

PADDINGTON GREEN POLICE STATION

Site Waste Management Plan

Site Waste Management Plan-November 2022 - GLA0711

NOVEMBER 2022





Berkeley Homes (Central London) Limited

Paddington Green Police Station

Site Waste Management Plan

Reference: Site Waste Management Plan- November 2022- GLA0711

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A.1

1. Introduction

1.1 Overview

This Site Waste Management Plan (SWMP) has been prepared by Ove Arup & Partners Limited ('Arup') on behalf of Berkeley Homes (Central London) Limited (Berkeley Homes) to support the redevelopment of the former Paddington Green Police Station (the Proposed Development). The site falls within the administrative area of Westminster City Council (WCC) and therefore the WCC Local Planning Authority (WCC LPA) will determine the planning application of the Proposed Development.

This SWMP discharges the requirements of:

- City of Westminster (2022), Code of Construction Practice);
- City of Westminster (2021), City Plan 2019-2040;
- Greater London Authority (GLA), Circular Economy Statement Guidance;
- The Building Research Establishment Environmental Assessment Method (BREEAM) UK New Construction 2018.

1.2 Project summary

The site is bounded by Edgware Road to the east, A404 Harrow Road to the south, Paddington Green to the west and Newcastle Place to the north. To the north of Newcastle Place is a development known as West End Gate (WEG) which is currently under construction by Berkeley Homes. Figure 1 shows the site location.

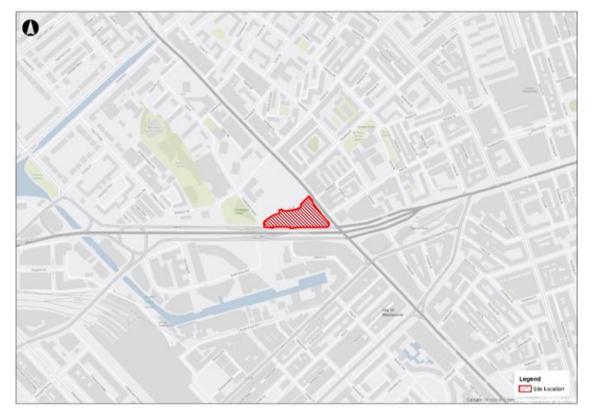


Figure 1: Site location

The Proposed Development comprises the demolition of the existing building and redevelopment of the site to provide three buildings of 39, 24 and 17 storeys in height, providing residential units (including affordable units)(Class C3), commercial uses (Class E), a community use (Class F.2), landscaping, tree and other

planting, public realm improvements throughout the site including new pedestrian and cycle links, provision of public art and play space, basement level excavation to provide associated plant, servicing, disabled car parking and cycle parking and connection through to the basement of the neighbouring West End Gate development.

Demolition works include the demolition of the entire former Paddington Green Police station; a 17-storey concrete frame tower, seven storey tower, connecting structure, single storey basement and existing foundations. It should be noted that elements of the basement retaining wall will be retained and incorporated into the Proposed Development.

The Proposed Development comprises the following, subject to further design development:

- 556 new homes (59,068m² GIA);
- Community space (133m² GIA).
- Flexible commercial / retail (1,079m² GIA);
- Basement plant and cycle parking (5,494m² GIA).

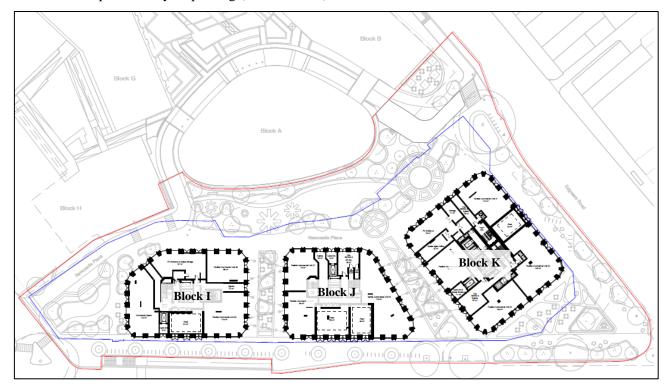


Figure 2: Proposed site development plan

1.3 Purpose

The purpose of this SWMP is to facilitate the planning, implementation, monitoring and review of waste minimisation and management for the construction of the Proposed Development. It acts as a record of the application of the waste hierarchy and circular economy principles with the aim of prioritising the avoidance and reduction of waste and promoting resource efficiency.

This SWMP provides a structured approach for materials management and production of waste during construction and associated demolition and excavation (including on-site and dedicated off-site manufacture or fabrication). It does not cover operational waste management.

The SWMP consists of the following chapters:

- Legislation and policy;
- Materials and waste forecast;

- Waste and resource management strategy;
- Measuring and reporting; and
- Certification compliance.

1.4 Roles and responsibilities

Table 1 highlights the responsibilities for implementation of this SWMP, prior to and during excavation, demolition and construction activities. The roles and responsibilities include but are not limited to:

Table 1: Roles and responsibilities

| Role title | Responsibility |
|---|--|
| Project Director | Provide adequate environmental resources and support to effectively deliver the requirements of this plan. |
| Environmental Manager and/or Environmental Advisors | Develop and implement the SWMP. Identify and maintain compliance with the requirements and principles of the SWMP during construction. Assist lead auditors in auditing the SWMP. Identify, develop and provide environmental training as required specific to the SWMP. Approve method statements and consider SWMP requirements. Advise and instruct construction teams in the event of incidents and complaints. Liaise/meet with external stakeholders. Inspections on compliance with the SWMP requirements including Duty of Care checks. Brief SWMP requirements to relevant teams. |
| Waste Manager | Provide technical support on waste management issues. Establish effective reporting and monitoring regime. Lead on the control and management of waste generated on site. Assist in the investigation of any complaints or incidents as required. |
| Project Manager | Ensure the requirements of the SWMP are implemented on site. Ensure the requirements of the SWMP are integrated into all aspects of the construction works and detailed in method statements. Ensure compliance with all waste management related procedures. Manage the investigation and response to complaints. |

Additional roles such as materials and waste champions are to be identified during construction. All staff working on site will be suitably trained on the processes in place to meet the commitments of this plan and, carry out works in accordance with agreed methods and briefings.

2. Legislation and policy

2.1 Legislation

The Proposed Development will comply with the requirements defined within the following:

- Environmental Protection (Duty of Care) (England) Regulations 1991 (as amended);
- The Waste (England and Wales) Regulation 2011;
- Environmental Permitting (England and Wales) Regulations 2016 (as amended);
- Control of Pollution (Amendment) Act 1989; and
- Waste Framework Directive (WFD) 2008/98/EC.

2.1.1 Policy context

Project targets for waste minimisation, reuse and recycling rates and landfill diversion have been developed in accordance with:

- Greater London Authority (2021), The London Plan;
- Greater London Authority (2022), London Plan Guidance Circular Economy Statements;
- City of Westminster (2021), City Plan 2019-2040;
- Westminster Code of Construction Practice (2022); and
- BREEAM UK New Construction 2018.

2.2 BREEAM certification

The BREEAM New Construction standard provides a framework to deliver high performing, and sustainable, newly built assets that create positive environmental and social impact. The Proposed Development is targeting a BREEAM rating of Excellent under the BREEAM New Construction 2018 scheme for the non-residential areas. This includes an emphasis on targeting credits within the 'Materials and Waste' sections.

BREEAM New Construction includes six waste related sections, encouraging the reduction of waste from construction, and throughout the lifetime of a building. Section Wst 01 Construction Waste Management aims to reduce construction waste by encouraging reuse, recovery and best practice waste management, to minimise waste going to landfill.

This document addresses the requirement of Wst 01, the development has produced a SWMP in the place of a resource management plan, which addresses all requirements (see Section 6). Furthermore, resource efficiency targets have been set (see Table 2), which would enable attainment of the available credits, if achieved during construction. Waste minimisation measures have been identified which would contribute towards attainment of the specified resource efficiency target.

2.2.1 Resource efficiency targets

The BREEAM UK New Construction 2018 Technical Manual sets the targets shown in Table 2 with respect to non-hazardous waste generated during construction of buildings assets. These resource efficiency targets exclude materials generated during demolition and excavation work phases.

Table 2: Construction phase resource efficiency targets

| BREEAM credits | Amount of waste generated per 100m ² | ² (gross internal floor area) | | |
|-----------------|---|--|--|--|
| | m³ | tonnes | | |
| One credit | ≤ 13.3 | ≤11.1 | | |
| Two credits | ≤ 7.5 | ≤ 6.5 | | |
| Three credits | ≤ 3.4 | ≤ 3.2 | | |
| Exemplary level | ≤ 1.6 | ≤ 1.9 | | |

It is proposed that these resource efficiency targets form the basis of all decisions with respect to resource efficiency and waste management in the design and construction of the development.

The one-credit target is intended to comprise a achievable benchmark which sets the maximum rate of material generation expected of contractors working on the construction of the Site. It is recommended that the Proposed Development targets a waste generation rate of not more than ≤ 11.1 tonnes/ $100m^2$ Gross Internal Area (GIA).

Based on the design information available at the time of writing this SWMP, the targeted maximum waste generation rate, based on gross internal floor area, would have to equate to no more than 7,301 tonnes of non-hazardous construction waste throughout construction.

Progress against these targets will be monitored once construction associated with the Proposed Development commences, in accordance with the requirements identified in Section 5. The evaluated progress against the stated targets will be included here during future updates to this SWMP.

2.3 Landfill diversion rates

Considering legislation, industry best practice and based on the information gathered about the types and quantities of materials likely to be generated, the targets set in Table 3 are suggested for waste arisings from the Proposed Development.

Table 3: Construction phase waste management targets

| Waste type | Minimum achievement | Stretch target |
|---|----------------------------|----------------------------|
| Non-hazardous construction waste landfill diversion | 80% by weight ¹ | 95% by weight ² |
| Non-hazardous demolition waste diverted from landfill | 90% by weight ³ | 95% by weight ⁴ |
| Non-hazardous excavation waste diverted from landfill | N/A | 95% by weight ⁵ |
| Inert excavation waste diverted from landfill | N/A | 100%6 |

It is proposed that these targets form the basis of all decisions with respect to resource efficiency and waste management in the design and construction of the Proposed Development.

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¹ Aligned with the achievement of one credit in BREEAM Wst 01.

² Aligned with the target set in the Westminster CoCP and London Plan.

³ Aligned with the achievement of one credit in BREEAM Wst 01.

⁴ Aligned with the Exemplary level achievement in BREEAM Wst 01, and the target set in the Westminster CoCP and London Plan.

⁵ Aligned with Exemplary level achievement in BREEAM Wst 01, and the target set in the London Plan.

⁶ Aligned with the target set in the London Plan.

These targets are more ambitious than the conservative landfill diversion rates used in the Waste Framework Directive (WFD) 2008/98/EC and compliance would contribute towards attainment of BREEAM certification, and contribution towards local and regional policy targets.

Progress against these targets will be monitored once construction associated with the development commences, in accordance with the requirements identified in Section 5. The evaluated progress against the stated targets will be included here during future updates to this SWMP.

3. Materials and waste forecast

3.1 Overview

A high-level forecast has been carried out for the quantity of materials and waste arising during the construction, demolition and excavation works of the Proposed Development.

Waste generated by the Proposed Development will be managed according to the principles of the waste hierarchy. The waste hierarchy identifies 'waste prevention' as the most favourable management option to reduce waste and retain materials at its highest value. 'Disposal' is identified as the least favourable management option. The order of priority for the management of waste is set out in descending order of environmental preference in The Waste (England and Wales) Regulation 2011.

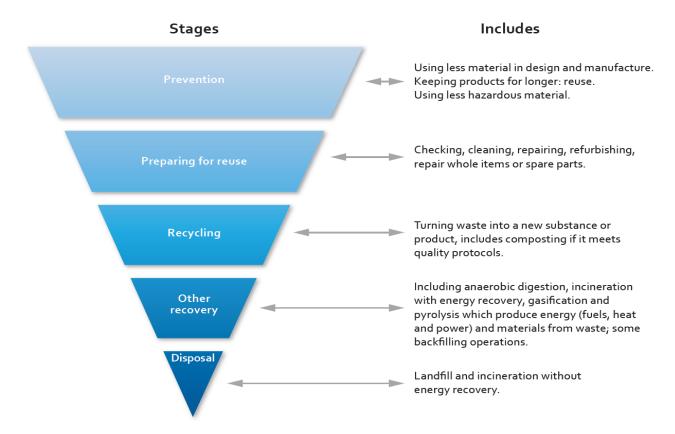


Figure 3: Waste hierarchy

3.2 Waste forecast

3.2.1 Overview

Waste is expected to be generated in all phases of the Proposed Development. Waste forecasts have been undertaken based on preliminary design information, pre-redevelopment audit⁷ and typical industry benchmarks (BRE construction waste data supplied 2022). These are summarised in Table 4, and presented in more detail in subsequent sections of this SWMP.

⁷ Paddington Green Police Station, Pre-Redevelopment Waste Audit, AESG, June 2022.

Table 4: Waste forecast summary

| Construction stage | Waste generation (tonnes) |
|-------------------------|---------------------------|
| Demolition | 26,436 |
| Excavation ⁸ | 37,590 |
| Construction | 9,805 |
| TOTAL | 73,830 |

3.2.2 Demolition

The former Paddington Green Police Station is a large multi-story building that requires demolition. The building is primarily of masonry construction throughout with external glazed windows and doors. Its extent is predominantly made up of an open plan basement car park, ground floor courtyard area and high security custody suites with two separate seven and 14 floor multi-story blocks. The external areas of the site are predominantly made up of hardstanding surfaces. No areas of shrubbery or landscaping are present. Demolition quantities presented have been taken from the sites' pre-redevelopment audit⁷.

3.2.3 Earthworks

Earthworks activities on the Site primarily comprise of structural foundations, basement excavation, and landscaping works. Excavations quantities have been provided directly by Berkeley Homes. Currently available design information indicates limited opportunities for excavated material reuse on-site.

3.2.4 Construction

Based on the design information available, a forecast has been prepared of potential quantities of waste generated during construction of the three blocks and basement. At present no waste forecast has been undertaken for hard or soft landscaping, utilities, highways or other external works.

Waste forecasts have been undertaken using industry benchmarks (BRE), assuming business-as-usual approaches to waste management; the forecast does not take consideration of the waste minimisation measures included in the design and recommended in this SWMP. This waste forecast will be revised in future updates to this SWMP, as the available design information increases in detail. Table 5 provides a recycling and waste forecast reporting table including the European Waste Catalogue (EWC) codes, as per the GLA Circular Economy Statement Guidance.

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⁸ A bulk density of two tonnes/m³ has been applied.

Table 5: Recycling and waste forecast reporting table

| | | | | | Diversion from lan | dfill | Forecast | | |
|-------------------|--|------------------|-------------------------------------|-----------|------------------------|----------------|-------------|---------------|-------------|
| C,D or E | Waste stream | Material type | Further description | EWC code | Management route | Percentage (%) | Volume (m³) | Mass (tonnes) | Forecast by |
| | Inert mixture: concrete, bricks, other. | | | 17 01 01 | Recycled off-site | 99 | | 4,628 | Arup |
| | Plastic (excluding packaging) | | | 17 02 03 | Recycled off-site | 99 | | 184 | Arup |
| | Oils (fuel oil and diesel) | | | 13 07 01* | Recycled off-site | 100 | | 1 | Arup |
| | Packaging Materials | | | 15 01 06 | Recycled off-site | 99 | | 273 | Arup |
| | Timber | | | 17 02 01 | Recycled off-site | 99 | | 835 | Arup |
| | Bituminous mixtures other than those mentioned in 17 03 01 | | | 17 03 02 | Recycled off-site | 99 | | 72 | Arup |
| | Mixed metals | | | 17 04 07 | Recycled off-site | 99 | | 141 | Arup |
| | Plasterboard / Gypsum | | | 17 08 02 | Recycled off-site | 99 | | 344 | Arup |
| Construction | Other construction and demolition wastes (including mixed wastes) containing hazardous substances* | | | 17 09 03* | Landfill | 100 | | 60 | Arup |
| | Mixed construction and/or demolition waste | | | 17 09 04 | Recycled off-site | 99 | | 3,101 | Arup |
| | Waste Electrical and electronic equipment (WEEE) | | | 20 01 36 | Recycled off-site | 99 | | 4 | Arup |
| | Canteen/Office/Adhoc waste | | | 20 03 01 | Recycled off-site | 99 | | 105 | Arup |
| | Furniture | | | 20 03 07 | Recycled off-site | 99 | | 1 | Arup |
| | Liquids | | | 16 10 | Recycled off-site | 99 | | 5 | Arup |
| | Insulation materials other than those mentioned in 17 06 01 and 17 06 03 | | | 17 06 04 | Recycled off-site | 99 | | 50 | Arup |
| | Soils and Stone | | Pile arisings | 17 05 04 | Beneficial reuse | 95 | 6,365 | 12,730 | Berkeley |
| xcavation | Soils and Stone | | Basement excavation - Inert | 17 05 04 | Beneficial reuse | 95 | 11,027 | 22,054 | Berkeley |
| xcavation | Soils and Stone | | Basement excavation - Non-hazardous | 17 05 04 | Landfill | 100 | 1,103 | 2,206 | Berkeley |
| | Hazardous Soils and Stone | | Basement excavation - Hazardous | 17 05 03* | Landfill | 100 | 300 | 600 | Berkeley |
| emolitio n | Concrete | | | 17 01 01 | Recycled off-site | 99 | | 23,409 | AESG |
| | Metals (including heir alloys) | | | 07 14 | Recycled off-site | 99 | | 727 | AESG |
| | Glass | | | 17 20 2 | Recycled off-site | 99 | | 70 | AESG |
| | Wood | | | 07 02 01 | Recycled off-site | 99 | | 67 | AESG |
| | Plasterboard / Gypsum | | | 17 08 02 | Recycled off-site | 99 | | 20 | AESG |
| | Ceramics | | | 10 71 03 | Recycled off-site | 99 | | 1,775 | AESG |
| | Textiles (including Carpet/ Vinyl) | | | 20 01 11 | Recycled off-site | 99 | | 237 | AESG |
| | Insulation materials other than those mentioned in 17 06 01 and 17 06 03 | | | 17 06 04 | Recycled off-site | 99 | | 29 | AESG |
| | Plastic (excluding packaging) | | | 17 02 03 | Recycled off-site | 99 | | 15 | AESG |
| | Bituminous mixtures other than those mentioned in 17 03 01 | | | 17 03 02 | Recycled off-site | 99 | | 88 | AESG |
| | TO | OTAL | 1 | ı | Diverted from landfill | 99% | 18,795 | 73,830 | |

4. Waste and resource management strategy

4.1 Overview

This SWMP sets out how waste will be managed throughout each stage of the Proposed Development. Prior to the commencement of site development, the main contractor will identify suitable waste management contractors and investigate opportunities to reduce waste generation, reuse materials on-site or recycle any waste that is predicted to arise. Waste minimisation measures have been identified which would contribute towards attainment of the specified resource efficiency target.

All waste will be managed in accordance with the duty of care requirements under Section 34 of the Environmental Protection Act 1990 and the Hazardous Waste (England and Wales) Regulations 2005. This will include the following key responsibilities:

- Safe, secure storage of waste;
- Appropriate classification of waste in accordance with Technical Guidance WM3⁹;
- Transfer of waste to a licenced waste carrier taking waste to a permitted (or registered exempt) waste facility; and
- Completion and retention of Waste Transfer Notes and Hazardous Waste Consignment Notes.

All hazardous waste, including asbestos containing materials (ACM), will be segregated from non-hazardous waste, stored separately, and managed in accordance with the Hazardous Waste (England and Wales) Regulations 2005.

4.2 Waste minimisation procedures

There are opportunities to improve resource efficiency across the design of the Proposed Development with the key focus on designing out waste, design for deconstruction opportunities, and lifecycle carbon reduction.

The following sections will be updated at each future design development stage, to reflect which actions are most applicable to the current Proposed Development phase.

4.2.1 Design

The biggest opportunities for reducing waste generation during the construction of the Proposed Development, will occur through decisions made at the design stage. As defined by the Waste & Resources Action Programme (WRAP), central to designing out waste are the following five principles:

- Design for reuse and recovery;
- Design for off-site construction;
- Design for materials optimisation;
- Design for waste efficient procurement; and
- Design for deconstruction and flexibility.

⁹ Environment Agency (2021), Waste Classification – Guidance on the classification and assessment of waste (1st Edition v1.2 GB) – Technical Guidance WM3. Available online at:

 $[\]frac{https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1021051/Waste_classification_technical_guidance_WM3.pdf.$

Designing out waste will be considered throughout all stages of design development and construction. Waste prevention opportunities that have been or are intended to be implemented in the design are shown in Table 6; this list will be updated in future revisions to this SWMP.

Table 6: Design out waste opportunities register

| Design element | Designing out waste opportunity |
|--------------------------------|--|
| Off-site fabrication | Through design consultation the development has incorporated prefabricated façade panels. The modular system is constructed offsite as per design needs. This directly reduces the amount of waste produced on site by reducing off-cuts, surplus materials and on-site material damage. |
| Retaining existing structures | Through design consultation the development has incorporated some of the existing basement retaining walls into new basement design. Reducing the amount of demolition, excavation and construction waste that would have arisen from the construction of new walls. |
| Ongoing design communications | Ongoing communications between client and design teams, and contractors and sub-contractors when appointed. Ongoing reviews of specifications that may restrict waste reduction options. If departures from standard specifications are required to enable waste reduction, these are more readily implemented if identified by the design team and discussed with the client and main contractor. |
| Off-site assembly | Designing for as much work as possible taking place in a factory environment, leaving assembly operations only on-site. The components manufactured off-site will incorporate the principles of designing out waste in their own design. |
| Designing for whole life cycle | Considering the whole life cycle of all materials used within the design. This will include sourcing reclaimed products such as timber components or secondary materials such as crushed demolition materials. Consideration will be given to what will happen to the materials specified when they reach the end of their useful life. Where possible, elements will be designed for repair, modular repair, recycling at the end of life or safe disposal. The use of hazardous materials will be minimised. |
| Flexible/adaptable design | Allowing for flexibility in the operational state of a building will minimise waste through fitout and refurbishment works, or premature replacement of buildings. Core, bracing shear wall and columns are the only fixed elements internally, which allows maximum flexibility of the internal layout. Internal partitions are to be of lightweight construction that could be easily modified to allow for alternative configuration within the use of the Proposed Development. |

4.2.2 Demolition

A pre-redevelopment audit⁷ has been undertaken for the Proposed Development. The aim of the predemolition audit is to determine if refurbishment or reuse of material is feasible where demolition is required. If not, the intent is to maximise the recovery of material from demolition for subsequent high grade or high value applications. Demolition activities will produce a large amount of concrete; opportunities will be explored to produce recycled aggregates from the inert portion of the material, for reuse on-site in structural concrete, as a sub-base materials, and for use as a piling matt.

4.2.3 Excavation

Currently the design has a negative cut and fill balance requiring that excavated material will be disposed of offsite. As the design of the Proposed Development progresses, opportunities will be sought to reduce the volume of surplus excavated material, including optimisation of the pile design.

4.2.4 Construction

Imported material management

Enabling the purchase of materials in shape/dimension and form that minimises the creation of off-cuts waste. The use of a materials inventory system will be explored, to minimise over ordering and facilitate just-in-time deliveries. This measure would reduce the period which materials are stored on-site, potentially reducing the wastage rates associated with damaging construction materials during periods of prolonged storage.

Packaging take-back

The use of packaging take-back schemes will be explored with all materials suppliers. This will ensure that where possible, materials are delivered in packaging that is suitable to be returned and reused a number of times.

Surplus materials

Unused, surplus construction materials will be returned to suppliers, or sold/donated to nearby construction projects via online construction materials trading platforms such as Globechain and Environate.

Secure storage

To prevent damaged materials/theft. Keeping deliveries packaged until they are ready to be used and the inspection of deliveries on arrival helps to reduce damage and wastage.

4.2.5 Hazardous waste

Hazardous waste can be minimised through design opportunities prior to excavation, construction and demolition, opportunities to reduce the quantum of hazardous waste include:

- Choosing non-hazardous or less hazardous materials or components as alternatives to any hazardous materials currently used, for example, material coatings.
- Improving quality control procedures to reduce the number of defective products wasted.
- Minimising equipment cleaning better working practices can reduce both the frequency and the extent of cleaning, reducing the amount of potentially contaminating effluents produced.

4.3 Diversion from landfill

4.3.1 Demolition

Waste generated during demolition of existing structures at the Site is anticipated to generate substantial quantities of inert materials and metals, both of which can effectively be diverted from landfill through appropriate processing for reuse and recycling. All concrete materials will be recovered from the demolition process, they will be crushed (onsite or offsite, depending on size of machinery) graded and stockpiled, where they can be used as concrete infill or piling matt. 100% of the rebar steel, structural steel, copper will be recovered and recycled.

4.3.2 Excavation

Excavated material will be used to satisfy the fill material requirements of the Proposed Development wherever reasonably practicable. Excavated material surplus to the requirements of the Proposed Development will be reused off-site where suitable receptor sites exist, these may include restoration of mineral sites, environmental mitigation and habitat creation projects, landscape and land raise works, and other local construction projects.

4.3.3 Construction

Construction materials that cannot be reused on-site or off-site will be sent directly to material reprocessors or sent to construction materials recovery facilities (MRFs).

MRF performance varies widely depending on the combination of equipment employed, and the nature of the incoming materials. Careful engagement with waste contractors will be undertaken in cases where MRFs are used to segregate a mixed waste stream, to ensure that the chosen contractor and facility are able to support the Proposed Development's targets for landfill diversion.

4.4 Storage and segregation

All contractors undertaking work as part of the construction of the Proposed Development, will comply with the waste segregation, storage, reuse and recycling procedures specified in BREEAM New Construction 2018 - Technical Manual, WFD 2008/98/EC and this SWMP.

The reuse and recycling of waste materials generated during all phases of construction should be maximised wherever possible. Meeting the landfill diversion rate targeted in Table 3 should be achieved wherever possible through reuse and recycling, with recovery used only as a last resort option.

The construction site will be planned to use best endeavours to ensure that sufficient space is available for the on-site segregation of recyclable materials. During periods of construction where space is exceptionally constrained, it will be permitted for a mixed-waste stream to be segregated off-site by a permitted waste management contractor with suitable recovery equipment to maintain the stated landfill diversion rate.

In cases where off-site segregation is necessary, the main contractor will liaise with their chosen waste services provider, to ensure that materials which may hinder the segregation performance are removed from the mixed-waste stream on-site.

As a minimum, the waste and material types (and their associated EWC code where relevant), excluding excavated waste shown in Table 7, will be segregated from the mixed residual waste.

Table 7: Waste type descriptions and EWC codesA

| Waste type description | EWC code |
|--|-----------|
| Inert mixture: concrete, bricks, other. | 17 01 01 |
| Plastic (excluding packaging) | 17 02 03 |
| Oils (fuel oil and diesel) | 13 07 01* |
| Packaging Materials | 15 01 06 |
| Timber | 17 02 01 |
| Bituminous mixtures other than those mentioned in 17 03 01 | 17 03 02 |
| Mixed metals | 17 04 07 |
| Plasterboard / Gypsum | 17 08 02 |
| Other construction and demolition wastes (including mixed wastes) containing hazardous substances* | 17 09 03* |
| Mixed construction and/or demolition waste | 17 09 04 |
| Waste Electrical and electronic equipment (WEEE) | 20 01 36 |
| Canteen/Office/Adhoc waste | 20 03 01 |
| Furniture | 20 03 07 |
| Liquids | 16 10 |
| Soils and Stone | 17 05 04 |
| Hazardous Soils and Stone | 17 05 03* |
| Concrete | 17 01 01 |
| Cement | 17 01 02 |
| Metals (including heir alloys) | 07 14 |
| Glass | 17 20 2 |
| Wood | 07 02 01 |
| Ceramics | 10 71 03 |
| Textiles (including Carpet/ Vinyl) | 20 01 11 |
| Insulation materials other than those mentioned in 17 06 01 and 17 06 03 | 17 06 04 |

A dedicated waste storage area will be provided with suitable hardstanding for containers to be established. This will be located in a secure location, away from public access to prevent fly tipping; it will be marked on both the site plan and the traffic management plan.

Waste storage receptacles will be colour coded in line with the colour coding scheme that will help reduce the levels of contamination in the skips and increases the likelihood that a load would not subsequently be rejected once the waste stream has been sent off-site for reprocessing. In cases where the load is rejected, the likely destination would be landfill (which would increase the costs of the Proposed Development).

Typical segregated skip categories and management methods include:

- Wood Recycle;
- Cable Recycle;
- Concrete Recycle;
- Plastic Recycle;
- Metal Recycle;
- Paper and cardboard Recycle; and
- General domestic waste Recycle/recover.

Skips will be monitored by the contractor to ensure that contamination of segregated skips does not occur.

The requirements for managing waste and materials on the construction site, specified in this SWMP, will be communicated to all contractor staff and their suppliers. Communication and training regarding waste management and material efficiency on the construction site, will be undertaken regularly from the outset of construction, until handover of the Proposed Development. A register of relevant training will be maintained and kept on-site for the duration of construction. The main contractor will nominate a 'Waste Champion' who will form the primary point of contact for communications regarding resource and waste management.

In line with the waste duty if care and in adherence with GLA Circular Economy Statement Guidance, reporting on the final destination of all waste steams will be recorded as soon as established. Once the contractor(s) has been appointed and works commence actual waste movements are to be recorded as per the methods for recording in the Westminster Code of Construction Practice (CoCP). See Appendix A.1 for an example of a waste actuals reporting table.

5. Measuring and reporting

5.1 Overview

All waste producers (as defined by the Environmental Protection Act 1990) undertaking work as part of the construction of the Proposed Development, are legally obliged to take measures to ensure that waste is managed properly and recovered or disposed of safely under the duty of care requirements. In particular, waste producers are required to record details of the nature and quantity of waste generated, in waste transfer notes and hazardous waste consignment notes as appropriate.

5.2 Measuring

A log of actual waste movements leaving the construction site will be maintained throughout construction. The log will comprise the primary record of all waste generated by the construction of the Proposed Development.

It will be the responsibility of the main contractor to ensure that the waste log is complete and up-to-date throughout the construction period. Wherever practicable, weighbridge weight data will be used to populate the waste log; vague volumetric quantities (e.g. 'a skip', 'a large bin', etc) often recorded in waste transfer notes, will not be accepted.

Excavated material quantities will be recorded in a materials management plan (MMP) covering the respective earthworks activity, except in cases where there is absolute certainty that the material will not be reused on site. In these cases, the material quantity will be recorded as waste under the Duty of Care requirements and in the waste log.

5.3 Reporting

It is important to collect and report waste data throughout the construction phases to allow for accurate assessment against the targets set in this SWMP, and for more accurate waste forecasting in future projects. Sufficient data should be captured to enable performance to be monitored against the resource efficiency and landfill diversion targets.

5.4 Review

This SWMP will be reviewed regularly throughout the design and construction stages; this will take place not less than once every six months during design (and whenever there is a significant change in the design), and monthly during construction. Reviews will be undertaken under the responsibility of the environmental sustainability manager during design, and by the main contractor's nominated waste champion during construction. This SWMP will be revised and updated whenever the reviews identify it as necessary.

The main contractor will record and compare all waste quantities and actual treatment destinations to the quantities forecast. As part of the review, the main contractor will record the following:

- The types and volumes of waste produced;
- The types and volumes of waste that have been;
 - reused (and whether this was on-site or off-site);
 - recycled (and whether this was on-site or off-site);
 - recovered;
 - sent to landfill.

See Appendix A for an example waste data reporting template.

6. Sustainability certification compliance

6.1 BREEAM

Table 8 demonstrates how this SWMP meets the BREEAM requirements for waste management for all buildings.

Table 8: BREEAM waste management requirements

| SWMP requirement | Reference | Compliant? |
|---|----------------------------------|------------|
| A target benchmark for resource efficiency i.e. m ³ or tonnes of waste per 100m ² (gross internal floor area) | Section 2.2.1 | Yes |
| Procedures and commitments for minimising non-hazardous waste in line with the benchmark | Section 4.2 | Yes |
| Procedures for minimising hazardous waste | Section 4.2.5 | Yes |
| A waste minimisation target and details of waste minimisation actions to be undertaken, including Designing out Waste principles. | Section 2.2.1 and Section 4.2 | Yes |
| Procedures for estimating, monitoring, measuring and reporting hazardous and non-hazardous site waste | Section 5 | Yes |
| Procedures for sorting, reusing and recycling waste into defined waste groups, either on- site or through a licensed external contractor | Section 4.3 and Section 4.4 | Yes |
| Procedures for reviewing and updating the plan | Section 5.4 | Yes |
| The name or job title of the individual responsible for implementing the above | Section 1.4 | Yes |

Example Waste Actuals Reporting Table

A.1

| Waste classification (inert / non- hazardous / | Type of waste | EWC code | Reused | | Recycled | Recovered | Landfill |
|--|----------------|----------|---------|----------|----------|-----------|----------|
| hazardous) | | | On-site | Off-site | | | |
| | Demolition | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | Excavation | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | Construction | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | TOTAL (tonnes) | | | | | | |
| | TOTAL (%) | | | | | | |