Site Waste Management Plan October 2021

EAS

Sidcup Library

Hadlow Road, Bexley London Borough

BexleyCo Homes



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The content of this report is based on information available as of October 2021, the validity of the statements made may therefore vary over time as planning guidance / policies and the evidence base change.

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1 Introduction

- 1.1 This Site Waste Management Plan has been prepared by EAS on behalf of BexleyCo Homes (hereinafter referred to as the 'client') regarding the proposed redevelopment of Sidcup Library (hereinafter the 'site'). A Location Plan is included within **Appendix A**.
- 1.2 The proposals are for the redevelopment of the former library including the demolition of the existing structure and providing a new building containing 32 residential apartments comprising of 13 x one-bedroom (2-person) one of which will be wheelchair accessible housing, 5 x two-bedrooms (3-person) two of which will be wheelchair accessible housing, 8 x two-bedrooms (4-person), 4 x three-bedrooms (4-person), and 2 x three-bedrooms (5-person) apartments (the 'scheme'). A Masterplan showing the development proposals is included in Appendix B.

Site Location and Function

- 1.3 The site is currently known as the Sidcup Library, and is located at 1 Hadlow Road, Sidcup, London DA14 4AQ. The site is therefore located within the administrative boundaries of the London Borough of Bexley ('LBB').
- 1.4 The site is currently developed as a library building, and it is proposed to redevelop this site into a residential scheme.

Aims and Structure of the Report

- 1.5 This Site Waste Management Plan ('SWMP') report has therefore been prepared with regard to the Department of Environment, Food and Rural Affairs ('DEFRA') Guidance on Site Waste Management Plans and the Disposal of business or commercial waste; also to guidance that LB Bexley have published on their website.
- 1.6 The contents of this report are:
 - Section 2 gives an overview of the national, London and local policy context regarding site waste management;
 - Section 3 describes the existing site conditions and describes the proposed development;
 - Section 4 explains the potential waste generated by the scheme;
 - Section 5 identifies the likely trip generation and traffic impact; and
 - Section 6 summarises the report.



2 Policy Context

Introduction

2.1 This Servicing & Waste Management Plan has been prepared in mind of national waste legislation and national and local policy and guidance.

The Waste (Circular Economy) (Amendment) Regulations 2020

- 2.2 This legislation essentially accommodates the requirements of the EU Waste Framework Directive (2008) into English law post-Brexit, thus maintaining the operation of national waste management plan and prevention programmes, such as the Waste Management Plan for England (2013).
- 2.3 It also retains the waste hierarchy which focuses on first preventing waste arising, followed by reuse of materials, then recycling, energy recovery, and finally, disposal.

Waste Management, The Duty of Care Code of Practice (2016 update)

- 2.4 This replaces the 1996 Code and regards Section 34(9) of the Environmental Protection Act 1990. The document sets out guidance on duty of care requirements relating to waste management.
- 2.5 This document updates the requirements of the duties on the holder of waste, including on producers, to assess the potential for recovery, preparation for reuse, recycling, disposal or treatment of the waste.
- 2.6 The Act requires the preparation of Waste Transfer Notes ('WTN'), which are declarations on the contents of waste deliveries, when this is being transferred between sites.

Environmental Permitting (England and Wales) Regulations 2010 (as amended)

2.7 These regulations require organisations that produce, store or manage waste to apply for an environmental permit (or relevant exemption). Exemptions exist for some low-risk activities, including via Non-Waste Framework Direction ('NWFD') exemptions, the most common being NWFD2 which allows producers of waste to temporarily store it at the place of production before its collection.

Site Waste Management Plans Regulations (2008, Repealed)

- 2.8 The Site Waste Management Plans Regulations 2008 came into force in April 2008, but were repealed by Government on December 2013 following consultation. They applied to all projects with a value of £300,000 or more, with additional updating requirements for projects with a value of £500,000 or more.
- 2.9 The regulations placed the initial responsibility for the production of the plan with the client, who had to produce the plan before the project was started, as a legal requirement. The regulations also laid out what the plan had to include.
- 2.10 This required the SWMP to include a description of the types, quantity and proposed method of disposal.



2.11 However, SWMPs remain good practice during construction and allow waste credits to be achieved under certification schemes such as BREEAM, and is typically prepared in full detail by the Principal Contractor(s) once appointed, post-planning consent.

Hazardous Waste Regulations (2005)

- 2.12 The production and processing of hazardous waste on site is restricted under The Hazardous Waste (England and Wales) Regulations, requiring registration of hazardous waste generation with the Environment Agency, and the notification of their movement under a Hazardous Waste Consignment Note ('HWCN'). This not includes the following information:
 - the process and source giving rise to the waste;
 - the chemical (and/or biological) components and concentrations of the waste material;
 - the hazard (List of Wastes) code;
 - the quantity, and the container type, size and number;
 - identify the end-destination of the waste; and
 - provide the Consignment Note a unique Code.
- 2.13 Typical examples of such wastes include contaminated soils, oils, solvents or acids, asbestos or certain insulation materials, batteries, etc.

National Planning Policy Framework (2021)

- 2.14 The revised National Planning Policy Framework ('NPPF') was recently updated in 2021, and sets out the government's planning policies for England and how these are expected to be applied.
- 2.15 Paragraph 10 states:
 - "So that sustainable development is pursued in a positive way, at the heart of the Framework is a **presumption in favour of sustainable development** (original emphasis)."
- 2.16 Paragraph 8 explains that minimising waste is a component of environmental objectives, which support deeper sustainable development aims. As such, strategic policies should include ensuring sufficient provision for waste management, within developments.

National Planning Policy for Waste (2014)

- 2.17 The National Planning Policy for Waste, superseding Planning Policy Statement 10 (PPS10) 'Planning for Sustainable Waste Management', aims to implement the Waste Management Plan for England (2013); the enactment of the EU Waste Framework Directive in England.
- 2.18 Paragraph 1 explains that the primary goal of waste management is to drive waste up the waste hierarchy. This means focusing on preventing waste generation, before reuse, recycling and recovery of materials or energy. This must be done without endangering human health or harming the environment, while ensuring design and layout promote effective management and align with other spatial issues like transport and housing. There also considerations for protecting water quality.



Waste Management Plan for England (2020)

- 2.19 The Waste Management Plan for England was most-recently updated in August 2020, replacing previous versions from 2013. The original act, dating back from 2007, was developed in response to Article 28 of the European Waste Framework Directive, established in 2008.
- 2.20 The main strategy of this plan is as follows:

"The Resources and Waste Strategy identifies five strategic ambitions:

- To work towards all plastic packaging placed on the market being recyclable, reusable or compostable by 2025;
- To work towards eliminating food waste to landfill by 2030;
- To eliminate avoidable plastic waste over the lifetime of the 25 Year Environment Plan;
- To double resource productivity by 2050; and
- To eliminate avoidable waste of all kinds by 2050."
- 2.21 The plan seeks to ameliorate on the recent advances on waste minimisation in the country, to seek to reduce the quantum of waste going being disposed of in landfills to a minimum, and extend on previous waste minimisation rates, and generate a reduced impact on the local environment.
- 2.22 An example of this relevant to the construction industry is that the annual recovery rate of non-hazardous construction and demolition waste has exceeded 90% over the past decade, although improvements to this rate has since become harder to achieve.
- 2.23 In terms of construction and demolition waste, it was found that over 90% of waste arising from construction activity is typically mineral waste (non-mining, such as concrete or brick) or soils, has regularly been achieved over the past decade in England, which are typically processed and reused accordingly within the construction industry.
- 2.24 The previous document, which superseded the Waste Strategy for England (2007), fulfils requirements of Article 28 of the EU Waste Framework Directive and provides the planning framework for local waste management plans. It also details potential measures to achieve the national target rates to be recycled or reused of at least 70% of construction waste by 2020.

Waste Hierarchy

- 2.25 DEFRA issued 'Guidance on applying the Waste Hierarchy' in June 2011. This ranks waste management options according to what is best for the environment, giving top priority to preventing waste. When waste is created, it prioritises its preparation for reuse, then recycling, then recovery, and last of all disposal (e.g. landfill).
- 2.26 Figure 2.1, shown overleaf, shows the Waste Hierarchy, as presented within this DEFRA guidance document:



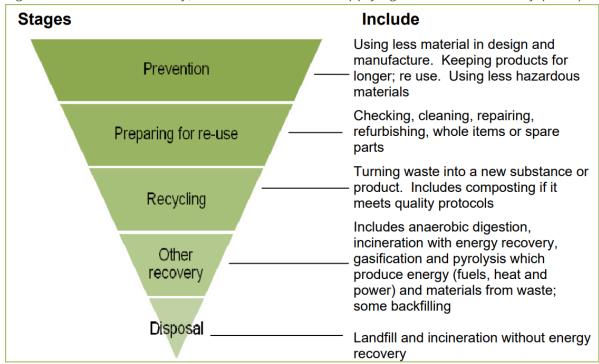


Figure 2.1: Waste Hierarchy; Source: Guidance on applying the Waste Hierarchy (2011)

2.27 The guidance continues by explaining how this works in practice for a range of material and products, and how business is expected to treat this waste generation.

The Mayor's Municipal Waste Management Strategy (2011)

2.28 This document identifies that reducing waste generation bring economic and environmental benefits. This document therefore sets out a strategy to reduce waste in London, identifying the role of households, businesses, industry and the government.

The Mayor's Business Waste Strategy for London (2011)

2.29 This document provides strategies and initiatives to businesses, such as shops, restaurants, manufacturing, construction and offices, on how to reduce waste to save money and conserve the environment.

The London Plan (2021)

- 2.30 The London Plan highlights the need to consider provision for waste management early in development plans and work towards waste net self-sufficiency by preventing waste from being generated and improving reuse, recycling and recovery.
- 2.31 Policy SI 7 'Reducing Waste and Supporting the Circular Economy' sets out targets to:
 - "encourage waste minimisation and waste avoidance"
 - "ensure there is zero biodegradable or recyclable waste to landfill by 2026"
 - "meet or exceed the municipal waste recycling target of 65 per cent by 2030"



• "design 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 Existing Site Assessment

The Existing Site

- 3.1 The existing site is currently developed as a library, with the main building entrance available off Hadlow Road. A yard to the rear of the site allows parking for staff, and includes circa 13 spaces, and is accessible off St John's Road, to the east of the site.
- 3.2 The site is bound by residential dwellings to the north and north-east of the site, by Hadlow Road to the west, and by commercial units at street level (fronting the local High Street) to the south and south-east.
- 3.3 The existing building structure on the site varies between a single storey building at the front of the site, and increases up to 4 storey in height at the rear of the site.
- 3.4 A sub-station is located to the rear of the site, near the site access with St John's Road is being retained, and will not form part of this scheme. A public toilet is present just outside the site area, near the main site access on St John's Road. This does not form part of the scheme either.

Material Composition of the Existing Site

- 3.5 The existing structure of the site has not been inspected for the preparation of this report, and this is recommended prior to a full SWMP being developed further.
- 3.6 Whilst it has not been fully verified at this point, the building appears to be a brick-clad concrete-framed structure, which also includes roof height windows in most areas of the site frontage. The site therefore includes an extensive quantity of glass apertures.
- 3.7 It is assumed that the existing structure was constructed in the late 1970s/early 1980s. Considering that the issues were already clearly known at the time, it is expected that asbestos material is not present within the site. This is however an informed assumption, and requires further investigation, prior to demolition processes commencing.
- 3.8 The rear yard is partially paved by asphalt and grassblock pavers. Streetlighting and signage will also require taking up. It is assumed that the asphalt paved area does not exceed 400sqm, and the grassblock pavers do not exceed 150sqm. The former is assumed to be made up of 225mm of asphalt layers, and 350mm of sub-base material. The latter material is expected to be made up of 100mm or 125mm deep grassblock pavers, set on 400mm sub-base layers.
- 3.9 The front of the site is fronted by a paved area including stone benches, etc. These will also require taking up and disposal safely, as part of the demolition process. It is assumed that this area is made up of 100mm granite block, set over 150mm of sub-base.
- 3.10 Waste that will be generated from the demolition of the site therefore includes primary construction materials such as bricks and concrete structures, plaster walls, timber, roofing material, earthworks, including asphalt, paving material and grassblock pavers, vegetation and topsoil, etc.
- 3.11 Detailing furniture will include internal and external apertures, internal and external lighting, drain pipes and culverts, CCTV cameras, alarms, wiring and switches, etc.



Waste Material Treatment

- 3.12 It is assumed that the existing contents of the site, including the furniture and books held within the library are to be moved elsewhere, or are to be disposed of, as part of the moving out process, and will not form part of the building demolition process.
- 3.13 Any waste arising from the site, which will not be reused on site, will be taken away from the site, and processed or disposed of, elsewhere.
- 3.14 Contaminated material will require treatment by appropriate licensed waste carriers, and disposed of in appropriate waste facilities.
- 3.15 Clean excavated materials which are not being reused on site will be sent for reuse elsewhere, following appropriate recycling facilities to be reused at other sites.
- 3.16 All material will be managed off-site by licensed waste carriers, until this is delivered through to the appropriate waste treatment site.



4 The Proposed Scheme

The Development Proposals

- 4.1 The proposals are for the redevelopment of the former library include 32 residential apartments comprising of 13 x one-bedroom (2-person), 5 x two-bedrooms (3-person), 8 x two-bedrooms (4-person), 4 x three-bedrooms (4-person), and 2 x three-bedrooms (5-person) apartments.
- 4.2 A Masterplan showing the development proposals is included in **Appendix B**.
- 4.3 There will be two separate pedestrian accesses from Hadlow Road. There will also be a pedestrian access to the development from the car parking area to the rear via St Johns Road.
- 4.4 The proposed development will therefore provide a minimum of 60 cycle parking spaces. 58 secure and sheltered cycle parking spaces are provided within the ground floor of the building, and a Sheffield stand for two visitor parking spaces should be provided near the entrance of the building.
- 4.5 Access for vehicles will remain via St Johns Road and will lead into the car park to the rear of the main building. The access into the car park will remain as per the existing arrangement.
- **4.6** The proposed development is providing 16 on-site car parking spaces.

The Construction Scheme

- 4.7 Whilst the detailed construction plans are not yet finalised at this point, the below sets out the basic assumptions for the management arrangements of the site waste that will be arising from this development process.
- 4.8 The proposed scheme is a four-storey brick development, which is expected to use traditional load-bearing masonry or a reinforced concrete frame construction system. A piled substructure below strip foundation footings and a green-roof structure, capping the new building are also envisaged by the preliminary Structural Feasibility Report.
- 4.9 Internal load-bearing walls will also be required as part of the structural composition of the new building.
- 4.10 Photo-voltaic panels and other building services are also proposed to be installed at roof levels.
- 4.11 The exact construction site arrangement has not been prepared at this point, and whilst it is assumed that on-site storage areas will be made available for the duration of this process, it is not clear how much space for this will be available. Space for crane installation, and other ancillary construction site areas are assumed to be required.

Building Foundations

4.12 It is understood that piling will be required on site, which will generate a significant element of waste being generated, which extent will need to be assessed by the Principal



- Contractor, or the Piling Contractor, prior to the commencement of the development works. The quantum of waste generated by these structural elements will depend on the design and depth of these elements, as adopted within the building proposal, following the detailed design of these structural elements.
- 4.13 The strip foundations will also require excavation around the site footing area, of approximately a circa (c.) 900mm wide strip, by c. 1.2m in depth. This will be required under all external and internal load-bearing walls. This is expected to generate approximately 360m³ of excavated material.
- 4.14 Excavated material that is found to be not contaminated during the excavation process, can be stored on site for reused for landscaping. Otherwise material will need to be transported for processing at appropriately licensed facilities off site.
- 4.15 The developable portion of the site is expected to cover c. 762sqm of the site area.

External Landscaping

- 4.16 Formally landscaped areas are expected to cover a limited portion of the scheme, apart from gardens and the site car parking area. Made up ground is expected to be required for any grassed areas of the private gardens, which extents are not currently defined in enough detail.
- 4.17 The total site area is of 2360sqm, of which almost 1600sqm will remain unbuilt.
- 4.18 It is assumed that in private gardens, 150mm will need to be taken up throughout, whereas in the communal landscaped areas, this will need to extend down to 600mm to allow for root areas for and trees and planting that are proposed here.
- 4.19 A road-surfacing paved area of c. 475sqm is proposed within the site car park. It is assumed that road construction depths of 225mm of asphalt layers, and 350mm of subbase material will be required here.

Superstructure Construction

- 4.20 The different construction elements required on site will always generate a wide variety of types of waste, either through packaging/loading material, loose off-cuts, wrong cuts, damaged material, over ordering, etc. It is recommended that while such material is minimised through pre-planning and training of staff how to inspect materials when these are delivered to the site and training staff to limit this.
- 4.21 In terms of superstructure materials, the exact type of construction system is not yet defined, and it is therefore a bit preliminary to define waste volumes at this point. Having said so, standard construction guidelines can be assumed at this point, such as the Building Research Establishment ('BRE') standard indicator of waste being generated by developable floor area.
- 4.22 The BRE indicators assumes that a residential scheme would generate c. 16.8t of construction waste per 100sqm of development.
- 4.23 Based upon a developable floor area of 726sqm, multiplied by four storeys, this would give an assumed mixed waste generation of approximately 500t for the superstructure



- construction. It is relevant to add that this figure is based on a national average, and site-specific requirements are not taken into consideration in this figure.
- 4.24 It is also assumed that additional non-standard building services, such as the green roof and PV panels at the top of the structure will generate additional construction-phase requirements which are not typically included in smaller schemes.
- 4.25 The classification of waste materials being generated by the scheme will be classified using the European Waste Catalogue ('EWC').



5 Construction Programme

Construction Programme

As a contractor has not yet been appointed, an initial preliminary construction programme has been produced using the TfL Construction Logistics Planning Tool. Table 5.1 below summarises the assumed construction phases for the proposed development.

Table 5.1 – Assumed construction programme

Construction Phase	Start	End
Site setup and demolition	Mar-2023	Apr-2023
Basement excavation and piling	May-2023	Jun-2023
Sub-structure	Jul-2023	Nov-2023
Super-structure	Dec-2023	Mar-2024
Cladding	Apr-2024	May-2024
Fit-out, testing and commissioning	Jun-2024	Sep-2024

5.2 During the 'Site setup and demolition' phase materials and equipment storage can utilise the existing hardstanding area along the east and west of the site. From the 'Basement excavation and piling' through to the 'Fit-out, testing and commissioning' phase materials and equipment will be securely stored within the structure and on space at the front and back of the site such as the parking area.

Site Setup and Demolition

- 5.3 Site setup will comprise erection of site boundary hoardings, closure of the footway along the site frontage, establishing the site office and demarcating the vehicle loading and unloading area. Following a soft strip, the structure will be demolished using mechanical plant.
- 5.4 Where possible, generated material will be reused, reducing the number of vehicles required to access the site. Unused material will be loaded into tipper lorries and removed from the site by appropriately licenced waste carriers.

Basement Excavation and Piling

5.5 It is not expected that there will be any basement excavation however there will be foundation works and possibly piling required. Any required piling would be monitored to ensure any vibrations to do not disrupt the nearby rail line or electrical substation.

Sub-Structure

5.6 Foundations for the four-storey building will re-using any materials where practicable.



Super-Structure

- 5.7 The structure, where possible will be constructed from large components which will brought to site by lorry and unloaded in the designated loading area. Use of prefabricated components reduces the need for construction vehicles to attend site.
- 5.8 Otherwise the raw materials will be delivered in bulk to ensure that number of trips to the site is being minimised.

Cladding

5.9 The façade contractor will be instructed to design the façade as to be delivered and installed in consolidated loads, reducing the number of deliveries required.

Fit-Out, Testing and Commissioning

5.10 This contractor will consider utilising DfMA principles with components manufactured and amalgamated off site, allowing quick installation, reduced time required on site and the number of deliveries. For instance, plumbing, mechanical and electric equipment are expected to be manufactured and assembled off site, to be installed as complete units.

6 Potential Waste Generation

Introduction

- 6.1 This section will be updated prior to the demolition phase to quantify the potential expected waste generation volumes by waste stream, and sets out targets for segregation and diversion rate from landfill.
- 6.2 These will be reviewed in due course, as the scheme progresses through its detailing and construction phase.
- 6.3 The demolition phase shall seek to maximise the reuse and recovery of materials wherever this is considered to be practically possible. These materials are to be correctly stored within the site until these can be reused on site.

Waste Processing Targets

- 6.4 It is recommended that in line with national averages, less than 5% of waste generated by the site is disposed of within a landfill. This would therefore naturally require that 95% of all demolition material being reused, recovered or recycled.
- 6.5 Whilst the scope to reuse the existing demolition material within the site is limited, due to the relatively small nature of the development, it is assumed that most of this was can be reused at other similar sites follow processing. A target of 15% on site reuse is therefore recommended.

Waste Generation Forecasting Audit

6.6 Prior to the commencement of the demolition works on site, an audit will be undertaken by the Principal Contractor, to assess the potential quantum of waste being generated by the demolition and construction processes. This audit will identify the different types of waste streams by each main areas of work, and tabulate these findings as follows:

Table 6.1 Waste Generation Forecast

Type of waste	List of Waste Code	Estimated Volumes (m³/t)	Managing Contractor		
Area or work (ex. Demolition of Existing Super-structure)					
Mixed concrete, brick, ceramics	17 01 07				
Soil or stones (non-hazardous)	17 05 04				
Gypsum	17 08 02				
Timber	17 02 01				
Glass	47 02 02				
Iron or steel	17 04 05				
Mixed metals	17 04 07				
Plastics	17 02 03				
Paper or cardboard packaging	15 01 01				
Plastic packaging	15 01 02				
Wooden packaging	15 01 03				
Metallic packaging	15 01 04				



- 6.7 Based upon the above, the Principal Contractor can therefore plan for the storage and assign the management of each type of waste to appropriate reuse on site or disposal processes, and avoid these wastes being mixed with other waste streams, before being appropriately managed.
- 6.8 The Waste and Resources Action Programme ('WRAP') waste volumes to mass conversion factors for excavation volumes is recommended to be used to quantify the above Waste Generation volumes.



7 Trip Generation & Impact

Trip Generation

7.1 A summation of the construction vehicle trips cannot currently be made from the above assumptions on demolition and construction material volumes. This will be prepared as the schemes moves forward, and more detail is made available following the grant of planning permission, and more detailed plans are prepared, and included with this design proposal.

Traffic Impact

- 7.2 It is expected that this site will generate a significant number of construction trips over the course of the Construction Phase. The type and number of trips are expected to be outlined above.
- 7.3 Whilst it is understood that each large vehicle trip within a dense urban area like Sidcup, will generate an impact on the local neighbourhood amenity, it is being proposed to minimise the impact by these proposals through the preparing and strict following of the Construction Logistics Plan and this Site Waste Management Plan, which seek to minimise and mitigate impact by the lowered number of construction trips.
- 7.4 It is not expected that the number of construction vehicle trips to generate a significant impact on the traffic flow levels, as these will be lower in number than the trips generated by the future Operational Phase scheme on site (as analysed within the application Transport Statement).



8 Waste Reduction Strategy

Introduction

- 8.1 In line with national, regional and local guidance, the scheme shall aim at reducing the generation of waste in line with the waste hierarchy, through reusing on site, recovery or recycling.
- 8.2 Guidance documents available in this regard include:
 - Defra (2008) Non-statutory guidance for site waste management plans;
 - WRAP (2010) Guidelines for measuring and reporting construction, demolition and excavation waste; and
 - WRAP (2011) Achieving good practice Waste Minimisation and Management

Waste Reduction Strategy

- 8.3 The following on-site processes shall be adopted by the Principal Contractor, to limit waste generation:
 - High Quality monitoring checks upon delivery of the materials, rejecting this before being unloading to the site, if this is found to be inappropriate for use on the site;
 - Strict following of the Construction Logistics Plan, to enable the efficient delivery and storage of materials on site, including the use of off-site consolidation centres and the use of 'just-in-time' delivery arrangements to limit materials being stored on site (potentially being damaged or being stolen);
 - Limiting the ordering of surplus material to a minimum and pre-arrangement of procurement agreements that require suppliers to take back any unused stock;
 - Provision of safe, secured and covered storage areas to minimise any damage to on site storage;
 - Provision of clearly marked segregation skips for recycled construction materials and green waste on site; and
 - Strict waste management and disposal agreements with sub-contractors.
- 8.4 Apart from the above, designers will look at reducing the need for construction work processes on site, through the deployment of off-site fabrication method, and design of standard-unit sized items to reduce off-cuts.
- 8.5 Waste can therefore be appropriately segregated at source, allowing for a more efficient recovery and recycling process further down the line. Training to all staff personnel shall be provided in this regard.

Principal Contractor Duties

- 8.6 The Principal Contractor shall ultimately remain responsible for managing these process, but may assign individual responsibilities of this to third-company companies operating on the site. The key elements of responsibility include:
 - Recording of material deliveries and pickups, to and from the site;



- Organisation and training of staff on material selection, handling and storage practices;
 and
- Periodic review and documentation of material usage, including waste generation.
- 8.7 This SWMP will act as a programme to develop a waste minimisation system, which requires the identification and measurement of raw material deliveries and wastage, the quantifying total waste streams, development of waste management systems, and is to be updated prior to the commencement of work on the site, and kept up to date through the construction process, including through periodic reviews by the Principal Contractor, every 6 months, reviewing the waste management processes, and updating these in line with operational requirements, and any arising legal obligations.
- 8.8 Full records of the materials being brought on the site, as well as the material being sent of disposal or treatment (through recovery or recycling) shall be maintained by the Principal Contractor, to retain a record the use of materials on the site.
- 8.9 It is pertinent to add that the SWMP remains a live document throughout the Construction Phase, and will be maintained by the Principal Contractor, once this is appointed for undertake the works on the site.

Best Practice Guidance

- 8.10 The Principal Contractor's site management will seek to adopt best practice with waste minimisation, such as:
 - minimisation of packaging of materials being delivered to the site;
 - avoiding over-ordering of material to the site;
 - using 'Just in time' delivery practices via consolidation centres, where material is checked for correct specification/quantity;
 - limiting damaging material during transfer between delivering vehicles and being used (and handed over) on site;
 - securing the site, to limit theft and vandalism; and
 - ordering of materials in standard sizes.
- 8.11 The on-site locations for storage materials and waste collection points will be clearly marked, to allow for appropriate storage of materials and dedicated skips for waste stream separation at source.
- 8.12 Any on-site offices will maintain records of deliveries and storage, as well as waste management, to be available at hand for site management, and allow appropriate health and safety reporting and appropriate site monitoring. This will allow the Principal Contractor to provide clear forecasts of the anticipated waste generation, to be able to plan for storage and disposal areas accordingly.



9 Summary

- 9.1 This Site Waste Management Plan has been prepared by EAS on behalf of BexleyCo Homes regarding the proposed redevelopment of Sidcup Library. The proposals are for the redevelopment of the former library including the demolition of the existing structure into 32 residential apartments comprising of 13 x one-bedroom (2-person), 5 x two-bedrooms (3-person), 8 x two-bedrooms (4-person), 4 x three-bedrooms (4-person), and 2 x three-bedrooms (5-person) apartments.
- 9.2 The site is currently known as the Sidcup Library, and is located at 1 Hadlow Road, Sidcup, London DA14 4AQ. The site is therefore located within the administrative boundaries of the London Borough of Bexley.
- 9.3 This Site Waste Management Plan ('SWMP') report has therefore been prepared with regard to the Department of Environment, Food and Rural Affairs ('DEFRA') Guidance on Site Waste Management Plans and the Disposal of business or commercial waste; also to guidance that LB Bexley have published on their website.
- 9.4 A review of the national and regional guidance and policy on construction waste generation is included in this report.
- 9.5 The existing site is currently developed as a library, with the main building entrance available off Hadlow Road. A yard to the rear of the site allows parking for staff, and includes circa 13 spaces, and is accessible off St John's Road, to the east of the site.
- 9.6 The existing building structure on the site varies between a single storey building at the front of the site, and increases up to four storey in height at the rear of the site.
- 9.7 A sub-station is located to the rear of the site, near the site access with St John's Road is being retained, and will not form part of this scheme. A public toilet is present just outside the site area, near the main site access on St John's Road. This does not form part of the scheme either.
- 9.8 It is assumed that the existing structure was constructed in the late 1970s/early 1980s. Considering that the issues were already clearly known at the time, it is expected that asbestos material is not present within the site. This is however an informed assumption, and requires further investigation, prior to demolition processes commencing.
- 9.9 Waste that will be generated from the demolition of the site therefore includes primary construction materials such as bricks and concrete structures, roofing material, earthworks, including asphalt, paving material and grassblock pavers, vegetation and topsoil, etc.
- 9.10 The proposed scheme is a four-storey brick development, which is expected to use traditional load-bearing masonry or a reinforced concrete frame construction system. A piled substructure below strip foundation footings and a green-roof structure, capping the new building are also envisaged by the preliminary Structural Feasibility Report.
- 9.11 Based upon a developable floor area of 726sqm, multiplied by four storeys, this would give an assumed mixed waste generation of around 500t for the superstructure construction. It is relevant to add that this figure is based on a national average, and site-specific requirements are not taken into consideration in this figure.



- 9.12 The classification of waste materials being generated by the scheme will be classified using the European Waste Catalogue ('EWC').
- 9.13 Any waste arising from the site, which will not be reused on site, will be taken away from the site, and processed or disposed of, elsewhere. Contaminated material will require treatment by appropriate licensed waste carriers, and disposed of in waste facilities.
- 9.14 Clean excavated materials which are not being reused on site will be sent for reuse elsewhere, following appropriate recycling facilities to be reused at other sites. All material will be managed of-site by licensed waste carriers, until this is delivered through to the appropriate waste treatment site.
- 9.15 It is not expected that the number of construction vehicle trips to generate a significant impact on the traffic flow levels, as these will be lower in number than the trips generated by the future Operational Phase scheme on site.
- 9.16 In line with national, regional and local guidance, the scheme aims at reducing the generation of waste in line with the waste hierarchy, through reusing on site, recovery or recycling. This includes waste reduction strategies through both design, planning and site practices.
- 9.17 The Principal Contractor shall ultimately remain responsible for managing these process, but may assign individual responsibilities of this to third-company companies operating on the site, including recording of deliveries and pickups from the site, organisation and training of staff on material handling and storage practices and the periodic review and documentation of material usage, including waste generation. Best practice guidance is included within this report.
- 9.18 It is pertinent to add that the SWMP remains a live document throughout the Construction Phase, and will be maintained by the Principal Contractor, once this is appointed for undertake the works on the site.

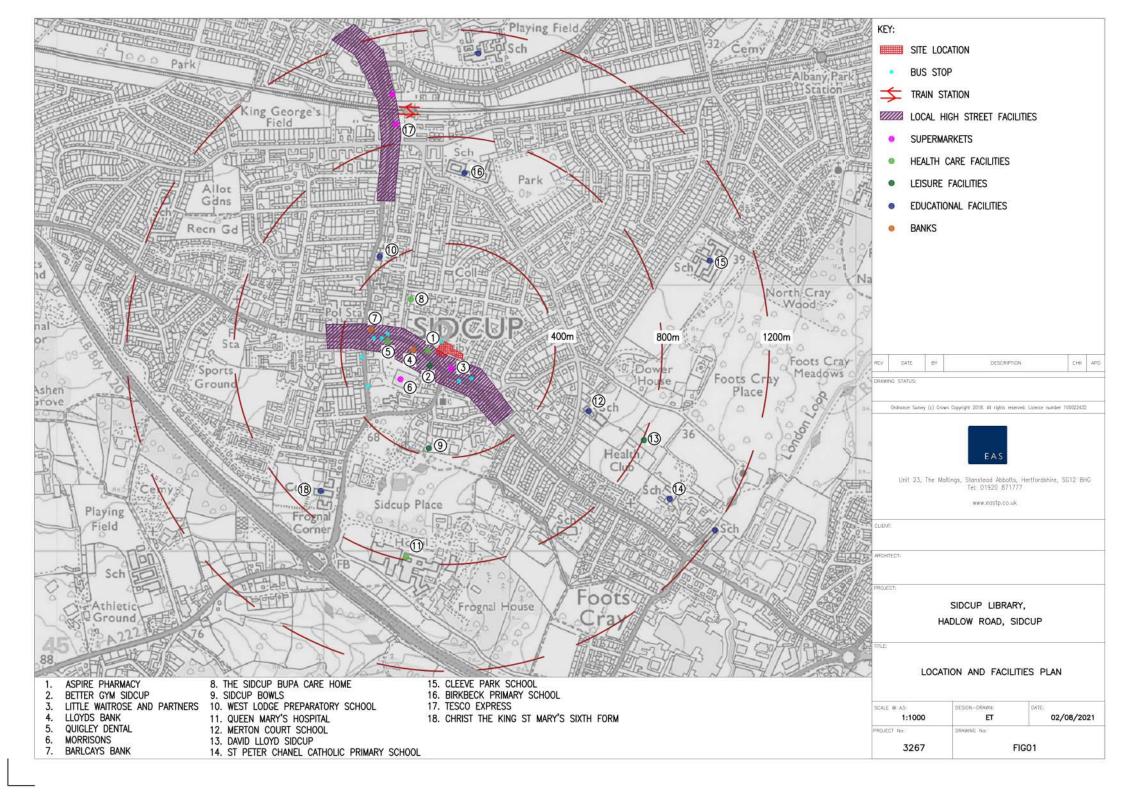


Appendices

Appendix: A - Location Plan Appendix: B - Masterplan



Appendix: A - Location and Facilities Plan





Appendix: B – Development Layout





Sidcup Library

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Site plan proposed 1:500 @ A3 A3 17.09.21

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Sidcup Library

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