Watkins Payne

Avondale Phase 1b to 2

Circular Economy Statement

Issue 2

Client Name:	London Borough of Hillingdon
Property:	Land at Avondale Drive, Hayes
Project Reference:	5779
Issue:	Issue 2
Date:	December 2025

Prepared by:	KC
Checked by:	BL
Validated by:	AF

C O N T E N T S

EXECUTIVE SUMMARY

This Circular Economy Statement has been prepared in accordance with condition 37 for hybrid planning permission for the redevelopment of the Avondale Drive Estate and relates to Phase 1b and 2. It has been prepared in line with the GLA's Circular Economy Statement Guidance and adheres to the principles set out in the approved draft Circular Economy Statement.

Current and future trends demonstrate the need for a paradigm shift in the way resources are consumed to avoid ecological collapse, significant disruption to production lines and other business risks. A circular economy has been defined by WRAP as an alternative to a traditional linear economy (make, use, dispose) in which we keep resources in use for as long as possible, extract the maximum value from them whilst in use, then recover and regenerate products and materials at the end of each service life. There are also considerable economic opportunities created by a shift to a circular economy.

In contrast to a linear 'take-make-dispose' economy, a circular economy builds overall system health by gradually decoupling economic activity from the consumption of finite resources. This should be underpinned by a transition towards renewable energy sources, and is based on three principles:

1. Conserve resources and source ethically
2. Design to eliminate waste (and for ease of maintenance)
3. Manage waste sustainably and at the highest value

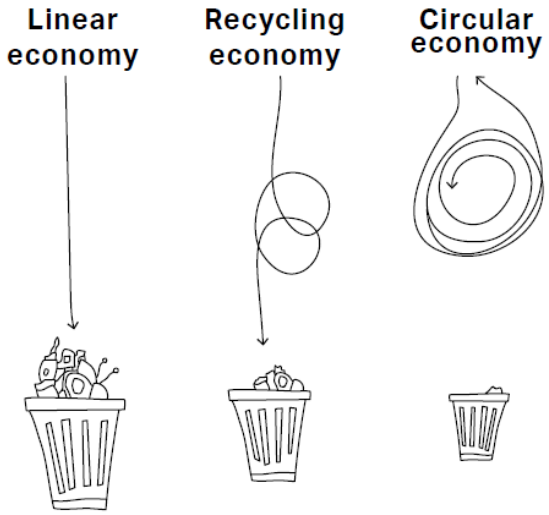

Figure 1: *Courtesy of Circular Flanders*

The end goal is to retain the value of materials and resources indefinitely, with no residual waste at all. This is possible, requiring transformational change in the way that buildings are designed, built, operated and deconstructed.

The main Circular Economy targets for the site are:

- 95 per cent reuse/recycling/recovery of construction and demolition waste.
- 95 per cent beneficial use of any excavation waste.
- 65 per cent recycling of municipal waste by 2030.
- 20% recycled content of materials by value.

1.00 INTRODUCTION

1.01 Application

This Circular Economy Statement has been prepared by Watkins Payne on behalf of the London Borough of Hillingdon ('LBH') in support of a reserved matters application for Land at Avondale Drive, pursuant to Condition 1 of the hybrid permission for the site. A Section 73 application (application ref: 76551/APP/2025/2861) is currently pending and will be determined prior to the approval of this Reserved Matters Application. Therefore, this RMA responds to the revised wording of the planning conditions proposed within the Section 73 application.

Planning Condition 37 of the hybrid planning permission states the following:

Each application for reserved matters shall be accompanied by a detailed Circular Economy Statement and Operational Waste Management Strategy in line with the GLA's Circular Economy Statement Guidance, which shall be submitted to and approved in writing by the Local Planning Authority. The statement shall adhere to the principles set out in the draft Circular Economy Statement. The development shall be carried out in accordance with the details so approved.

1.02 Existing Building

The site occupies the majority of the Avondale Drive Estate comprising Phases 1b and 2 (Development Zones 2 and 3) of the wider masterplan. The original wider estate consists of three 13-storey blocks of flats containing 144 homes in total, all of which are two bedroom homes. This RMA follows the completion of Phase 1a, new apartment building of 30 homes, located at the western end of the estate.

The surrounding area generally comprises two to three storey residential dwellings (including that to the southern side of Avondale Drive); Hitherbroom Park is located to the north of the site and Minet Infant School is located to the west.

1.03 Proposed Building

The description of the proposed development is as follows:

Submission of Reserved Matters Application (Access, Appearance, Landscaping, Layout and Scale) pursuant to Condition 1 of Application ref:76551/APP/2025/2861 (Outline permission (with all matters reserved) for residential floorspace (Class C3) including demolition of all existing buildings and structures; erection of new buildings; new pedestrian and vehicular accesses; associated amenity space, open space, landscaping; car and cycle parking spaces; plant, refuse storage, servicing area and other works incidental to the proposed development;) for the erection of dwellings with associated landscaping, amenity space, parking, access, and associated works.

Figure 2: *Site Plan – All Phases*

Figure 3: *Proposed Ground Floor Layout*

1.04 Purpose

The aim of this circular economy statement is to demonstrate how the development will incorporate circular economy measures into all aspects of the design, construction and operation process.

This statement is structured as follows:

- **Section 1** – an introduction to the site and the buildings.
- **Section 2** – summary of any relevant national or local planning policies.
- **Section 3** – an outline of the circular economy goals and strategic approach of the project, namely partial retention and refurbishment.
- **Section 4** – the circularity design approaches both in relation to the existing development and the new development in the context of key circular economy principles.
- **Section 5** – approach waste management including the demolition, construction and operational stages.
- **Section 6** – how performance will be monitored and reported.
- **Section 7** – conclusion of key circular economy targets.

1.05 Reservation

This report has been prepared solely for the use of the applicant and Watkins Payne accept no responsibility for its use by any third parties.

2.00 POLICY REVIEW

2.01 The London Plan (2021)

As the overall strategic plan for London, the new London Plan (March 2021) sets out an integrated economic, environmental, transport and social framework for the development of London over the next 20-25 years.

Policy SI 7 (reducing waste and supporting the circular economy) is considered most pertinent to this report:

B. Referable applications should promote circular economy outcomes and aim to be net zero-waste. A Circular Economy Statement should be submitted, to demonstrate:

1) *how all materials arising from demolition and remediation works will be re-used and/or recycled*
2) *how the proposal's design and construction will reduce material demands and enable building materials, components and products to be disassembled and re-used at the end of their useful life*
3) *opportunities for managing as much waste as possible on site.*
4) *adequate and easily accessible storage space and collection systems to support recycling and re-use*
5) *how much waste the proposal is expected to generate, and how and where the waste will be managed in accordance with the waste hierarchy.*
6) *how performance will be monitored and reported.*

C. Development Plans that apply circular economy principles and set local lower thresholds for the application of Circular Economy Statements for development proposals are supported.

The Mayor of London's Circular Economy Statement Guidance (March 2022), as referenced in the London Plan (Policy SI7), has been used to prepare this Circular Economy Statement to accompany the planning application.

2.02 London Environment Strategy (2018)

The Greater London Authority's (GLA's) London Environmental Strategy sets out an ambitious vision for improving London's environment for the benefit of all Londoners. One of the key themes, as set out in Chapter 10, is the transition to a low carbon circular economy:

A low carbon circular economy is one in which as much value as possible is extracted from resources, through their use and reuse, before they become waste. As London grows, it must invest in low carbon infrastructure and services to achieve healthier, zero emission, resource efficient growth. This can be achieved by manufacturing goods that are made to last, rather than be disposed of, and by creating systems that allow existing goods to be reused and recycled.

2.03 London Borough of Hillingdon Local Plan

The Local Plan for the London Borough of Hillingdon is comprised of two parts: Part 1 – Strategic Policies (adopted November 2012) and Part 2 – Development Management Policies and Site Allocations (adopted January 2020). These documents, together with the West London Waste Plan (WLWP, adopted 2015) and the current London Plan, constitute the statutory development plan for the borough.

Policy EM11: Sustainable Waste Management in Part 1 Strategic Policies states that:

- *The Council will require all new development to address waste management at all stages of a development's life from design and construction through to the end use and activity on site, ensuring that all waste is managed towards the upper end of the waste hierarchy.*

- *The Council will promote using waste as a resource and encouraging the re-use of materials and recycling.*

Policy DMIN 4: Re-use and Recycling of Aggregates in Part 2 Development Management Policies state that:

- *The Council will promote the recycling of construction, demolition and excavation waste.*

3.00 CIRCULAR ECONOMY GOALS AND STRATEGIC APPROACH

The strategic approach for this development centres on this development being classified as a long-life new development. This classification has been selected because the development has been designed for an expected life of over 10 years, in keeping with the project brief and design objectives for an adaptable and future proofed building designed to allow for the changing/upgrading/replacement of the building layers and components. Figures 4 and 5 show the Decision Tree approaches for this project.

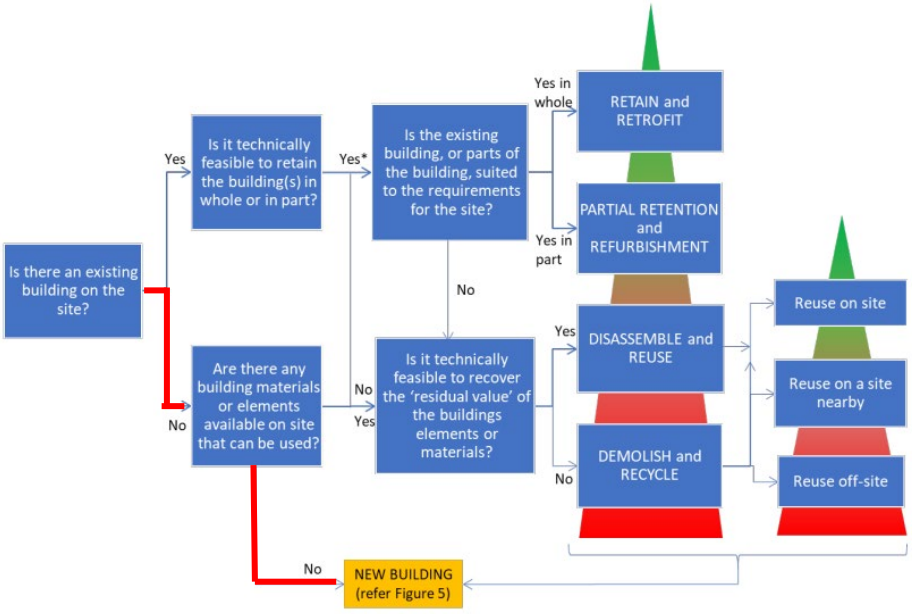

Figure 4: *Decision Tree approach for the development*

As seen in Figure 4, the red pathways indicate the route taken to establish the preferred strategy for the development, which is:

- to construct a new building
- to demolish/deconstruct and recycle materials
- to follow the waste hierarchy for materials on site.

Stock condition surveys and maintenance reports must have concluded that the flats did not meet modern living standards and it would have been uneconomical to bring them up to decent homes and modern living standards around insulation and fire safety. These surveys would have formed part of the business case for regeneration over continued refurbishment along with the opportunity to increase density and house more council tenants.

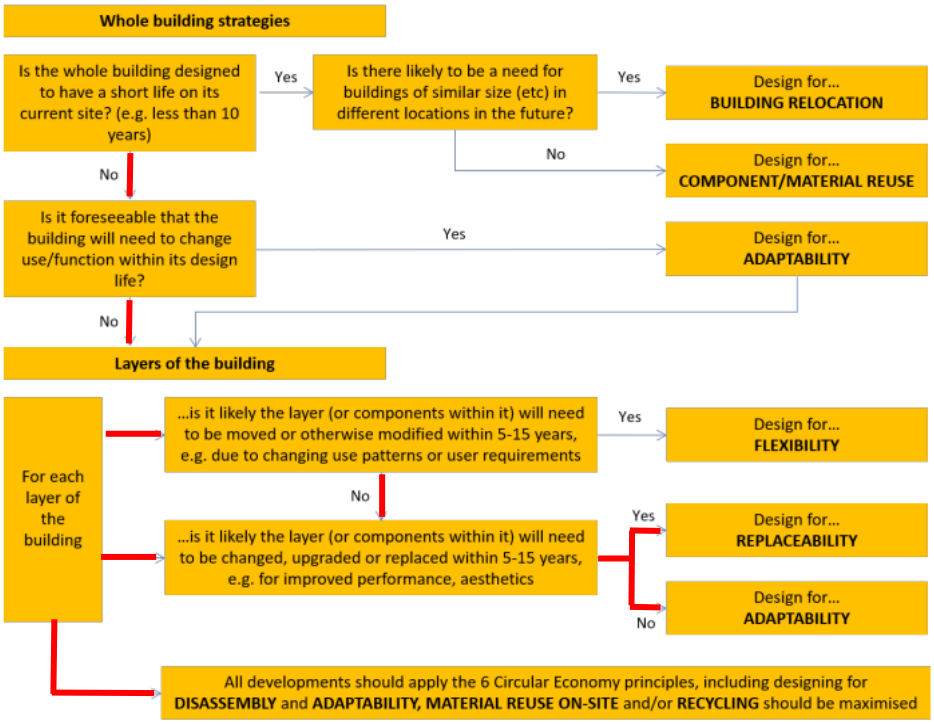

***Figure 5**: Whole building and building layer approach*

As seen in Figure 5, the red pathways indicate the route taken to establish the preferred strategy for the development, which are:

- whole building approach to design for adaptability
- for each building layer, the approach is to design for replaceability and adaptability.
- as in line with the Circular Economy approach, all developments should also design for disassembly, adaptability, material reuse on-site and/or recycling should be maximised.

3.01 Building in Layers

The proposed building is designed to have a long life on its current site (e.g. more than 10 years). Furthermore, it is not foreseeable that the building will need to change use/function within its design life. As a result, each layer of the building will be assessed separately with a particular focus on designing for replaceability and adaptability.

A building comprises several ‘layers’, each with their own life cycle and life span (see Figure 6). The design approach for this development acknowledges these distinctions and these ‘layers’ will form the basis of several of the circular economy strategies covered within this report.

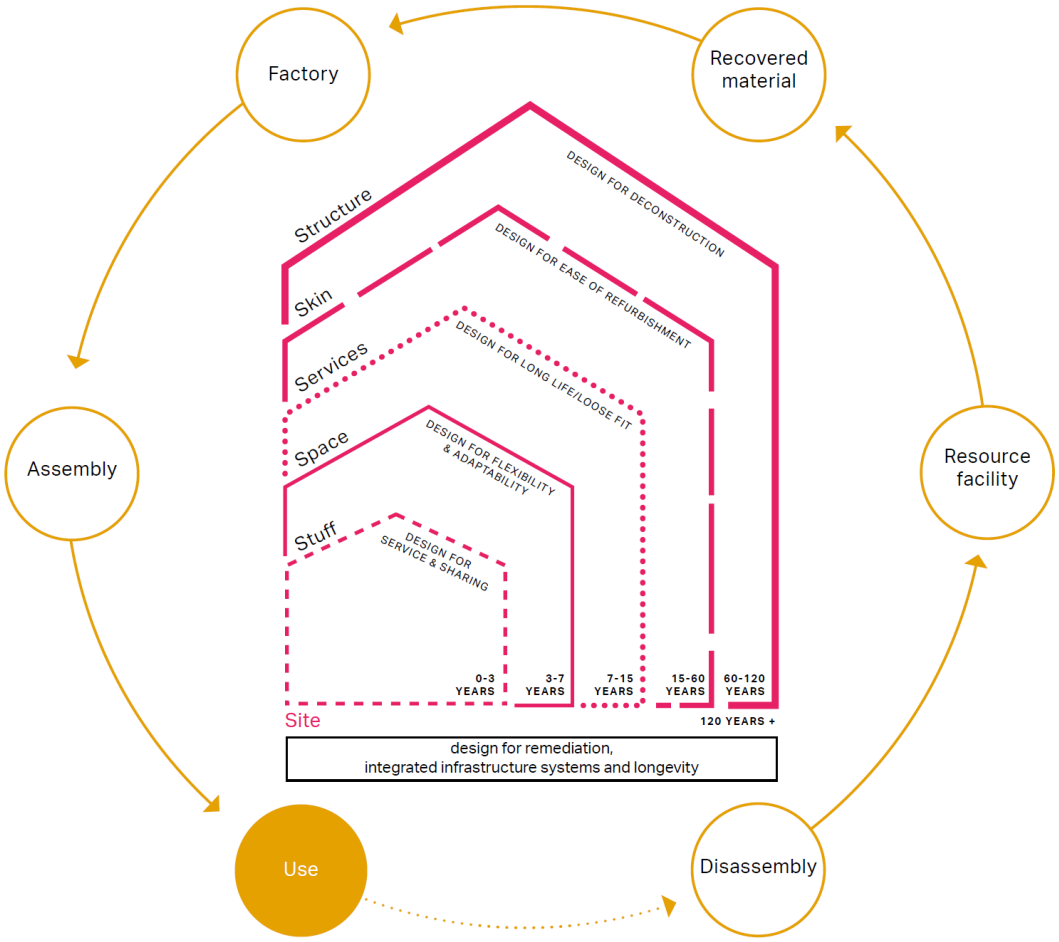

Figure 6: *Courtesy of Useful Projects (see Frank Duffy's 'Shearing Layers' concept described in 'How Buildings Learn' by S. Brand, 1994)*

4.00 CIRCULARITY DESIGN APPROACHES

4.01 Design Approaches for Existing Development

Possible options for the redevelopment of the site were assessed in accordance with the GLA's decision tree for design approaches for existing structures/buildings. The rational for demolition and the construction of a new building has been provided below:

Retain and Retrofit

It is assumed that the existing building cannot support the additional loading of the proposed new development, therefore it is not feasible to retaining the existing modest structure.

Partial Retention and Refurbishment

It is assumed that the existing building cannot support the additional loading of the proposed new development, therefore it is not feasible to retaining the existing modest structure.

Disassembly and Reuse

Concrete waste from demolition can be crushed and graded on-site for use within the proposed development, whether utilised in the superstructure, or used as roofing ballast. Our target is to divert 100% of the demolition concrete from landfill. If there is insufficient storage for stockpiling concrete, a third-party company will recycle the concrete. If crushed on site then some of the material can be used as the piling mat for the development or hardcore beneath the slabs / roads. Reuse of brick is considered impracticable due to age, quality and quantity of stock available. Potentially to reuse existing brick stock within BOH areas / rear of site. Reuse of electrics is impracticable due to the age of the core installation. Raised access flooring (RAF) may have high reusability potential and should be reused on another proposed development or sold to a distributor.

Demolition and Recycling

If there is insufficient storage for stockpiling concrete, a third-party company will recycle the concrete. Structural steel is widely recycled and will be separated as part of the demolition process. Similarly, reinforcement will be separated from the concrete and sent to recycling centres to be returned into the manufacturing process of new steel. Currently structural steel contains at least 60% of recycled material. There is potential to sell metal to salvage enterprises. If this is not possible metal elements can be set aside for re-use/ recycling (open-loop recycling). Glass can be crushed for use as recycled glass. Due to the age of the existing building, there is little opportunity for the glazing units to be returned to the manufacturer for closed-loop recycling. Gypsum should be segregated with care taken to avoid any contaminants, and contaminating waste streams. Plasterboard can be recycled into new plasterboard manufacture; contribute to cement manufacture or be used in land improvement in agriculture. Gypsum-containing wastes must be separated from other wastes if landfilled. The plasterboard can't be reused on-site. Depending on the type of mineral wool insulation present, this may be suitable for upscale recycling to be transformed into new insulation materials. If bricks cannot be reused within the development, it is recommended that it is sent for recycling.

4.02 Design Approaches for New Development

Component and/or Material Reuse

The building is designed with a focus on reusing materials at the end of their lifespan. Key materials, including concrete, steel, and bricks, are fully recyclable. The building incorporates mechanical fixings for easy disassembly, allowing components such as doors, windows, and internal fixtures to be replaced or repurposed. The design prioritizes sustainability by specifying materials that can be reused or recycled, minimizing waste and supporting the building's longevity.

Adaptability

Adaptability is achieved through flexible structural design, including a generous structural grid and non-load-bearing internal partitions, which allow for easy reconfiguration of spaces. The building's layout supports future changes in function or internal use without significant structural modifications. The substructure and superstructure have been designed to accommodate potential future uses, while adaptable spaces like car parking areas can be repurposed if needed.

Flexibility

Flexibility is embedded in the building design through modular systems and adaptable layouts. Internal configurations can be modified without major structural interventions, supporting changing needs over time. The building features flexible floor plans, allowing for internal partitions to be added or removed as required. Additionally, services and utilities are designed to be easily accessible for future upgrades or replacements, ensuring the building can respond to evolving requirements.

Replaceability

Replaceability is a key principle, with components like windows, doors, services, and white goods designed for easy replacement or renewal. The building systems, including HVAC and plumbing, are designed to be easily accessed for future upgrades or replacement without disrupting the overall structure. Standardized components, such as white goods, ensure simple replacements over time. A maintenance strategy will guide residents and operators on replacing elements efficiently, while all removed components will be recycled or reused.

Disassembly

The building is designed for long-term use with future disassembly and material reuse in mind. Most components, including doors, windows, and services, have a 60-year lifespan, after which they can be replaced, retrofitted, or recycled. Mechanical fixings are prioritized to allow easy removal of elements, while apartment services are designed for isolation and targeted replacement without disruption. Concrete, steel, and bricks are recyclable at end-of-life, although the substructure and superstructure are not designed for full disassembly. A coordinated strategy ensures all components are designed for future deconstruction, with detailed plans for recycling, reuse, and safe removal in place.

Longevity

The building is designed for a minimum 60-year service life, with durable materials, robust structural design, and efficient maintenance strategies. Both the substructure and superstructure are built for long-term durability, supported by regular maintenance plans for key elements like concrete, steel, and services systems. Adaptable spaces, such as potential repurposing of car parking areas, enhance functional resilience, while low-maintenance materials and efficient services minimize operational losses. A coordinated strategy ensures

the building's components, including the shell, structure, and services, are regularly assessed and maintained to exceed their expected lifespan. Regular reviews and condition assessments will ensure timely interventions to maintain the building's performance over time.

General

In addition, the following circular economy strategic design approaches will be considered in relation to the new development:

- Use reclaimed materials and products with a high level of recycled content.
- Use less material in the design – e.g. use new thin insulation materials to reduce the depth of wall thickness and maximise overall building net areas.
- Use standardised material sizes within design to facilitate future reuse.
- Do not over-specify, e.g. consider the required purpose of a room when specifying sound insulation to avoid the unnecessary use of materials; however, this has to be weighed against flexibility in the use of the room.
- Identify opportunities to incorporate modular products and systems that can more easily disassembled / replaced.
- Simplify and optimise materials and components (e.g. use full height doors or doors with fan lights above (i.e. to ceiling) to avoid cutting sheets of plasterboard).
- Adopt a reliable and secure supply chain, utilising materials, and products widely available and commonly used within the sector.

4.03 End-of-Life Strategy

The following end-of-life strategy will be established to facilitate the disassembly and recovery of components and materials when the building reaches the end of its life.

The steel used in the proposed building will be designed for enhanced reusability at the end of the building's life. This strategy applies to both the existing structure and the new construction.

Major plant items will be made accessible to ensure easy replacement when they reach the end of their serviceable life. The requirements for plant replacement will be considered throughout the design process identifying provision for replacement of equipment componentry and entire items of plant throughout the life of the building. This will be summarised into a plant replacement strategy which can be used by the building owner/operator. The building will be completed to a high standard incorporating equipment from high quality manufacturers minimising breakdown or requirement for plant replacement as a result of poor-quality equipment. Comprehensive operation and maintenance manuals will be provided at handover such that the building owner/operator can deploy an enhanced level of maintenance to the equipment in place. With higher levels of maintenance, the equipment components lifespan can be extended/maximised and if appropriate, can be reused in the event of a complete building refurbishment/redevelopment.

The materials relating to the M&E plant, equipment, cabling, pipework and ductwork are readily recycled. Therefore, the end-of-life removal would be to send the plant and equipment to be broken down and recycled. All refrigerant charge would be pumped down and recycled prior to any strip out.

A BIM model will be produced which will contains details on materials specifications and how these elements can be disassembled. Containing the material specification allows for the eventual design team to analyse the materials within the building and the suitability for reuse. Then failing this they will be able to advertise this for others to reuse the material. This

removes the need for further audits to be conducted at the end-of-life stage and facilitates a much smoother transition into increasing the circularity of materials.

Furthermore, the O&M manual will be produced by the Contractor and provided to building maintenance team / building owner at handover. This will provide building design, maintenance information and contact details for product suppliers. This will also include end-of-life details where relevant.

5.00 WASTE MANAGEMENT

5.01 Managing On-Site Waste

The developer or building operator will be contractually responsible for all operational waste reporting for the proposed development. This reporting will be based either on number of container lifts per waste stream, or collection weight data if available. Data requirements and reporting methods will be agreed with the relevant authorities once all elements are occupied.

The site is made up of the following structures:

- 2 x 12 story, brick/concrete RC frame-built flats.

The demolition works comprise of the following:

- Demolition of structures to ground slab level including full soft strip and asbestos removal.
- Removal of all concrete ground slabs/foundations.
- Crushing concrete/hardcore on site to 6F2 for reuse.

Concrete arisings and non-concrete masonry from the demolished buildings will be crushed on site to be used as a capping layer/piling mat over the area or used as infill to voids and other areas which need to be infilled. Tarmac material to be crushed to a type 2 certified material ready for use as a drainage run cover.

Through good practice measures, occupants will be encouraged to reduce and prevent waste. Both the developer and the LBH waste management department will be encouraged to engage with residents upon occupation, to ensure they are aware of how to minimise their waste.

Community-led waste minimising initiatives will be encouraged, such as partnering with organisations that can redistribute redundant items or furniture on site, including:

- Warp-it;
- Collectco;
- and Reuse Network.

LBH is part of the West London West Authority (WLWA) who host campaigns and local events including:

- Clothes Swaps;
- Reusable Nappy Events; and
- Fixing Factory for broken technology

In addition, the following circular economy strategic approaches will be considered in relation managing on-site waste for the new development:

- Talk to suppliers about returnable packaging solutions.
- Consider opportunities for offsite fabrication, where components are installed in a factory environment the waste rate should be lower compared with onsite installation.
- Apply tighter specifications to work procedures to avoid waste and allow the use of offcuts.
- Consider how work sequences affect the generation of construction waste and work with the Contractor and specialist subcontractors to understand and minimise these.
- Discuss options for packaging reduction with Contractors and suppliers.
- Use ordering procedures that avoid waste, e.g. no over-ordering and take-back schemes for material surplus and offcuts.
- Ensure the products are stored correctly and handled carefully to avoid damage. This includes organising a systematic approach to storing off-cuts for further use on the site, or for local community reuse projects.

5.02 Designing Out Waste

The project integrates circular principles from the outset to minimise material use and prevent waste generation. A Pre-Redevelopment Audit will identify materials suitable for reuse or on-site recycling before works begin. Material efficiency is prioritised through an optimised structural strategy, including regular column and slab arrangements, minimised transfer structures, and localised use of thicker slabs only where required, such as at podium levels.

Embodied carbon reductions are being explored by increasing GGBS content from 25% to ≥30% in both substructure and superstructure concrete, subject to cost and design development. Further measures under consideration include exposing concrete to enhance thermal mass, reducing operational energy for heating and cooling.

Precision is improved through BIM, allowing accurate material specification and reducing over-ordering and off-cuts. Efficient spatial and services design—including stacked floorplates and a streamlined central plant arrangement—reduces the amount of plant and distribution infrastructure needed, lowering material demand.

Collectively, these strategies ensure that waste is designed out through efficient use of resources, reduced embodied carbon, and long-life, low-maintenance structural solutions.

5.02 Demolition Waste

Demolition waste is managed through circular recovery and high-value material retention. A Pre-Demolition Audit assesses existing components and materials to maximise reuse and recycling and to minimise disposal to landfill.

Concrete arisings and non-concrete masonry from the demolished buildings will be crushed on site to be used as a capping layer/piling mat over the area or used as infill to voids and other areas which need to be infilled. Tarmac material to be crushed to a type 2 certfied material ready for use as a drainage run cover.

Key structural materials - particularly concrete and reinforcing steel - offer strong recovery potential. Concrete can be infinitely recycled into aggregate for new construction, and reinforcement steel is 100% recyclable into new steel products.

These measures ensure that demolition activities prioritize resource recovery, support closed-loop material cycles, and significantly reduce waste sent to landfill.

5.03 Municipal Waste Generation and Management

The Operational Waste Management Plan by Velocity Transport Planning Limited considers the potential impacts that may arise from waste generated during the operational phase of the Proposed Development, with the overall aim of developing a strategy for legislative compliance and good practice in the separation, storage and collection of waste arising.

This OWMS outlines:

- The quantity of municipal waste the Proposed Development is expected to generate once operational;
- How operational waste will be managed in accordance with the Waste Hierarchy;
- How operational waste management performance will be monitored and reported; and
- That measures such as consolidated, smart logistics and community-led waste minimisation schemes have been explored.

The London Plan Policy SI 7 indicates the target of at least 65% of any municipal waste to be recycled by 2030, and no biodegradable or recyclable waste to be disposed of to landfill by 2026. 2.4.5 Residential recycling rates are dictated by the collection authority; facilities have been designed in accordance with LBH requirements stated in guidance from Officers and BS5906:2005 – Waste Management in Buildings – Code of Practice. As recycling performance increases, the waste storage can be adapted to reflect these changes and meet the relevant 65% target.

The Waste Hierarchy strategy, in accordance with the London Plan, will be used to ensure that all demolition waste (along with any excavation plus construction waste) is reduced or reused where possible prior to being disposed of via recycling or refuse collection.

Residential waste streams will include:

- Residual waste;
- Dry Mixed Recycling (DMR); and
- Food waste.

LBH currently accepts the following types to be put into the DMR bin, including:

- Cardboard;
- Mixed paper;
- Plastic packaging;
- Tins and cans;
- Glass; and
- Aluminium foils.

LBH currently does not provide separate collection and recycling services for food waste from private apartments. It is expected that LBH will introduce a weekly food waste collection service to every property across the borough to comply with recent legislation.

This legislation may also potentially require LBH to separate paper and card from other materials within the DMR stream. It is not anticipated that it will be required to segregate the DMR into further individual waste streams (hard plastics, films, aluminium, glass, other plastics and metals).

If this becomes necessary to reflect prevailing legislation, the overall waste storage capacity would not be increased (only the number of separate waste streams). Hence, the residential waste stores could be configured to accommodate further waste stream segregation.

Individual waste streams will be transported to suitably licenced facilities for processing at a Materials Recycling Facility (MRF), Energy from Waste (EfW) or Anaerobic Digestion (AD) facility or bulking and onward transfer at a Waste Transfer Station (WTS).

6.00 MONITORING PERFORMANCE

It is intended that the Circular Economy Statement will be continually developed throughout the demolition, construction and operation phases to provide greater detail and transparency to the specific measures and targeted circular economy ambitions.

A Main Contractor will be appointed and, with input from the professional team, will develop a construction strategy, sequence and methodology that will be able to further reduce waste arising from the construction activities through a combination of material selection, modular design and prefabrication (where possible).

The procurement process will ensure that specialist trade Contractors will proactively support the circular economy ambitions and the selection of materials will be sustainably led.

As part of the commitment to meet the GLA requirements for Circular Economy and an aspiration to divert construction waste from landfill, the Contractor will be required to regularly monitor and record the site's waste reduction performance.

During the demolition, the details of the actual materials arisings and the waste management methods used are to be recorded and compared with the forecasted data. This will aid in assessing the performance against the set targets. Upon completion of the project, any impediments to the achievement of the objectives must be reviewed to ensure that in future projects these barriers can be overcome.

It is the duty of care of the respective site management personnel that all waste is managed in accordance with the procedures as set out within the Operational Waste Management Plan. A summary of waste management measures should be included and clearly defined within relevant sub-contract documents, and a copy of the Operational Waste Management Plan should be made available to all agents as necessary.

Regular discussions should be held between the building owner and tenants at the site to ensure no ongoing issues / conflict arises from the allocated use of the various refuse stores.

All refuse collections will be appropriately monitored / recorded to maximise efficiency of waste removals from the site. Over the course of the building's operation, the building owner will inform the Council of any significant alterations made to the refuse collection schedule (i.e. any required increase in frequency of collections). All receipts for commercial waste removals and notes on the tonnage of transferred waste will be retained for monitoring purposes.

The volume of various waste streams will be recorded to ensure future targets can be set to reducing the proportion of residual waste generated by the development.

The building owner / manager should periodically review the content of the Operational Waste Management Plan to ensure that all procedures remain relevant and up-to-date. Such reviews should account for and address the waste management strategy and its interaction with other site functions, such as parking, fire safety procedures, impact on neighbours, the local highway network and visitor access, for example.

<u>Targets</u>

Once operational, management of the premises should establish the tonnage of waste generated at the earliest opportunity to establish the baseline to set future targets against.

Future targets should seek to reduce the overall volume of waste generated by the development. Targets should also ensure that any proportions of waste that are generated are shifted towards re-use and recycling where possible to do so. The processing methods

for commercial waste should be recorded by site management so that targets can be revised once met, encouraging a continued objective to sustainable manage all waste.

Monitoring

Following the establishment of site-specific waste targets, the process for monitoring the waste management strategy should be implemented by both the building owner / manager. The overall waste streams, tonnage and processing method should be recorded.

A log should be filed to record all matters pertaining to the respective waste management strategies identified in the Operational Waste Management Plan for the development. All key aspects outlined within the Operational Waste Management Plan should be logged, including but not limited to:

i. The tonnage and types of waste generated;
ii. The waste processing methods (i.e. re-use, recycle, disposal);
iii. The frequency of waste collections;
iv. The type / size of collection vehicle utilised;
v. The condition of the bin stores / service yard;
vi. The effectiveness of management measures; and
vii. Any complaints raised by the building's tenants.

The monitoring log should be updated every 6 months as a minimum interval, whilst certain elements will be continually recorded, such as the waste tonnage through the retention of commercial waste receipts, for example. The logged data should then be used to revise / set annual targets.

All logged information should be used by the respective building management to prepare a monitoring report, summarising the outcomes of the waste management strategy, demonstrating statistical evidence where possible. The monitoring reports should ultimately be used to set future waste targets.

Lessons Learnt

At the end of each stage of design and construction, the sustainability consultant shall review and co-ordinate the output from the completed stage and compare against the target ambitions. This shall be reviewed with the Client with recommendations as to what further actions can be taken to further improve the targets.

7.00 CONCLUSION

7.01 The development aims to contribute to a circular economy by implementing the approaches discussed in the report within the design, demolition/construction and operation of the building for each building layer.

The main circular economy targets for the site are:

- 95 per cent reuse/recycling/recovery of construction and demolition waste.
- 95 per cent beneficial use of any excavation waste.
- 65 per cent recycling of municipal waste by 2030.
- 20% recycled content of materials by value.

This Circular Economy Statement (including the Operational Waste Management Plan in Appendix 4) adheres to the requirements of condition 37 on the basis that it has been produced in line with the GLA's Circular Economy Statement Guidance and the principles of the Draft Circular Economy Statement submitted with the outline application.