buildings, the ground floor and part of the first floor of the restored Maltings building (489m²) and the Boathouse (349 m²). At this stage the exact use of the space has not been identified although it is anticipated that the Boathouse is likely to be occupied by a rowing club and with the Maltings used for more general community purposes. Whilst these spaces are applied for within the wider flexible use format, the expectation is that they will be occupied for the aforementioned community uses.

Table 2.3 Maximum floor areas for flexible land uses

Land Use	Floor Space
Retail	2,500 m ²
Financial and Professional Services	200 m ²
Cafés and Restaurants	2,200 m ²
Drinking Establishments	1,600 m ²

Land Use	Floor Space
Offices	2,000 m ²
Community (including Boathouse)	1, 499 m ²

Application A – Development Area 2

2.3.6 Planning permission is sought in outline with all matters reserved for works at ‘Development Area 2’ (the west of Ship Lane), will comprise of:

- *The erection of a single storey basement and buildings varying in height from 3 to 7 storeys;*
- *Residential development of up to 224 units;*
- *Nursing and care home with associated communal and staff facilities;*
- *Up to 150 units of flexible use living accommodation for either assisted living or residential use;*
- *Provision of on-site cycle, vehicle and service parking;*
- *Provision of public open space, amenity and play space and landscaping; and*
- *New pedestrian, vehicle and cycle accesses and internal routes, and associated highway works.*

2.3.7 **Table 2.4** provides a breakdown of the anticipated mix of residential units.

Table 2.4 Outline Application anticipated residential mix summary

	1 Bed	2 Bed	3 Bed	4 Bed	Total
Total Residential units ²	32	87	86	19	224

Application B – School

2.3.8 Planning permission is sought in detail for works to the west of Ship Lane, which comprise of:

- *The erection of a three-storey building to provide a new secondary school with sixth form;*
- *Sports pitch with floodlighting, external MUGA and play space; and,*
- *Associated external works including, landscaping, car and cycle parking, new access routes and associated works.*

² Note: Up to an additional 150 units within blocks 13, 16 and 17 are coming forward as flexible assisted living/residential.

3 Policy and Legislative Background

3.1 Introduction

3.1.1 This section provides a review of the relevant policy and guidance, in relation to waste, to demonstrate it has been appropriately considered within this Strategy and going forward.

3.2 European and National Policy and Guidance

3.2.1 The European Revised Waste Framework Directive (2008/98/EC) sets the framework for UK Waste Policy. The Waste Hierarchy (demonstrated in **Figure 3.1**) runs throughout this policy and ranks waste management options according to what is best for the environment.

3.2.2 The Waste (England and Wales) Regulations 2011 (as amended in 2012) place a duty on waste producers and all handlers of waste to manage waste in accordance with a hierarchy of options where this achieves the best overall environmental outcomes. Therefore, as a producer, the operator/resident of this development must endeavour to reduce, sort and separate waste – for example; by separating the recyclable from the non-recyclable waste before placing out the residual waste for disposal.

3.2.3 These regulations also aim to improve the quality and quantity of material being collected for recycling by placing a duty on waste collectors to enable recyclable material (particularly glass, paper, plastics and metal) is collected separately where it is necessary to ensure the recovery of high quality recyclables and where this is technically, environmentally or economically practicable (TEEP). Although this duty is specifically on the collectors of waste, it is important for any new development to consider the logistical impacts of separating out these materials.

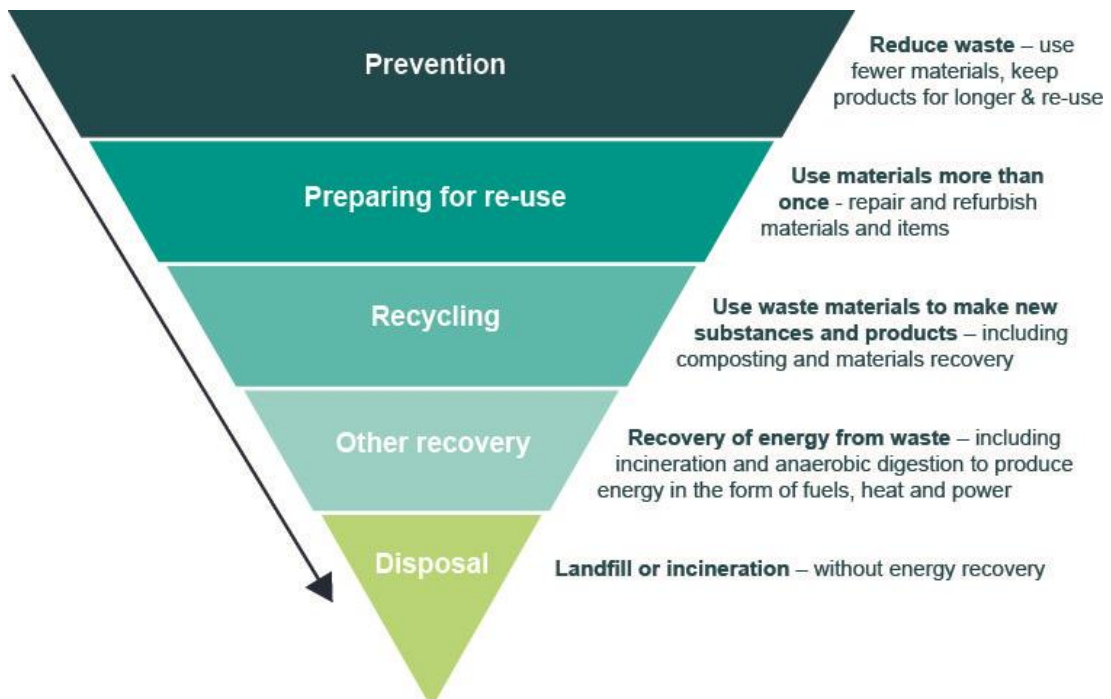


Figure 3.1: The Waste Hierarchy (Defra, 2011)

3.3 Regional Policy and Guidance

Adopted London Plan

- 3.3.1 The overarching strategic policy and guidance which relates to the sustainable management of waste within the LBRuT jurisdiction includes policies set within the London Plan.
- 3.3.2 The London Plan, revised in March 2016, sets the overarching strategic development for sustainable waste management in London's Boroughs and establishes targets for increased recycling and recovery of waste.
- 3.3.3 The London Plan sets out targets for increased recycling, composting and reuse of operational waste for London, with targets of:
- 50% recycling/composting/re-use of municipal solid waste (MSW) by 2020 and 60% by 2031; and
 - 70% recycling/composting/re-use of commercial and industrial (C&I) waste by 2020.
- 3.3.4 These targets are also set within The Municipal Waste Strategy for London: London's Wasted Resource³ and The Mayor's Business Waste Strategy for London⁴. To note, whilst the target for C&I waste is ultimately voluntary for individual businesses, each business should aim to contribute to improving London's recycling performance.
- 3.3.5 Other relevant policies within the London Plan, associated with operational waste and new developments, include:
- 3.3.6 **Policy 5.3 Sustainable Design and Construction:** requires development proposals to achieve specific sustainable design principles, including 'minimising the generation of waste and maximising reuse or recycling'.
- 3.3.7 **Policy 5.16 Waste Net Self-Sufficiency:** discusses how the Mayor aims to work with the London Boroughs and waste authorities, the London Waste and Recycling Board (LW&RB), the Environment Agency, the private sector, voluntary and community sector groups, and neighbouring regions and authorities to:
- Manage as much of London's waste within London as practicable, working towards managing the equivalent of 100% of London's waste within London by 2026;
 - Create positive environmental and economic impacts from waste processing; and
 - Work towards zero biodegradable or recyclable waste to landfill by 2026.

The policy expands upon these points, noting that the following will be achieved by:

- Minimising waste;
- Encouraging the reuse of and reduction in the use of materials; and
- Exceeding the waste targets outlined above.

³ London's Wasted Resource: The Mayor's Municipal Waste Strategy, Nov 2011

⁴ Making Sense of Business Waste. The Mayor's Business Waste Strategy for London. 2011

Emerging London Plan

- 3.3.8 A new London Plan is currently being prepared, which once adopted, will supersede the existing policies within the revised London Plan (2016). The draft new London Plan (published November, 2017) includes a number of policies related to operational waste management that the development needs to consider. The key draft policy is **Policy S17**:
- 3.3.9 **Policy S17 Reducing waste and supporting the circular economy:** states how waste reduction, increases in material re-use and recycling and reductions in waste going for disposal will be achieved by:
1. *Encouraging waste minimisation and waste avoidance through the reuse of materials and using fewer resources in the production and distribution of products;*
 2. *Ensuring that there is zero biodegradable or recyclable waste to landfill by 2026;*
 3. *Meeting or exceeding the recycling targets for each of the following waste streams and generating low-carbon energy in London from suitable remaining waste:*
 - *MSW: 65 per cent by 2030*
 4. *Designing developments with adequate and easily accessible storage space that supports the separate collection of dry recyclables (at least card, paper, mixed plastics, metals, glass) and food.*
- 3.3.10 The new London Plan is currently undergoing consultation and is expected to be adopted in Autumn 2019.

3.4 Local Policy and Guidance

- 3.4.1 The local policy and guidance which relates to waste in the LBRuT area includes policies set jointly by the West London Boroughs within the West London Waste Plan in relation to minerals and waste planning, and planning and development-related policies set by LBRuT. This sub-section outlines the relevant policies in relation to the proposed development.

Adopted West London Waste Local Plan

- 3.4.2 The West London Waste Local Plan was adopted in July 2015 by the West London Boroughs, including; Brent, Ealing, Harrow, Hounslow, Hillingdon, Richmond-upon-Thames and Old Oak and Park Royal Development Corporation. The Plan outlines the vision and strategy for managing waste in the West London area until 2031 and refers to the overarching waste targets outlined in the London Plan, as seen above. Therefore, the proposed development will aim to achieve these targets and manage waste in accordance with the Waste Hierarchy.

Core Strategy

- 3.4.3 The Core Strategy was adopted by LBRuT in April 2009 and the vision, strategic objectives and policies for development in the Borough for the next 15 years. The relevant policy in relation to operational waste management, is set out below:
- 3.4.4 **Policy CP6 Waste:** states how the Borough supports sustainable waste management and will:
- Seek to minimise waste creation, increase household recycling and composting rates to at least 50% by 2020, address waste as a resource and look to disposal as the last option, in line with the waste hierarchy;
 - Work with its partners in the West London Waste Authority; and
 - Monitor changes in the stock of waste management facilities, waste arisings, and the amount of waste recycled, recovered and going for disposal.

Adopted Sustainable Construction Checklist Guidance Document

- 3.4.5 The Sustainable Construction Checklist Guidance Document was adopted by LBRuT in January 2016. This document provides a checklist to help inform developers on sustainability issues relevant to their development. In relation to sustainable waste management, the document makes reference to following the Waste Hierarchy and the encouragement of composting food and organic waste facilities on site to help reduce the amount of waste sent to landfill. A Sustainable Construction Checklist has been prepared and submitted alongside these applications (included as an appendix to the Sustainability Statement, prepared by Hoare Lea).

Adopted Refuse and Recycling Storage Requirements

- 3.4.6 The Refuse and Recycling Storage Requirements Supplementary Planning Document (SPD) was adopted by LBRuT in April 2015. The SPD offers guidance for the sustainable management of waste in the Borough to enhance the overall quality of the environment and reduce adverse environmental impacts from the handling, storage, processing, transportation and disposal of waste. The SPD outlines the following requirements for operational refuse collection and recycling:
- The design of storage facilities should be sufficiently large enough to accommodate different waste containers and allow space for the separation of commercial waste storage and residential waste storage;
 - Accessible and secure provision for the storage of waste and recycling materials, with consideration of LBRuT's highway guidelines and environmental requirements; and
 - Provision of operational waste and recycling provision must accord with LBRuT's collection services and accessibility guidelines.
- 3.4.7 **Sections 4, 5 and 6** of this Strategy expand upon the details provided in this SPD and explain the proposed operational waste strategy and set out how adequate, safe and secure provision will be provided going forward.

Emerging Local Plan

- 3.4.8 LBRuT is currently preparing a new Local Plan for the Borough which, once adopted, will supersede the existing policies within the Core Strategy (2009) and Development Management Plan (2011).
- 3.4.9 The latest Draft Local Plan (4th January – 15th February 2017) includes a number of policies related to operational waste management that the development needs to consider. The key draft policy is **Policy LP 24 Waste Management** which encourages new developments to accord with the Waste Hierarchy and the following requirements:
- All developments are required to provide adequate refuse and recycling storage space and facilities, in line with the Council's SPD on Refuse and Recycling Storage Requirements; and
 - All developments need to encourage that the management of waste, including the location and design of refuse and recycling facilities, is sensitively integrated within the overall design of the scheme.

3.5 Summary

3.5.1 To summarise, the main operational waste management requirements that apply to the development, include:

- Accordance with the Waste Hierarchy;
- To support the increase of recycling and composting of municipal waste by 65% by 2030; and
- To support the delivery of recycling, composting and reuse of C&I waste by 70% by 2020.

3.5.2 To note, the local guidance documents have been taken into consideration throughout the development of this Strategy.

4 Estimated Waste Arising

4.1 Introduction

4.1.1 The different land uses proposed for this scheme will produce different streams and volumes of waste. As a result, this section outlines the estimated operational waste arising from the development.

4.2 Estimated Waste Volumes Guidance

4.2.1 The waste from the operation of the development has been assessed using national benchmarks and local planning guidance. By quantifying the likely volumes of waste that will be generated in this way, an assessment of expected quantities of waste and appropriate management facilities can be integrated with the objective of reducing waste volumes.

4.2.2 The predicted waste volumes from the proposed residential uses and office uses in Application A have been based on the guidance outlined in LBRuT's *Refuse and Recycling Storage Requirements SPD (2015)*. This SPD sets out the following requirements for storage capacity of refuse in new developments:

- **For houses with individual refuse containers:** storage capacity of 240 litres for refuse per household of three bedrooms or fewer and storage capacity of 360 litres for refuse per household more than three bedrooms;
- **For development using communal refuse storage containers:** storage capacity of 70 litres per bedroom; and
- **For offices:** 2.6 cubic metres waste storage should be provided for every 1,000m² gross floor space.

4.2.3 LBRuT do not provide any specific guidance on the expected quantities of other non-residential waste. Therefore, guidance figures for the overall volume of waste likely to arise in the cinema, gym, hotel, retail units, café/restaurants and community facilities proposed in Application A, are from the British Standards (BS 5906:2005): *Waste Management in Buildings – Code of Practice*. For the school facilities proposed in Application B, waste volumes have been estimated on the base storage capacity requirements of 12.7 litres waste per week per student/pupil, as per the guidance outlined in Wandsworth Council's (2014) *Refuse and Recyclables in Developments SPD*.

4.2.4 This approach has been agreed by LBRuT⁵.

⁵ This Strategy has been developed and produced through consultation with LBRuT waste team. Meeting with Roland Copley (Inspection and Enforcement Manager), Rita Csonka (Waste Projects Officer) and Lucy Thatcher (Planning Officer) on Wednesday 29th November 2017.

4.3 Application A – Development Area 1

4.3.1 This sub-section outlines the estimated waste volumes expected during the operation of Development Area 1.

Residential Use

4.3.2 **Table 4.1** sets out the estimated waste volumes of the residential use for Development Area 1.

Table 4.1: Estimated Waste Volumes for the Residential Use in Development Area 1

Assumed Land Use		Expected Weekly Storage Capacity ⁶	Total Expected Waste Volumes (litres per week)
One Bedroom Flat	65	70 litres per bedroom	4,550
Two Bedroom Flats	232	70 litres per bedroom	32,480
Three Bedroom Flats	138	70 litres per bedroom	28,980
Four Bedroom Flats	8	70 litres per bedroom	2,240
TOTAL (litre/per week)			68,250

4.3.3 It is estimated that the residential component of Development Area 1 could result in approximately circa 68,000 litres of household waste per week. The storage provision for this volume of waste is considered in **Section 6**.

Non-Residential Use

4.3.4 **Table 4.2** sets out the estimated waste volumes of the non-residential use for Development Area 1.

Table 4.2: Estimated Waste Volumes for the Non-Residential Use in Development Area 1

Assumed Land Use		Expected Weekly Storage Capacity	Total Expected Waste Volumes (litres per week)
Cinema	2,120 m ²	5 litres waste storage per floor area	10,600
Gym	740 m ²	5 litres waste storage per floor area	3,700
Hotel	1,266 m ² (16 rooms)	350 litres per number of bedrooms ⁷	5,600

⁶ Based on LBRuT's *Refuse and Recycling Storage Requirements SPD* (2015)

⁷ This estimate is based on the assumption that the hotel will be 4/5 star hotel. This is therefore considered a 'worst case scenario' in terms of waste generation.

Assumed Land Use		Expected Weekly Storage Capacity	Total Expected Waste Volumes (litres per week)
Retail	2,500 m ²	10 litres waste storage per floor area	25,000
Financial and Professional Services	200 m ²	2.6m ³ waste storage for every 1,000m ² gross floor space	520
Café/Restaurant	2,200 m ²	75 litres per number of covers ⁸	23,265
Drinking Establishments	1,600 m ²	75 litres per number of covers ⁹	16,920
Office	2,000 m ²	2.6m ³ waste storage for every 1,000m ² gross floor space	5,200
Office (Flexible Floor Area)	2,424 m ²	2.6m ³ waste storage for every 1,000m ² gross floor space	6,302
Community (including Boathouse)	1,499 m ²	5 litres waste storage per floor area	7,495
Management Office	33 m ²	2.6m ³ waste storage for every 1,000m ² gross floor space	86

4.3.5 It is estimated that the non-residential component of Development Area 1 could result in approximately 105,000 litres of commercial waste per week, based on a 'worst case scenario'. The 'worst case scenario' for estimating the waste arising for the proposed non-residential uses has been based on the fixed land use for the proposed offices, gym, cinema and hotel, the maximum floor areas of the flexible floorspace of the other non-residential uses (as outlined in Gerald Eve's 2018 Technical Note) and on typical waste generation rates of similar businesses. Therefore, the estimated waste arisings for the non-residential units is indicative only. The actual provision for non-residential waste will be dictated by the incoming tenants/occupiers and their waste contractors.

⁸ Per number of covers has been based on BREEAM New Construction Guidance (2014) on default occupancy rates by building type.

⁹ Per number of covers has been based on BREEAM New Construction Guidance (2014) on default occupancy rates by building type.

4.4 Application A – Development Area 2

4.4.1 This sub-section outlines the estimated waste volumes expected during the operation of Development Area 2.

Residential Use

4.4.2 **Table 4.3** sets out the estimated waste volumes of the residential use for Development Area 2.

Table 4.3: Estimated Waste Volumes for the Residential Use in Development Area 2

Assumed Land Use		Expected Waste Storage Capacity	Total Expected Waste Volumes (litres per week)	
Flats	One Bedroom Flat	32	70 litres per bedroom	2,240
	Two Bedroom Flats	87	70 litres per bedroom	12,180
	Three Bedroom Flats	74	70 litres per bedroom	15,540
	Four Bedroom Flats	7	70 litres per bedroom	1,960
House	Three Bedroom Houses	12	240 litres per household of three bedrooms or fewer	2,880
	Four Bedroom Houses	12	360 litres per household of more than three bedrooms	4,320
Flexible Assisted Living/Residential ¹⁰	Up to 150 units		70 litres per bedroom	21,140
TOTAL (litre/per week)				60,260

4.4.3 It is estimated that the residential component of Development Area 2 could result in approximately 60,000 litres of residential waste per week. To note, the mix and total number of residential units used to estimate the waste volumes in this sub-section has not been confirmed. The estimated mix and total number of residential units is comparable to the actual mix for Development Area 1, therefore estimations for the waste arising from the proposed

¹⁰ This has been based on LBRuT's guidance on developments using communal refuse storage containers assuming a 17 one bedroom, 117 two bedrooms and 17 three bedrooms mix. The mix and total number of units has not been confirmed, therefore the total expected waste volume per week for the 'Flexible Assisted Living/Residential' land use is indicative only. The actual provision for waste will be dictated once the land use and number of units is confirmed.

residential units in Development Area 2 will only be feasible once the actual mix of housing is confirmed at Reserved Matters.

Non-Residential Use

4.4.4 **Table 4.4** sets out the estimated waste volumes of the non-residential use for Development Area 2.

Table 4.4: Estimated Waste Volumes for the Non-Residential Use in Development Area 2

Assumed Land Use		Expected Waste Storage Capacity	Total Expected Waste Volumes (litres per week)
Care Home ¹¹	Up to 80 units	70 litres per bedroom	12,600
TOTAL (litre/per week)			12,600

4.4.5 It is estimated that the non-residential component of Development Area 2 could result in approximately 12,600 litres of waste per week. To note, the mix and total number of units used to estimate the waste volumes for the Care Home has not been confirmed. Therefore, the estimated waste arisings for the Care Home is indicative only and will only be feasible once the actual mix of housing is confirmed at Reserved Matters. The actual provision for the waste arising from the Care Home will be dictated by the incoming tenants/occupiers and their waste contractors.

4.5 Application B – School

4.5.1 This sub-section outlines the estimated waste volumes expected during the operation of the school proposed in Application B.

Table 4.5: Estimated Waste Volumes for the School

Assumed Land Use	Expected Weekly Storage Capacity	Total Expected Waste Volumes (litres per week)
1,200 pupils	12.7 litres per week per student/pupil	15,240
TOTAL (litre/per week)		15,240

4.5.2 It is estimated that the school could result in approximately 15,000 litres of waste per week. To note, the estimated waste arisings for the school is indicative only. The actual provision for the school waste will be dictated by the incoming tenants/occupiers and their waste contractors.

¹¹ This is based on LBRuT's guidance on developments using communal refuse storage containers assuming 9 one bedroom flats, 48 two bedroom flats and 21 three bedroom flats. The mix and total number of units has not been confirmed, therefore the total expected waste volume per week for the Care Home is indicative only. The actual provision for waste will be dictated once the number of units is confirmed.

5 Waste Separation and Recycling Proposals

5.1 Introduction

5.1.1 This section outlines how different streams of waste arising during the operation of the development will be segregated and stored on Site.

5.2 Application A – Development Area 1

Residential Use

Materials to be collected

5.2.1 Residential units in Development Area 1 have been designed to incorporate appropriate spaces to enable a large proportion of the waste arising to be separated for recycling and as a result reducing the amount of waste requiring disposal.

5.2.2 In accordance with the requirements set by LBRuT, separate recycling bins and general waste bins will be allocated for:

- General waste;
- Mixed paper, card and carton recycling bins; and
- Mixed container recycling bins for plastic, tins, unbroken glass and aerosols.

5.2.3 Although the provision for communal food waste collection is not a requirement for flats with over 5 units, it is proposed that there will be sufficient internal space for one 23 litre food waste bin in each residential unit in Development Area 1. This was suggested by LBRuT, in case the collection of food waste for flats with over 5 units becomes a requirement when the scheme is in operation.

Storage Requirements

5.2.4 In accordance with LBRuT's *Refuse and Recycling Storage Requirements SPD (2015)*, the following recycling storage requirements have been considered within this Strategy and the design process for the residential units in Development Area 1:

Table 5.1: Recycling storage provisions for residential units

Number of units	Mixed Paper, Card and Carton Recycling Bins	Mixed Container Recycling Bins	Total Recycling Bins
Flats of three or more units			
3 to 5	1 x 240 litres	1 x 240 litres	2 x 240 litres
7 to 8	1 x 360 litres	1 x 360 litres	2 x 360 litres
9 to 11	2 x 240 litres	2 x 240 litres	4 x 240 litres
12 to 17	2 x 360 litres	2 x 360 litres	4 x 360 litres

Number of units	Mixed Paper, Card and Carton Recycling Bins	Mixed Container Recycling Bins	Total Recycling Bins
18 to 25	1 x 1100 litres	1 x 1100 litres	2 x 1100 litres
26 to 45	2 x 1100 litres	2 x 1100 litres	4 x 1100 litres
46 to 70	3 x 1100 litres	3 x 1100 litres	6 x 1100 litres

5.2.5 This Strategy and the design process for the residential units in Development Area 1 have assumed the provision of 1100 litre Eurobins for the storage of general refuse waste.

Non-Residential Use

Materials to be collected

5.2.6 The specifics of materials to be collected from the non-residential units in Development Area 1 will be determined by their individual uses and their appointed waste collection contractors. Sufficient space has been allocated within the individual non-residential units to accommodate the separation and collection of a variety of materials.

5.2.7 Non-residential uses in Development Area 1 will aim to provide sufficient storage space to help enable the commercial elements of the development to support the Mayor's target of 70% C&I waste to be recycled.

Storage Requirements

5.2.8 The storage requirements for the non-residential uses in Development Area 1 have been based on the guidance outlined in LBRuT's *Refuse and Recycling Storage Requirements SPD* (2015). Although this SPD only provides specific guidance on the storage requirements for offices, the same principles have been applied to the cinema, gym, hotel, retail units, café/restaurants and community facilities, to ensure that the storage facilities will be sufficiently large enough to accommodate for the expected weekly arisings of waste. This SPD sets out the following requirements:

- 50% of the expected waste capacity of office waste should be retained for the storage of separated waste for recycling.

5.2.9 To note, the non-residential storage areas will be clearly separated from the storage area for the residential waste, with separate access to each use.

5.2.10 This approach has been confirmed through discussions with LBRuT¹².

¹² This Strategy has been developed and produced through consultation with LBRuT waste team. Meeting with Roland Copley (Inspection and Enforcement Manager), Rita Csonka (Waste Projects Officer) and Lucy Thatcher (Planning Officer) on Wednesday 29th November 2017.

5.3 Application A – Development Area 2

Residential Use

Materials to be collected

- 5.3.1 The residential units in Development Area 2 will be designed to incorporate appropriate spaces to enable a large proportion of the waste arising to be separated for recycling and as a result reducing the amount of waste requiring disposal.
- 5.3.2 In accordance with the guidelines set by LBRuT, separate recycling bins and general waste bins will be allocated for:
- General waste;
 - Mixed paper, card and carton recycling bins; and
 - Mixed container recycling bins for plastic, tins, unbroken glass and aerosols.
- 5.3.3 Furthermore, the proposed townhouses in Development Area 2 will all provide sufficient space for storing recyclable and non-recyclable waste when designing kitchen/utility rooms, including a one 23 litre food waste container, as outlined in LBRuT's *Refuse and Recycling Storage Requirements SPD (2015)*. Space will also be provided so that the container can be presented within the property boundary and be visible from the kerbside on the designated collection day.

Storage Requirements

- 5.3.4 The space allocated for waste stores in the residential units of Development Area 2 will be developed once the project reaches detailed design stage and following further consultation with LBRuT. The storage provisions will align with LBRuT's current collection practices and detailed measures for waste provision.
- 5.3.5 At present, LBRuT offers the following measures for domestic waste storage provisions, applicable to the proposed townhouses in Development Area 2:
- Storage capacity of 240 litres for refuse per household of three bedrooms or fewer;
 - Storage capacity of 360 litres for refuse per household more than three bedrooms;
 - Storage capacity for two 55 litre recycling bins; and
 - Storage capacity for 23 litre food waste container.
- 5.3.6 Communal waste facilities are provided to flats which are designed to meet the different collection and storage challenges. LBRuT currently offers the following communal waste storage requirements, which have been considered in the design process for the flats in Development Area 2:
- Storage capacity of 70 litres for refuse per bedroom;
 - Storage capacity for two types of recycling bins to store mixed paper, card and carton and mixed container recycling (see **Table 5.1** for specific requirements).
- 5.3.7 To note, this Strategy has considered the provision of 1100 litre Eurobins in storing communal general waste, as per LBRuT's guidance.

Non-Residential Use

Materials to be collected

- 5.3.8 The specifics of materials to be collected from the care home in Development Area 2 will be determined by its individual uses and their appointed waste collection contractors. Sufficient space has been allocated within the care home to accommodate the separation and collection of a variety of materials. Clinical waste from the proposed care home and assisted living units will also be required to be stored securely and collected separately.

Storage Requirements

- 5.3.9 The waste storage area for the care home will be clearly separated from the storage area for the residential waste, with separate access to each use.
- 5.3.10 As outlined in the previous sections, LBRuT does not provide any specific guidance on storage requirements for care home facilities. To provide preliminary assumptions regarding the storage requirements for the care home, this Strategy has adopted LBRuT's general waste and recycling provisions for office units to the care home to ensure storage facilities will be sufficiently large enough to accommodate the expected weekly arisings of waste (including separate additional storage space provision for recycling). As a result, 50% of the expected waste capacity for the care home will be retained for the storage of recyclable waste. This approach has been confirmed through discussions with LBRuT.
- 5.3.11 The waste storage space for the care home will be development once the project reaches the detailed design stage and following further consultation with LBRuT.

5.4 Application B – School

Materials to be collected

- 5.4.1 The school has been designed to incorporate sufficient space to enable a large proportion of the waste arising to be separated for recycling, and as a result reducing the amount of waste requiring disposal.
- 5.4.2 It is expected that separate recycling bins and general refuse bins will be allocated for:
- General waste bins, including food waste from the canteen;
 - Mixed paper, card and carton recycling bins and;
 - Mixed containers bins for plastic and tins etc.
- 5.4.3 However, the specifics of materials to be collected from the school will be determined through discussions with the appointed waste collection contractor. The school will aim to provide sufficient storage space to help enable the commercial elements of the development to support the Mayor's target of 70% C&I waste to be recycled.

Storage Requirements

- 5.4.4 As outlined in the previous sections, LBRuT does not provide any specific guidance on storage requirements for education facilities. To provide preliminary assumptions regarding the storage requirements for the school, this Strategy has adopted LBRuT's general waste and recycling provisions for office units to the school to ensure storage facilities will be sufficiently large enough to accommodate the expected weekly arisings of waste (including separate additional storage space provision for recycling). As a result, 50% of the expected waste capacity for the school will be retained for the storage of recyclable waste. This approach has been confirmed through discussions with LBRuT.

6 Storage and Servicing Logistics

6.1 Introduction

6.1.1 This section discusses the collection and servicing of the waste arising during the operation of the development.

6.1 Application A – Development Area 1

Residential Use

Waste Container Requirements

6.1.1 **Table 6.1** presents the indicative number of bins that would be required for the collection of household waste from the proposed development. These estimations have been based on the assumption of a 2-weekly collection which was agreed by LBRuT on 29th November 2017.

Table 6.1: Estimated Container Requirements – Household Waste – Application A – Development Area 1

Building Number	Capacity Requirement (litres)	Indicative Number of 1100 litre bins for refuse based on collection twice a week	Indicative Number bins for recycling based on collection twice a week
2	15,610	8	6 x 1100 litre bins
3	6,790	4	2 x 1100 litre bins
4	3,150	2	4 x 240 litre bins
6	2,800	2	4 x 240 litre bins
7	10,430	5	4 x 1100 litre bins
8	11,410	6	4 x 1100 litre bins
9	2,380	2	2 x 360 litre bins
10	3,570	2	2 x 1100 litre bins
11	6,510	3	2 x 1100 litre bins
12	5,600	3	2 x 1100 litre bins

6.1.2 Following discussions with LBRuT, a suitable space for the storage of bulky waste has been allocated in the Refuse & Recycling Collection Stores to manage the movement of bulky waste. The space will be sufficient enough to store a bulk waste storage container which conforms to British Standard BS EN 840: 1997.

Storage of Waste

- 6.1.3 Residents occupying units in Development Area 1 are required to take their waste and recycling to the Basement Level of their building within the development, where the designated refuse areas for household waste will be located. Access is provided by internal lifts within the building. Each of the storage areas will be locked and only accessible by residents and the Facilities Management Team.
- 6.1.4 The majority of residential units (Building(s) 2, 3, 7, 8, 10, 11 and 12) will store their refuse and recycling waste in the basement of each building. Residents occupying Building(s) 4 and 9 do not have access to the basement level and as a result their refuse and recycling stores are located on the ground floor in each building.
- 6.1.5 Each storage area has been designed to incorporate the design requirements as set out in LBRuT's *Refuse and Recycling Storage Requirements SPD* (2015). These design measures include:
- No waste will be stored on the public highway;
 - Household waste and recycling is stored separately from non-residential waste;
 - Pairs of recycling bins will be sited together so that residents can easily access both streams of recycling;
 - Recycling bins will also be located alongside refuse bins so residents can easily access both bins;
 - Clear labels to illustrate where different recyclables and waste materials should be deposited;
 - Sufficient clearance to allow full opening of bin lids;
 - 2m width of access threshold to allow for removal and return of containers whilst servicing; and
 - 900mm clearance space in front of each waste storage container to allow access to use each.
- 6.1.6 It is proposed that all ground floor bin stores will also include the following features:
- A water supply and a trapper gully to allow for regular cleaning;
 - Permanently ventilated;
 - Minimum headroom of 2.2m; and
 - Level with the adjacent path or highway.

Servicing

- 6.1.7 Household waste arising from the Development Area 1 will be collected twice a week by LBRuT. This approach was agreed by LBRuT's waste team.
- 6.1.8 The Facilities Management Team and LBRuT waste team will liaise to coordinate the refuse & recycling collection process and agree the collection days / times and process. On the specified collection day, the Facilities Management Team will move the appropriate bins from the storage area(s) on the Basement Level to the Refuse Stores located on the Ground Floor.

The Refuse Stores will be locked and will only be accessible to the Facilities Management Team.

- 6.1.9 To clarify, the Refuse Stores on the Ground Floor are allocated to the following buildings:
- Building 3 Refuse & Recycling Store is for Buildings 2 and 3;
 - Building 8 Refuse & Recycling Store is for Buildings 7 and 8;
 - Building 12 Refuse & Recycling Store is for Buildings 11 and 12;
 - Building 10 has its own collection store; and
 - Building(s) 4 and 9 do not have access to the Basement Level and so their Refuse Stores are located on the Ground Floor.
- 6.1.10 The Facilities Management Team will provide a highly managed service and will rotate bins within the Refuse Stores on the basement levels to avoid overflowing bins. The bins will be transported between the basement levels to ground floor levels via a dedicated bin lift which operates from the Refuse Collection Storage Rooms directly into the appropriate Refuse & Recycling Holding Store by the Facilities Management Team. The Refuse Store(s) have direct access to agreed collection points as demonstrated in the Transport Assessment (PBA, 2017), also submitted alongside these planning applications. The Facilities Management Team will be responsible for taken out and replacing the bins from the Refuse & Recycling Holding Stores to the collection point, at the agreed time of collection. The location of bin stores and collection points is shown in **Appendix B**.
- 6.1.11 All collection points within this phase of the development will be located within 20m from where the rear of the refuse lorry can safely stop, as required by LBRuT.
- 6.1.12 The goods lift will be large enough to accommodate at least one waste container and a member of the Facilities Management Team. The lift doors and adjacent corridors will also provide sufficient space so that waste containers can be easily manoeuvred, as required by LBRuT.

Non-Residential Use

Waste Container Requirements

- 6.1.13 The non-residential waste will be stored in each individual outlet and stored separately from the residential waste stores in Development Area 1. Sufficient space will be provided to store the minimum number of separate containers and to enable the separation of general waste and recyclable waste.
- 6.1.14 The specific size of these areas will be dependent on both the commercial operation itself, and the frequency the operators wish to have their waste and recycling collected. The waste storage space for this waste will be developed following confirmation of the commercial tenants.
- 6.1.15 Furthermore, the frequency of collection will be determined at a later date following discussions with the appointed waste collection contractors.
- 6.1.16 It is expected that the detailed waste arrangements for these units would be secured via planning condition.

Storage of Waste

- 6.1.17 The designated non-residential storage areas in Development Area 1 will be clearly separate from the storage area for the residential waste. This area will be locked and only accessible to the commercial tenants and the Facilities Management Team.
- 6.1.18 All material will be contained within the dedicated containers to avoid amenity issues associated with litter and vermin.

Servicing

- 6.1.19 Businesses have a duty of care of ensuring that their waste is collected and disposed of appropriately and an obligation (through the Waste Regulations as amended 2013) to adhere to the principles of the waste hierarchy. The non-residential waste is likely to be collected by private contractors working in the area or through the LBRuT's trade waste and recycling service. Each business will contract a waste collection service that is appropriate to their needs.
- 6.1.20 Refuse and recycling waste will be collected by a dedicated waste contractor(s). Following their appointment, specifics relating to material separation and frequency of collection will be refined and finalised.
- 6.1.1 On the specified collection day, the Facilities Management Team will move the appropriate bins from the storage areas on the Basement Level of Buildings 1 and 5 to the 'Refuse & Recycling Stores' on the Ground Floor. The goods lift will be large enough to accommodate at least one waste container and a member of the Facilities Management Team. The lift doors and adjacent corridors will also provide sufficient space so that waste containers can be easily manoeuvred.
- 6.1.2 The collection days /times can be specified with the contractor to make sure they do not conflict with the household waste collection.

6.2 Application A – Development Area 2

Residential Use

Waste Container Requirements

- 6.2.1 **Table 6.2** presents the indicative number of bins that would be required for the collection of household waste of the residential units within Development Area 2. These estimations have been based on the assumption of one waste collection per week, as discussed with LBRuT.

Table 6.2: Estimated Container Requirements – Household Waste – Application A – Development Area 2

Building Number	Capacity Requirement (litres)	Indicative Number of 1100 litre bins for refuse based on weekly collection	Indicative Number of 1100 litre bins for recycling based on weekly collection
18	22,540	21	12 x 1100 litre bins
19	9,380	9	6 x 1100 litre bins

- 6.2.2 In accordance with LBRuT's collection practices, the storage requirements for the 24 townhouses (blocks 20 and 21) are as follows:
- General Refuse Bin: 240 litre bins for three bedroom units and 360 litre bins for four bedroom units;
 - Black Box: for plastic bottles, pots, tubs, trays, tins, unbroken glass and aerosols;
 - Blue Box: for papers and cardboard; and
 - Food Waste Container.
- 6.2.3 Furthermore, the storage requirements for the proposed flexible living/residential units (Blocks 13, 16 and 17) will be in accordance with LBRuT's communal refuse storage requirements (see **Section 4.2** and **Table 5.1**). There will also be storage provision for clinical waste if the units become assisted living units.
- 6.2.4 The waste storage space for the proposed residential units in Development Area 2 will be developed once this phase reaches detailed design stage via Reserved Matters submissions and following further consultation with LRRuT.
- 6.2.5 Following discussions with LBRuT, suitable space for the storage of bulky waste will also be incorporated within the detailed design of the flats to alleviate problems created by fly-tipping. It is recommended that space will be sufficient enough to store a bulk waste storage container which conforms to British Standard BS EN 840: 1997, as required by LBRuT.

Storage of Waste

- 6.2.6 The proposed residential units in Development Area 2 will continue to be developed to meet LBRuT's storage and collection arrangement.
- 6.2.7 Following discussions with LBRuT, it has been proposed that all of the flats, comprising affordable housing, will have their waste storage areas located on the ground floor in each building. This design decision was raised by LBRuT in case there will not be a Facilities Management Team present to coordinate the management and movement of household bins from the basement levels to ground floor levels in the affordable housing units.
- 6.2.8 The following bin storage parameters have been considered for the townhouses and will continued to be discussed at detailed design:
- Waste will not be stored on the public highway;
 - Household waste and recycling is stored separately from non-residential waste;
 - The provision of space for storing recyclable and non-recyclable waste, including food waste, when designing kitchens and utility rooms; and
 - Space will be provided so that food waste containers can be presented within the property boundary and visible from the kerbside on the designated collection day.
- 6.2.9 The following bin storage parameters have been considered for the communal waste stores and will continued to be discussed at detailed design:
- Pairs recycling bins will be sited together so that residents can easily access both streams of recycling;
 - Recycling bins will be located alongside refuse bins so residents can easily access both bins;

- Waste will not be stored on the public highway;
- Household waste and recycling is stored separately from non-residential waste;
- Sufficient space will be provided to store the minimum number of separate containers to which to store refuse and recycling and allow access to all containers;
- Clear labels to illustrate where different recyclables and waste materials should be deposited;
- The waste stores will include; a water supply and a trapper gully to allow for regular cleaning, natural ventilation, minimum headroom of 2.2m and be level with the adjacent path or highway;
- Sufficient clearance to allow full opening of bin lids;
- 2m width of access threshold to allow for removal and return of containers whilst servicing; and
- 900mm clearance space in front of each waste storage container to allow access to use each.

Servicing

- 6.2.10 Household waste arising from Development Area 2 will be collected weekly by LBRuT, which was agreed by LBRuT's waste team.
- 6.2.11 The storage areas for all residential dwellings in Development Area 2 will be positioned so that the occupiers are not required to carry refuse or recycling more than 30 meters from an external door. Furthermore, at detailed design stage consideration will also be given to access for disabled persons, where applicable.
- 6.2.12 Since this part of the planning application is outline the servicing strategy will be developed at detailed design via Reserved Matters submissions.

Non-Residential Use

Waste Container Requirements

- 6.2.13 The waste arising from the proposed care home will be stored in its own individual outlet, to ensure household waste from Development Area 2 is always stored separately from the care home waste. Sufficient space provisions will be made for the separation of general waste, recyclable waste and clinical waste.
- 6.2.14 The specific size of the waste storage space for the care home will be developed once this phase reaches detailed design stage and will be dependent upon the frequency the tenant wishes to have its waste and recycling collected. The waste storage space for the care home will be developed following confirmation of the operating tenants.
- 6.2.15 It is expected that the detailed waste arrangements for these units would be secured via planning condition.

Storage of Waste

- 6.2.16 The care home will have a dedicated 'waste and recycling storage area'. This area will be locked and only accessible to the tenants and the Facilities Management Team.

- 6.2.17 All material will be contained within the dedicated containers to avoid amenity issues associated with litter and vermin.

Servicing

- 6.2.18 Refuse and recycling waste will be collected by a dedicated commercial waste contractor(s). Following their appointment, specifics relating to material separation and frequency of collection will be refined and finalised at a later date following discussions with the appointed waste collection contractors.
- 6.2.19 It is expected that the detailed waste arrangements for these units would be secured via planning condition.

6.3 Application B – School

Waste Container Requirements

- 6.3.1 **Table 6.3** presents the indicative number of bins that would be required for the collection of school waste from the proposed development.
- 6.3.1 The estimated waste container requirements for the school is indicative only. The actual provision for school waste will be dictated by the incoming tenants/occupiers and their waste contractors.

Table 6.3: Estimated Container Requirements – Application B – School

Use	Capacity Requirement (litres)	Indicative Number of 1100 litre bins for refuse based on weekly collection	Indicative Number of 1100 litre bins for recycling based on weekly collection
School	15,240	7	7

Storage of Waste

- 6.3.2 The storage areas for the school will be locked and only accessible to the tenants and the Facilities Management Team.
- 6.3.3 All material will be contained within the dedicated containers to avoid amenity issues associated with litter and vermin.

Servicing

- 6.3.4 Refuse and recycling waste will be collected by a dedicated commercial waste contractor(s). Following their appointment, specifics relating to material separation and frequency of collection will be refined and finalised at a later date following discussions with the appointed waste collection contractors.
- 6.3.5 It is proposed that refuse vehicles will be able to utilise the bus parking spaces adjacent to the main entrance outside school opening and closing hours. These spaces are adjacent to external bin store/recycling area as well as entrance doors. This will allow ease of waste disposal.
- 6.3.6 The collection days/times can be specified with the contractor to make sure they do not conflict with the household waste collection and school opening and closing hours.

7 Summary

7.1 Introduction

- 7.1.1 Waste generated on Site through the occupation of the proposed development will be managed in an appropriate and sustainable way. It will follow the principles of the Waste Hierarchy 'eliminate, reduce, reuse, recycle' to enable the environmental, social and economic risks from waste to be reduced and national and local policy aspirations to be supported.
- 7.1.2 Both adopted and emerging local guidance documents have been taken into consideration throughout the development of this Strategy. The main operational waste management targets that apply to this development, include:
- Accordance with the Waste Hierarchy;
 - To increase the recycling and composting of municipal waste by 65% by 2030; and
 - To increase the recycling, composting and reuse of C&I waste by 70% by 2020.
- 7.1.3 This Strategy has been developed and agreed through consultation with LBRuT's Waste Team on 29th November 2017.

7.2 Application A - Development Area 1

Residential Use

- 7.2.1 It is estimated that the occupation of the residential use of Development Area 1 would generate approximately of 68,000 litres of waste per week, which has been based upon the guidance outlined in LBRuT's *Refuse and Recycling Storage Requirement* (SPD) for residual waste and recycling capacity for residential waste.
- 7.2.2 The designated refuse areas for household waste have been designed to store the number of separate bins outlined in **Table 6.1** and are large enough to all access to all containers for residents and the Facilities Management Team. Furthermore, these designated areas ensure that the residential and non-residential waste from Development Area 1 is stored and collected separately.
- 7.2.3 Residents occupying units in Development Area 1 are required to take their waste and recycling to the Basement Level of their building within the development, where the designated refuse areas for household waste will be located. Each of the storage areas will be locked and only accessible by residents and the Facilities Management Team.
- 7.2.4 Household waste from the Development Area 1 will be collected twice a week by LBRuT. This approach was agreed by LBRuT's Waste Team, on 29th November 2017. The Facilities Management Team and LBRuT waste team will liaise to coordinate the refuse & recycling collection process and agree the collection days / times and process. On the specified collection day, the Facilities Management Team will move the appropriate bins from the storage area(s) on the Basement Level to the 'Refuse & Recycling Collection Stores' located on the Ground Floor.

Non-Residential Use

- 7.2.5 The estimated waste arisings for the non-residential units summarised in this Strategy are indicative only. The actual provision for non-residential waste will be dictated by the incoming tenants/occupiers and their waste contractors.
- 7.2.6 To note, the non-residential waste will be stored in each individual outlet and stored separately from the residential waste stores in Development Area 1. The specific size of these areas will

be dependent on both the commercial operation itself, and the frequency the operators wish to have their waste and recycling collected. The waste storage space for this waste will be developed following confirmation of the commercial tenants.

- 7.2.7 Furthermore, the frequency of collection will be determined at a later date following discussions with the appointed waste collection contractors.

7.3 Application A – Development Area 2

Residential Use

- 7.3.1 It is estimated that the occupation of the residential use of Development Area 2 would generate approximately 60,000 litres of waste per week, which has been based upon the guidance outlined in LBRuT's *Refuse and Recycling Storage Requirement (SPD)* for residual waste and recycling capacity for residential waste. To note, this figure is indicative only and will be subject to change once the actual mix of housing is confirmed at Reserved Matters.
- 7.3.2 In comparison to Development Area 1, the household waste from Development Area 2 will be collected once a week by LBRuT. This arrangement was agreed by LBRuT's Waste Team on 29th November 2017 due to the proportion of affordable housing in this Development Area. This collection agreement will be discussed further with LBRuT following confirmation of the fixed mix of housing.
- 7.3.3 There will also be space provision for the storage of food waste for the townhouses in this Development Area and an appropriate area for the storage of bulky waste to alleviate problems created by fly-tipping.
- 7.3.4 To note, the proposed residential units in Development Area 2 will continue to be developed to meet LBRuT's storage and collection arrangement.

Non-Residential Use

- 7.3.5 It is estimated that the operation of the care home would generate approximately 12,600 litres of waste per week. To note, this figure is indicative only and will be subject to change once the actual mix of housing is confirmed at Reserved Matters.
- 7.3.6 The waste arising from the proposed care home will be stored in its own individual outlet and stored and collected separately to the residential waste stores in Development Area 2. Sufficient and secure space provisions will be made for the separation and storage of general waste, recyclable waste and clinical waste. The specific size of this area will be dependent on both the operation of the care home itself, and the frequency the operators wish to have their waste and recycling collected.
- 7.3.7 It is expected that the detailed waste arrangements for this unit would be secured via planning condition.

7.4 Application B – School

- 7.4.1 It is estimated that the operation of the school will generate approximately 15,000 litres of waste per week, based on a pupil intake of 1,200. The estimated waste volumes and container requirements for the school is indicative only. The actual provision for school waste will be dictated by the incoming tenants/occupiers and their waste contractors.
- 7.4.2 Refuse and recycling waste will be collected by a dedicated commercial waste contractor(s). Following their appointment, specifics relating to material separation and frequency of collection will be refined and finalised at a later date following discussions with the appointed waste collection contractors.

Appendix A Consultation with LBRuT

NOTES

Subject: Stag Brewery Meeting Notes with LBRuT (29.11.17)

Date: 29th November

Attendees: Natalie Maletras, Richard Mallet, Kathleen Hallquist, Emma-Mai Eshelby, Roland Copley, Rita Csonka and Lucy Thatcher

Waste Collection

- Waste collection is weekly collections in Mortlake
- Waste and recycling will be collected on the same day
- The development is to likely be the first stop on the waste collection route, due to the volume of waste required to be collected from the site.
- Waste contract will be renewed in 1 year

Phase 1 - Detailed Component

- Waste storage facilities for the residential uses are to be located within the underground car park
- An estate management company will be responsible for transferring waste from the underground stores to the surface for collection at specific collection points – this will be a highly managed scheme
- Waste and recycling will be collected on the same day, with two collections per week to be made. The cost will be 50% of the cost of commercial waste collection services, although LBRuT will confirm
- Commercial waste collection will be subject to a separate regime but will be controlled by the management company to ensure that it operates efficiently and that collections are timed to avoid peak traffic hours

Phase 2 – Outline Component

- This will less likely to be managed by Facilities Management
- It is recommended that waste storage facilities for residential uses are to be located within ground floor stores. No residential waste will be stored within the underground car parks
- Waste will be collected weekly

Care Home and Health Care Facilities

- Care home and health care units will be collected as commercial waste. Collection will be agreed at a later date
- Estimated storage facilities for assisted living units will be based on LBRuT's waste storage capacity for residential units
- Clinical waste needs to be considered for all units. Storage and collection of clinical waste will be considered at detailed design

Food Waste

- Currently, there is no requirement for food waste collection for flats in Mortlake. Only townhouses in Phase 2 have a requirement for storage of food waste – this will be incorporated into design codes

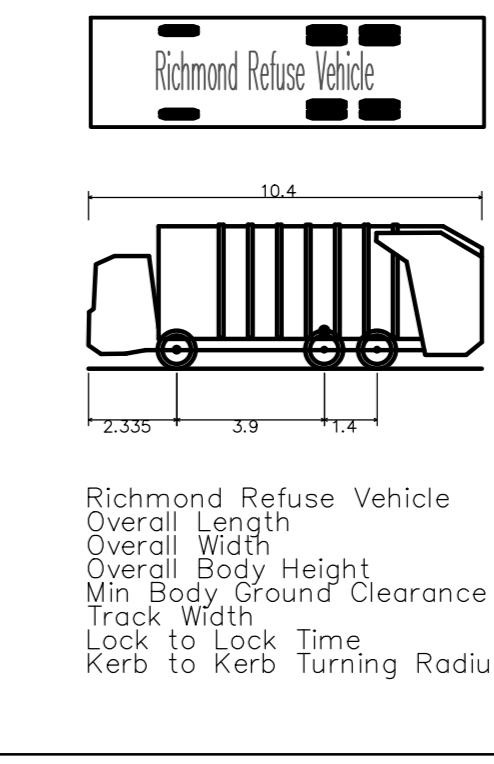
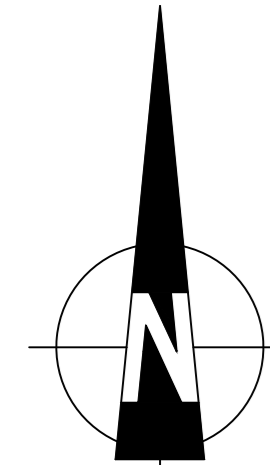
NOTES

- Recommended that there is sufficient storage within Phase 1 and 2 for the storage of food waste to accommodate this, if this becomes a requirement when the scheme is within operation

Bulky Waste

- There is no specific requirement for the storage of bulky waste
- LBRuT recommend that there is a holding area for bulky waste within one of the ground floor waste stores in Phase 2 of the development
- LBRuT offers chargeable collection of bulky goods

Appendix B Servicing Plans



- 1 BED
- 1 BED (L)
- 1 BED (S)
- 2 BED
- 2 BED (L)
- 2 BED (M)
- 3 BED
- 3 BED (H)
- 4 BED
- 4 BED (H)
- ASSISTED LIVING
- BIKE ST
- CARE HOME
- CINEMA
- FLEXIBLE USE
- GAS METER ROOM
- HOTEL
- KIOSK
- OFFICE
- REFUSE
- REFUSE STORE
- RESTAURANT/BAR
- SCHOOL
- SUBSTATION
- VEHICLE ACCESS RESTRICTED TO SPECIFIED TIMES
- FORMAL LOADING BAY
- INFORMAL LOADING BAY



C	Masterplan updated, building uses & loading bays revised	04.01.18	REM	RAP	RAP
B	Landscape base updated, tracking & kerb geometries revised	14.12.17	REM	RAP	RAP
A	Landscape base updated, tracking & kerb geometries revised	15.11.17	REM	-	-
Mark	Revision	Date	Drawn	Chkd	Appd

SCALING NOTE: Do not scale from this drawing. If in doubt, ask.
 UTILITIES NOTE: The position of any existing public or private sewers, utility services, plant or apparatus shown on this drawing is believed to be correct, but no warranty is given or implied. Other such plant or apparatus may also be present but not shown. The Contractor is therefore advised to undertake his own investigation where the presence of any existing sewers, services, plant or apparatus may affect his operations.

Drawing Issue Status: **FOR PLANNING**

**STAG BREWERY, MORTLAKE
 DELIVERY AND SERVICING STRATEGY
 PHASE 1 - REFUSE TRUCK**

Client
**RESELTON
 PROPERTIES LTD**

Date of 1st Issue: 19.10.2017
 No Scale: 1:500

Designed	REM	Drawn	REM
Checked	MB	Approved	RAP
Revision	C		

Drawing Number: **38262/5501/076**

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