

London School of Hygiene & Tropical Medicine TP2

Waste Strategy Statement

Issue Date: 24.01.2020 Revision: P05

This revised Waste Strategy Statement is provided in support of a Section 96a Non-Material amendment application (December 2019) incorporating changes to the courtyard design and omission of the vehicle turn table. A revised Swept Path Analysis is included.

The following items are addressed within this statement:

1. Site Waste Management Plan (SWMP) – Construction and demolition waste
2. Waste arising from the proposed TP2 building.

Appendix A: LSHTM Waste Management Policy and Guidance Document – Sept. 2017.

Appendix B: Swept Path Analysis drawing 683-045-010 SPA Rev G

1. Site Waste Management Plan

LSHTM's current Waste Management Policy (appended to this Statement) includes requirements to ensure that Contractors are aware and supportive of the School's waste policies. This includes contractors adhering to relevant legislation relating to waste from construction and refurbishment works, and providing a Site Waste Management Plan where applicable.

The proposed contents of the Site Waste Management Plan are set out below:

Site Waste Management Plan

Contents

- a. Introduction
- b. Project Value (greater than £500, 000)

- c. Aim of SWMP
- d. Implementation of SWMP
- e. Legislative Context and Guidance

Project Details

- a. Site Address
- b. Description of Development
- c. Details of where the SWMP will be kept on site
- d. Date Waste Management Plan Prepared
- e. Project Timescales
- f. Principal Client
- g. Principal Contractor
- h. Originator
- i. Person responsible for ensuring compliance with Waste Duty of Care Regulations
- j. Third Party Waste Handling
- k. Waste Minimisation
- l. Ongoing Monitoring and Review Upon Completion of Each Phase

Records

- a. Waste Estimates
- b. Waste Records
- c. Project Overview
- d. Deviation Explanation
- e. Cost Saving Estimate

Existing and Proposed Waste Disposal (*including data*)

a. Laboratory Waste

b. Domestic Waste

Conclusions

Appendices

a. Site Location Plan

b. Demolition Plan

2. Waste arising from the proposed TP2 building

It is important to consider how future waste streams will be managed at this site, having regard to Camden Local Plan Policy CC5 (Waste), London Plan Policies 5.16 (Waste net self-sufficiency) and 5.7 (Waste capacity), the Government's Waste Management Plan for England (2014); and CPG3 - Sustainability.

Waste management for the proposed TP2 building will comply with the principles set out in the attached LSHTM Waste Management Policy. Upon completion of the building the policy will be updated to suit the changes to the School's waste collection requirements arising from the new building.

A refuse storage area is included as part of the proposed design on the west side of the TP2 building, designed to accommodate the combined waste arising from the use of the existing LSHTM building and proposed TP2 building. Areas for general waste, recycling, food waste, and glass waste will be provided within this storage area. Bagged waste and recycling will be collected from within the TP2 building and existing LSHTM building and taken to the appropriate bin within the refuse storage area.

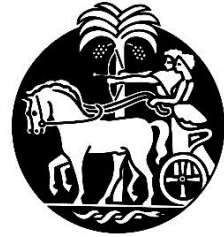
Collection of waste by the refuse collection contractor will be undertaken from within the service courtyard. It is proposed that refuse vehicles will enter the courtyard via the west pend in forward gear, undertake a reversing manoeuvre within the courtyard and then leave the site in forward gear. This is as shown on the Swept Path Analysis drawing included in Appendix B.

A secure area within the TP2 basement will be provided for the storage of equipment for re-use. Access to the basement is provided via the passenger lift and stairs.

Appendix A

LSHTM Waste Management Policy and Guidance Document – Sept. 2017.

LONDON
SCHOOL *of*
HYGIENE
& TROPICAL
MEDICINE



Waste Management Policy and Guidance Document

September 2017

1. Purpose

The purpose of this document is to set out the School's approach to waste management.¹

2. Scope

This policy and supporting guidance confirms how the School manages all waste streams arising from all its business activities in addition to highlighting opportunities for increasing re-use and recycling.

3. Responsibilities

This policy is the overall responsibility of the Director of Estates. Day-to-day responsibility for implementation of the policy is delegated to the Domestic Services Manager who is supported by the Bloomsbury Sustainability Manager.

4. Procedure

This policy will be reviewed and updated at least once every two years normally in the summer term by the Domestic Services Manager with input from the Bloomsbury Sustainability Manager. The review and any updates made will reflect any changes in legislation and/or industry best practice guidance.

Amendments to this policy will initially be made by the Domestic Services Manager in consultation with the Bloomsbury Sustainability Manager for review by the Director of Estates. Following agreement on updates, a revised version of the policy will be put to the School's Senior Leadership Team for formal approval.

5. Equality Implications

There are no known any impacts on equality in relation to protected characteristic groups i.e. age, ethnicity, sex, disability, sexual orientation, religion, belief or non-belief, pregnancy or maternity, civil partnerships or marriage or gender identity for both staff and students in respect to this policy.

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6. Policy Document

6.1 At the School of Hygiene and Tropical Medicine (LSHTM) we are conscious of the impact our activities have on the environment and we take steps to minimize this impact. The Environmental policy endorsed by the Bloomsbury Colleges (of which we are a member) commits the partners to *“Minimise the impact and use of natural resources...reusing materials, recycling and reducing waste to landfill”*.

6.2 Therefore raising awareness of waste issues, assigning responsibilities, improving waste and recycling infrastructures and adherence to all related legislation, will ensure continual progress is made towards reducing waste production, diverting waste from landfill and increasing recycling capture.

6.3 This policy provides a guide to the LSHTM’s current waste management structure and associated responsibilities, as well as highlighting opportunities for increasing participation and performance relating to waste and recycling.

6.4 Waste Policy and Operation

The School will:

- Meet or exceed all waste related legislation and requirements;
- Implement waste strategies based on the waste hierarchy:
 - **Reduce** waste production – Before you buy, consider whether the item is being offered for reuse by another department (refer to WARPiT in Section 8). If not, then make sure that waste from the item purchased can be effectively reused or recycled. Where possible make attempts to repair items before going on to purchase new. Get suppliers to take back unwanted packaging when delivery is made as part of order form by procurement;
 - **Reuse** items – Explore opportunities to reuse items before disposing as waste. Examples are furniture, books and IT equipment;
 - **Recycle** as much as possible – Most materials can now be recycled. Purchase products that can be recycled and where possible are made from recycled materials. Table 1 below details materials that can be recycled at the School;

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- **Recover** useful materials from waste, Energy from Waste – for example metal can be separated and taken to scrap yards and food waste can be collected and turned into compost;
- **Disposal** – Disposal to landfill is the last resort for items that cannot be dealt with by any of the above options;
- Ensure that all staff as producers of waste become responsible for managing their own domestic waste stream, sorting out their recycling and reducing waste to landfill;
- Ensure contractors and suppliers are aware and supportive of the School’s waste policies. This includes contractors adhering to relevant legislation relating to waste from construction and refurbishment works as required. (E.g. providing Site Waste Management Plans (SWMP) when applicable).

65 Responsibilities

65.1 Responsibility for waste production and consequently waste management has to be shared by every member of LSHTM staff, students and partners. Below is a list of key stakeholders and their role in waste management:

65.2 All Staff

All staff are required to support the School’s waste policies by: minimizing waste production, reusing items and recycling as much waste as possible. Table 1 outlines a breakdown of the School’s waste streams.

65.3 All Students

LSHTM students are required to support and abide by the School’s waste policies – reducing waste, reusing and recycling as much as possible. Students are also expected to be tidy and considerate when on LSHTM property.

65.4 Senior Staff Committee and Departmental Heads (both Professional and Academic)

The LSHTM Senior Leadership Team and Departmental Heads can help by encouraging their staff to comply with this policy. Managers can be asked to cascade feedback regarding recycling performance to staff and initiate improvements as required.

65.5 Cleaning and Portering Staff

Cleaning and Portering staff are responsible for emptying the designated waste receptacles and for the appropriate storage of the different waste streams prior to collection by the appropriate waste contractor. Also, they are required to assist with improvements to waste management operations and waste audit exercises.

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6.5.6 Catering and Refectory Staff

Catering and Refectory Staff are expected to be mindful of waste produced as a result of their operations, services and procurement decisions. As with other staff Catering staff will be required to abide by the School's waste policies and apply the waste hierarchy through the decision making process of their service provisions.

6.5.7 Waste Contractors

The School's waste services contractor will assist in the continual improvement to the School's waste management operations and performance as much as possible and fulfill the performance related aspects of their contract. General waste collected from LSHTM sites currently gets transported to SITA's incinerator in Barking and used to generate energy. Therefore, the School's waste currently is not being sent to landfill.

6.5.8 Suppliers

Suppliers are required to support the School's waste policies by ensuring product packaging is reduced. Suppliers will also be prepared to 'take back' excess packaging.

6.5.9 Contractors

Maintenance contractors and those engaged in refurbishment works are responsible for the waste produced as a result of the work carried out on the School sites. Contractors are expected to collect this waste separately and securely. Contractors will make their own arrangements to dispose of this waste responsibly.

6.6 Waste Streams

General waste produced by the School goes to Energy from Waste plant and Material Recovery Facility at Barking. Table 1 lists the different kinds of waste produced at the LSHTM. It also shows the types of waste that are currently being recycled. All listed waste streams should be disposed of appropriately in line with relevant legislation.

Table 1: Breakdown of the School's Waste Streams

Waste Stream	Content	Point of Production	Responsibility	Waste Contractor	Frequency of Collection
General Rubbish	Domestic, non-recyclable waste	Across the School	Cleaners (Noonan)	SITA	KS – Daily TP – Mon, Wed & Fri
Recycling	Tins, cans, plastic bottles, glass, paper & cardboard	Across the School	Cleaners (Noonan)	SITA	KS – Daily TP – Mon, Wed & Fri

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Confidential Waste	Mostly paper based	Across the School	Departments	Paper Round	As required
Furniture	Tables, chairs etc.	Across the School	Porters	JEP Industrial	As required
WEEE	All electrical items including white goods	Across the School	Departments	JEP Industrial	As required
WEEE: IT Goods	Computers, printers, mobile phones and other IT equipment	Across the School	IT services	JEP Industrial	As required
Hazardous / Special Waste	Fluorescent tubes and bulbs	Across the School	Maintenance / Facilities team	Ralco	As required
	Toner cartridges	Across the School	Departments	JEP Industrial	As required
Clinical Waste	Lab waste	Across the School	Lab Technicians	Grundon	As required
Hygiene Waste	Feminine Hygiene, body fluids	Toilets, First Aid points	Cleaners (Noonan)	Cannon Hygiene / ABC Hygiene	As required
Construction Waste (Skips)	Construction and refurbishment waste	Construction and renovation sites	Estates and/or Externally Appointed Project Manager	Project Contractor	As required
Batteries	Batteries from small appliances and lead acid batteries	Across the School	These are held to key locations across Reception and by Media Technicians	SITA	As required
Food Waste	All kitchen and food waste	Refectory and other locations	Catering Staff	SITA	As required

6.7 Raising Awareness

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6.7.1 Awareness raising and promotional campaigns are key to ensuring waste is reduced at source and waste produced is dealt with in a sustainable and legal manner. This involves educating key staff and other members of the LSHTM community. Effective mobilization and engagement will result in minimization of our waste arising and whilst increasing our recycling rates. The *Greenthing*² brand is used as a promotional tool to help increase participation and engagement with the School's waste and overall environmental policies.

6.7.2 Effective communication and outreach campaigns will greatly contribute to the improvement of the waste management system and provide a platform for promoting other objectives within the environmental policy. Table 2 provides a breakdown of promotional/communication avenues for the different stakeholder groups within the School.

Table 2: Avenues for Promotional Campaigns

Education and Promotion				
Target Group	Avenue	Engagement	Responsibility	Notes
New Students	Students' Induction week	Presentation / Video, Talk and Information Pack	School's administrators and Sustainability Manager	To convey what is expected of new students as part of their responsibility to the LSHTM environment and as a part of their learning experience
All Students	Students' Union as a venue and partner for promoting behavioural change	Various schemes including promotions and competition	Students' Union Executives, and Sustainability Manager	Student friendly avenues for promoting behavioural change

² The Greenthing is the Bloomsbury Colleges sustainability brand. It is the face of environmental activities across the colleges to help with awareness raising and improving engagement with sustainability issues.

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New Staff	Staff Induction	Presentation / Video, Talk and Information Pack	Staff Development Administrator and Sustainability Manager	To convey what is expected of new staff as part of their responsibility to the LSHTM environment
Staff in Different Departments	Staff meetings	Presentation / Talk	Schools administrators / Departmental Heads and Sustainability Manager	Encourage departments to invite updates from the Sustainability Manager at some departmental meetings
All Staff	Emails, Newsletter	Print and Electronic Medium; Green Champions Network	External Relations and Sustainability Manager	Getting environmental stories out through the School's communication structures and established sustainability groups
Students, Staff, General Public	Website, brochures	Print and Electronic Medium	Communications / Marketing Manager and Sustainability Manager	Getting environmental stories out through the School's communication structures
Catering Staff	Organised briefing sessions	Posters, Talks, Updates on Service	Catering Manager and Sustainability Manager	Discussing the importance of their role to our objectives, highlighting results of their contributions as well as getting their feedback on operations on the ground
Cleaning Staff	Organised briefing sessions	Presentation / Talk, Updates on Service	Domestic Service Manager and Sustainability Manager	
Maintenance Staff	Organised briefing sessions	Presentation / Talk, Updates on Service	Maintenance Manager / Sustainability manager	

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*Also design generic posters/leaflets which provide a largely pictorial explanation of the recycling scheme at main lounges and reception areas, space permitting.

6.8 Auditing and Continuous Improvements

Spot check audits will be conducted twice a year across the School's estate to identify recycling hotspots with a view to introduce targeted interventions. In addition, areas of improvements and non-conformities can be identified during the Sustainability Management System (EMS) auditing process.

6.9 Reviewing Performance

Improvements to waste management operations and infrastructure are discussed regularly by the Director of Estates and the Bloomsbury Sustainability Manager with a view to reduce the environmental impact of waste production.

For consideration will include: the amount of total waste produced, removal and transportation of waste, effectiveness of communication, improvements to waste infrastructure, review of supply chain and all associated carbon emissions.

7. Waste Action Reuse Portal (WARPiT)

The LSHTM together with the Bloomsbury Colleges have subscribed to WARPiT – a resource and waste redistribution network. WARPiT makes it easy for individuals to give surplus items to other individuals/departments within the same organization in the first instance, to selected partners (e.g. Bloomsbury Colleges), and then to other universities and charity organizations who are part of the WARPiT Club. The web application works by linking resources to where they are required, thus reducing waste and the need for more procurement. All employees are encouraged to use this network and contribute to the School's waste management improvement efforts.

Staff can follow this link www.warp-it.co.uk/lshtm to register and start sharing resources.

8. Document Owner and Approval

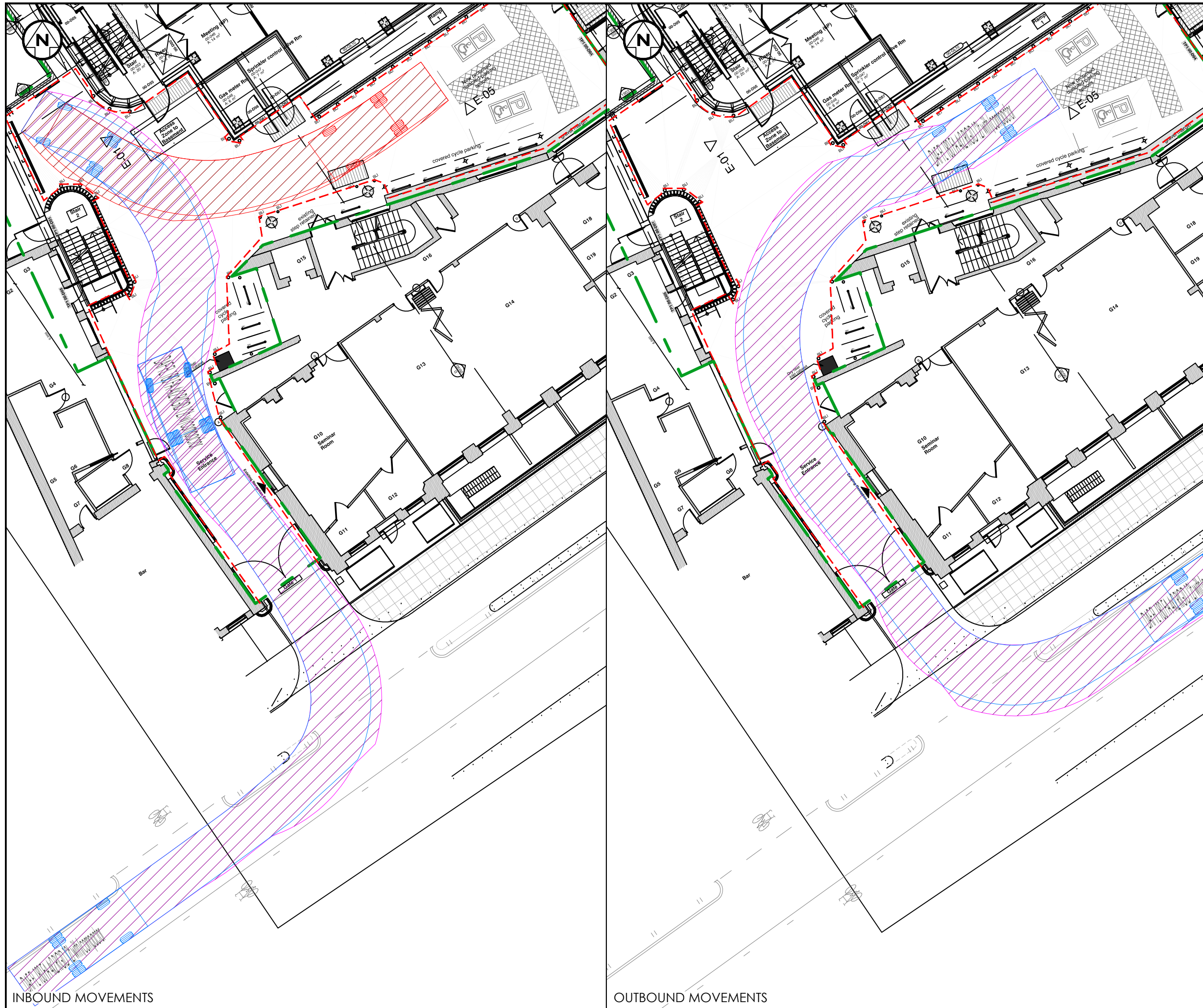
The Director of Estates is the owner of this document and is responsible for ensuring that this policy is reviewed in line with the review requirements of the LSHTM.

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A current version of this document will be available to all members of staff on the School's intranet, website and will be published at the new Bloomsbury Environmental website when this goes live.

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Appendix B - Swept Path Analysis Drawing



NOTES - GENERAL:

- 1) ALL DIMENSIONS ARE STATED IN MILLIMETRES UNLESS NOTED OTHERWISE.
- 2) ALL LEVELS ARE STATED IN METRES
- 3) DO NOT SCALE. PLEASE REFER ANY QUERIES TO THE PROJECT MANAGER / SUPERVISOR.

KEY

DAF FL 180 FA 4x2 RIGID 12t W/COMPACTOR
 OVERALL LENGTH 7.470m
 OVERALL WIDTH 2.550m
 OVERALL BODY HEIGHT 2.590m
 MIN BODY GROUND CLEARANCE 0.270m
 TRACK WIDTH 2.550m
 LOCK TO LOCK TIME 6.00s
 KERB TO KERB TURNING RADIUS 8.385m

VEHICLE MANOEUVRE (FORWARD)
 VEHICLE MANOEUVRE (REVERSE)
 LIMIT OF VERTICAL OBSTRUCTION

G	SD	ML	TS	22.01.20	LAYOUT AND SWEEP PATHS AMENDED
F	DN	ML	TS	10.01.20	LAYOUT AND SWEEP PATHS AMENDED
E	DN	ML	TS	10.01.20	LAYOUT AND SWEEP PATHS AMENDED
D	SD	ML	TS	30.07.19	SWEEP PATHS AMENDED
C	SD	ML	TS	24.07.19	VEHICLE AMENDED
B	SD	ML	TS	12.07.19	LAYOUT AND SWEEP PATHS AMENDED
A	SD	ML	TS	19.06.19	SWEEP PATHS AMENDED
REV	DRN	CHK	APP	DATE	DESCRIPTION

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Client

LONDON SCHOOL OF HYGIENE & TROPICAL MEDICINE

Project

LSHTM TAVISTOCK PLACE
CMP DESIGN

Title

SWEPT PATH ANALYSIS
DAF FL 180

Scale 1:200	Drawn SD	Date 18.06.19	Chkd ML	Approved TS
Drawing No. 683-045-010				Revision G
Status FOR INFORMATION				Sheet Size A3