



Port Health & Environmental Services Committee

Date: MONDAY, 10 OCTOBER 2022
Time: 11.00 am
Venue: COMMITTEE ROOMS, 2ND FLOOR, WEST WING, GUILDHALL

Members:

Deputy Keith Bottomley (Chairman)	Deputy Ann Holmes
Mary Durcan (Deputy Chairman)	Wendy Hyde
George Abrahams	Henry Jones
Shahnan Bakth	Elizabeth Anne King
Alderman Alexander Barr	Natasha Maria Cabrera Lloyd-Owen
Deputy Christopher Boden	Andrew McMurtrie
Tijs Broeke	Deputy Henry Pollard
Timothy Butcher	Jason Pritchard
Deputy Simon Duckworth (Chief Commoner)	Oliver Sells KC
Deputy Peter Dunphy	Deputy Dr Giles Shilson
John Edwards	Alethea Silk
Helen Fentimen	Mandeep Thandi
Deputy Marianne Fredericks	Luis Felipe Tilleria
Steve Goodman	Glen Witney
Alderman Prem Goyal	Irem Yerdelen
Caroline Haines	Henrika Priest

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[Port Health and Environmental Services Committee 10/10/2022 - YouTube](#)

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John Barradell
Town Clerk and Chief Executive

AGENDA

NB: Certain items presented for information have been marked * and will be taken without discussion, unless the Committee Clerk has been informed that a Member has questions or comments prior to the start of the meeting

Part 1 - Public Agenda

1. **APOLOGIES**

2. **MEMBERS' DECLARATIONS UNDER THE CODE OF CONDUCT IN RESPECT OF ITEMS ON THE AGENDA**

3. **MINUTES**

To agree the public minutes and non-public summary of the meeting of the Port Health and Environmental Services Committee held on 22nd of July 2022.

For Decision
(Pages 5 - 10)

4. **PUBLIC OUTSTANDING ACTIONS**

Report of the Town Clerk.

For Information
(Pages 11 - 12)

5. ***COMMITTEE EVENTS**

Report of the Town Clerk.

For Information
(Pages 13 - 14)

6. **BREXIT UPDATE**

Executive Director Environment to be heard.

For Information

7. **CLEANSING UPDATE**

The Director of City Operations and Assistant Director for Gardens and Cleansing to be heard.

For Information

8. ***CITY OF LONDON LIGHTING SUPPLEMENTARY PLANNING DOCUMENT**

Report of the Executive Director Environment.

For Information
(Pages 15 - 54)

9. ***AIR QUALITY ASR FOR 2021 COMMITTEE REPORT**

Report of the Executive Director Environment.

For Information
(Pages 55 - 72)

10. ***RISK MANAGEMENT UPDATE REPORT**

Report of the Executive Director Environment.

For Information
(Pages 73 - 88)

11. ***BUSINESS PLANS 2022/23: PROGRESS REPORT (PERIOD 1, APRIL-JULY)**

Report of the Executive Director Environment.

For Information
(Pages 89 - 104)

12. **QUESTIONS ON MATTERS RELATING TO THE WORK OF THE COMMITTEE**

13. **ANY OTHER BUSINESS THAT THE CHAIRMAN CONSIDERS URGENT**

Any items of business that the Chairman may decide are urgent.

14. **EXCLUSION OF THE PUBLIC**

MOTION – That under Section 100(A) of the Local Government Act 1972, the public be excluded from the meeting for the following items on the grounds that they involve the likely disclosure of exempt information as defined in Part I of the Schedule 12A of the Local Government Act.

Part 2 - Non-public Agenda

15. **NON-PUBLIC MINUTES**

To agree the non-public minutes of the meeting of the Port Health and Environmental Services Committee held on 22nd of July 2022.

For Decision
(Pages 105 - 108)

16. **LEASE RENEWAL LAUNCH SERVICE :FORMER ISOLATION BLOCK, MARK LANE, DENTON, GRAVESEND, KENT DA12 2QE**

Report of the Executive Director Environment.

For Decision
(Pages 109 - 116)

17. ***PORT HEALTH AND ENVIRONMENTAL SERVICES DEBTORS - PERIOD ENDING 30 JUNE 2022**

Report of the Executive Director Environment.

For Information
(Pages 117 - 126)

18. **NON-PUBLIC QUESTIONS ON MATTERS RELATING TO THE WORK OF THE COMMITTEE**

19. **ANY OTHER BUSINESS THAT THE CHAIRMAN CONSIDERED URGENT AND WHICH THE COMMITTEE AGREES SHOULD BE CONSIDERED WHILST THE PUBLIC ARE EXCLUDED**

PORT HEALTH & ENVIRONMENTAL SERVICES COMMITTEE

Friday, 22 July 2022

**Minutes of the meeting of the Port Health & Environmental Services Committee
held at the Guildhall EC2 at 10.00 am**

Present

Members:

Deputy Keith Bottomley (Chairman)
Mary Durcan (Deputy Chairman)
Peter Dunphy
Elizabeth King
George Abrahams
Anne Holmes
Marianne Fredericks
Helen Fentimen
Deputy Henry Pollard
Wendy Hyde
Alderman Alexander Barr
Alderman Prem Goyal
Mathew Pritchard
Steve Goodman
Irem Yerdelen
Natasha Lloyd-Owen
Luis Tilleria
Timothy Butcher
Deputy Dr Giles Shilson
Deputy Simon Duckworth (Chief Commoner)

Officers:

Juliemma McLoughlin	- Executive Director, Environment
Gary Burks	- Superintendent & Registrar, City of London Cemetery & Crematorium
Ruth Calderwood	- Environment Department
Paul Chadha	- Chief Lawyer
Jenny Pitcairn	- Chamberlain's Department
Rachel Pye	- Environment Department
Gavin Stedman	- Port Health & Public Protection Director
Polly Dunn	- Town Clerk's Department Officer
Andrew Buckingham	- Media Officer
Elisabeth Hannah	- Environment Department
Robin Whitehouse	- Environment Department
Ian Hughes	- Environment Department
Joe Kingston	- Environment Department

1. **APOLOGIES**

Apologies were received from Henry Jones, Andrew McMurtrie, John Edwards, Oliver Sells QC, Caroline Haines and Alethea Silk.

2. **MEMBERS' DECLARATIONS UNDER THE CODE OF CONDUCT IN RESPECT OF ITEMS ON THE AGENDA**

There were no declarations.

3. **URGENT ITEM OF BUSINESS - APPOINTMENT OF MEMBERS TO THE LOCAL PLANS SUB-COMMITTEE**

The Committee considered the appointment of one Member of the Port Health and Environmental Services Committee to the Local Plans Sub-Committee of the Planning and Transportation Committee. The Town Clerk informed the Committee that Deputy Chairman Mary Durcan and Elizabeth Anne King had indicated willingness to stand and invited any other declaration of interest in the position. As there were two Members indicating their willingness to stand, a ballot was conducted in accordance with the Standing Orders.

RESOLVED – That Elizabeth Anne King be appointed to the Local Plans Sub-Committee.

4. **MINUTES**

RESOLVED- That the public minutes and non-public summary of the meeting held on 24 May 2022 were approved as an accurate record.

Matters Arising

Officers confirmed early discussions on the Disco ship/ahoy centre had taken place with other London Boroughs who may be involved to consider licensing and conditions, however, there were no further details concerning locations, disembarking, and embarking. Officers said they would continue to monitor the situation and would report back to Committee when further details emerge.

Officers agreed to come back to Committee with figures on the revenue of public lavatories in the City. Officers noted that the contactless trial at Tower Hill was still on-going and a report would be brought back to the Committee in October.

Following Member's query on the campaign regarding litter, which was planned for the summer, Officers confirmed the litter trial had taken on several components.

5. **OUTSTANDING ACTIONS**

The Committee received a report of the Town Clerk setting out the current list of outstanding actions.

The Chairman requested an update on the action listed regarding the measurement and mitigation options for operational rail noise from London Underground effecting the Barbican Estate. The Committee was informed that funding and vibration issues remained high on the priority to the Corporation

and, through the Chairman of Policy and Resources, these points would be highlighted to the Deputy Mayor, Transport and Deputy Mayor, Transport for London (TfL) Sebastian Dance. It was suggested by Members the Deputy Mayor that be invited to properties effected by the noise from the London Underground.

Members queried whether officers had been made aware of any additional funding being provided to cover the costs from Destination City. Officers noted that the wider Corporation position understood there was a challenging funding situation and feedback from the Resource Allocation Sub-Committee was that budgets would be held at their existing levels in terms of contract uplifts and capital spend including other measures. It was noted that implications from this would be absorbed through mid-year budget rounds usually held in September and further discussions would take place between the Chairmen of the Port Health & Environment Services Committee, Finance Committee and Executive Directors for those perspective areas. The Chairman said on behalf of the Committee he would write Executive Director of Innovation and Growth to formally request that the Director of Destination City addresses concerns relating to investment in cleaning and public services.

RESOLVED- That the report be noted.

6. BREXIT UPDATE

The Committee was provided with a verbal update of the Executive Director Environment regarding the current position with the Brexit process.

RESOLVED, That the verbal update be noted.

7. TRANSPORT FOR LONDON CONSULTATIONS

The Committee considered a report of the Executive Director Environment regarding Transport for London (TfL) consultations on the changes to the bus network in London and the Ultra-Low Emission Zone (ULEZ) expansion and road user charging.

Responding to a query from a Member, officers clarified that whilst TfL were expanding the ULEZ area, this did not directly affect the City. It was noted that there was an overall benefit from the London Mayor's direction in terms of air quality improvements and at present the road user charging part of the proposal had not put forward a date for when changes would take place. Regarding potential implementation of zero emission zones in the City, officers said the public consultation for Beech Street was likely to take place in September with an intention to reintroduce some form of an air quality scheme with longer terms plans being funding dependent on a wider air quality zone healthy streets approach for the streets surrounding the Barbican.

RESOLVED- That:-

- i) the proposed response to the consultation on proposed expansion of the ULEZ and future road user charging, set out in paragraphs 25 and 26 be approved; and

- ii) Authority be delegated to approve the final wording of the response to the Director of City Operations in consultation with the Chairmen and Deputy Chairmen of the Streets & Walkways Sub Committee and the Planning & Transportation Committee and the Port Health and Environmental Services Committee.

8. CEMETERY EXCAVATOR REPORT

The Committee considered a report of the Executive Director Environment seeking permission for the purchase of a replacement JCB 3CX excavator, at the cost of £90,000, for a range of work carried out at the cemetery.

RESOLVED- That Members:

- i) That budget of £90,000 be approved for the purchase of this vehicle in order to reach the next Gateway.
- ii) That the project budget of £90,000 (excluding risk) be noted; and
- iii) That the total estimated cost of the project currently at £90,000 (excluding risk) be noted; and
- iv) That it be noted there was no Costed Risk Provision is approved due to the fact that this is a straightforward vehicle purchase; and
- v) That option 1, the purchase of a JCB 3CX Compact is approved.

9. *REVENUE OUTTURN 2021/22

The Committee received a joint report of the Chamberlain and Executive Director Environment. The report compared the year 2021/22's outturn with the final budget with an underspend of £3.287m, with £353,000 agreed to carry forward.

RESOLVED- That the report be noted.

10. QUESTIONS ON MATTERS RELATING TO THE WORK OF THE COMMITTEE

There were no questions received in the public session.

11. ANY OTHER BUSINESS THAT THE CHAIRMAN CONSIDERS URGENT

The Chairman made a statement updating the Committee on the Government action on sewage in waterways.

The Committee were informed that the Chairman had asked officers to write to the Secretary of State for Environment, Food and Rural Affairs to welcome the Environment Agency's recent report, and to ask them to clarify whether the Government intends to implement the recommendations. The Chairman said he would report back to the Committee with the Government's response in the autumn.

12. EXCLUSION OF THE PUBLIC

RESOLVED- That under Section 100(A) of the Local Government Act 1972, the public be excluded from the meeting for the following items on the grounds that they involve the likely disclosure of exempt information as defined in Part 1 of the Schedule 12A of the Local Government Act.

13. **NON-PUBLIC MINUTES**

RESOLVED- that the non-public minutes of the meeting held on 24th May be approved as an accurate record.

14. **HARC - FORWARD PLAN - JULY 2022**

The Committee considered a report of the Executive Director Environment on the Heathrow Animal Reception Centre Forward Plan.

RESOLVED- That the report be approved.

15. **WALBROOK WHARF FEASIBILITY 2027 AND BEYOND**

There were no questions.

16. ***PORT HEALTH AND ENVIRONMENTAL SERVICES DEBTORS - PERIOD ENDING 31 MARCH 2022**

The Committee received a report of the Chamberlain informs the Committee of the invoiced income outstanding as at March 31 2022.

17. **NON-PUBLIC QUESTIONS ON MATTERS RELATING TO THE WORK OF THE COMMITTEE**

There were no questions.

18. **ANY OTHER BUSINESS THAT THE CHAIRMAN CONSIDERED URGENT AND WHICH THE COMMITTEE AGREES SHOULD BE CONSIDERED WHILST THE PUBLIC ARE EXCLUDED**

There were no items of urgent business.

The meeting closed at 11:45am

Chairman

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Port Health & Environmental Services Committee – Outstanding Actions

Item	Date	Action	Officer(s) responsible	To be completed/ progressed to next stage	Progress Update
1.	15 January 2019	Measurement and mitigation options for operational rail noise from London Underground affecting the Barbican Estate	Executive Director of Environment	Ongoing	<p>A number of actions have been carried out by LUL over recent years to reduce the noise and vibration experienced by residents such as rail grinding, replacement of ballast, sleepers, rails joints and insulated block joints. However, LUL have now confirmed that points 35 A/B that are the main noise source for Brandon Mews cannot be moved, replaced or removed due to operational requirements.</p> <p>Letters have been sent by the Chairman of PHES and Chair of Policy & Resources have written to Andy Lord and Seb Dance. An on-site meeting with Nikki Aitken MP was held and an undertaking to assist given.</p> <p>A site meetings has been arranged for the 27th October 2022 with LUL Director of Asset Renewals and Capital investment and the Chairman. The invitation has also been extended to Seb Dance, Deputy Mayor for Transport and Nikie Aiken MP.</p>
2.	27 September 2021	Lighting Guidance Note	Planning and Development Director	Ongoing	Lighting Planning Advice Note will be presented to the Committee in October.
4.	24 May	Note on the increase of anti-	Executive Director of	October	Item on the agenda for the Director of City Operations and Assistant Director for Gardens and Cleansing to provide an

	2022	social behaviour	Environment	2022	update to Committee.
5.	22 July 2022	Chairman to write the Director of Innovation and Growth to formally request that Destination City addresses concerns relating to investment in cleaning and public services.	Director of Innovation and Growth	October 2022	The Chairman wrote to the Director to express the Port Health and Environmental Services Committee's concern that the right levels of cleansing and public services needed to be in place and designed in as part of Destination City.

Agenda Item 5

Date	Committee/Meeting/Visit
	2022/23 Port Health and Environmental Services Committee Event Dates
8 October	50th Annual Fishing Experiment
10 October	Thames Estuary Partnership network event
18 October	Port Health and Environmental Services Committee visit to Walbrook Wharf
21 November	Port Health and Environmental Committee visit to Port Health London Gateway
January 2023	Port Health and Environmental Committee Dinner

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Committee(s)	Dated:
Port Health and Environmental Services Committee - for information	10 October 2022
Planning and Transportation – for decision	1 November 2022
Subject: City of London Lighting Supplementary Planning Document (SPD)	Public
Which outcomes in the City Corporation's Corporate Plan does this proposal aim to impact directly?	1, 2, 5,11,12.
Does this proposal require extra revenue and/or capital spending?	Yes
If so, how much?	Approximately £18,000
What is the source of Funding?	Planning policy budget
Has this Funding Source been agreed with the Chamberlain's Department?	No
Report of: Executive Director of Environment Department	
Report author: Pearl Figueira, Environment Department	

Summary

This report presents a Supplementary Planning Document (SPD) that provides guidance for developers on lighting buildings and the spaces between them. It will help developers to meet the requirements of the Development Plan policies that relate to lighting. It covers the design, delivery, operation, and maintenance of artificial light within the City of London.

This document includes a 'Considerate Lighting Charter' which the City Corporation would encourage all those involved in lighting the City to commit to, including the owners, occupiers and managers of existing buildings in the City.

As this is a Supplementary Planning Document, the decision to approve and publish it will be taken by the Planning and Transportation Committee.

The report presents the draft SPD for information, summarises the approach taken in the SPD and sets out details of the planned public consultation exercise for at least six weeks during December 2022 and January 2023 (subject to approval by the Planning and Transportation Committee).

Recommendation

Port Health and Environmental Services Committee is asked to:

- Note the Lighting SPD attached at Appendix 1 for information.

Main Report

Background

1. In October 2018, the Court of Common Council resolved to adopt the Corporation's Lighting Strategy ('Light + Darkness in the City: A Lighting Vision'), which seeks to improve the quality, efficiency, sustainability and consistency of lighting for the whole City, providing a holistic approach to lighting and helping to ensure a safe, vibrant and pleasant night environment for businesses, residents and visitors. This included a commitment to publish detailed planning guidance as to the use of lighting within the City of London to support and enhance the implementation of policy.
2. The draft Supplementary Planning Document (SPD) provides planning guidance for artificial lighting for existing buildings and details required as part of planning applications from designers, developers, and owners of buildings to help enhance the lit environment after dark. The document has been prepared by lighting consultants Speirs Major Architects with input and oversight from officers across the Corporation.
3. Subject to approval from Planning and Transportation Committee, a formal public consultation exercise will be undertaken to gather public responses to the approach presented in the SPD.

The draft Lighting SPD

4. The Lighting SPD has been drafted having been informed by internal consultation. It provides planning guidance for developers on lighting buildings and the spaces between them and will help developers to meet the requirements of the Development Plan policies that relate to lighting. It covers the design, delivery, operation, and maintenance of artificial light within the City of London.
5. The document sets out:
 - Relevant policy, legislation, and standards;
 - The details related to lighting that will need to be provided at pre-application stage, planning application submission, and post-permission stage (including information secured through conditions);
 - Guidance on good practice related to lighting, categorised under six 'Lighting Outcomes' of: sustainability and climate change; residential amenity; public realm; architecture, heritage and public art; safe and inclusive design; and temporary lighting.
 - Technical requirements, which all lighting schemes for new developments are expected to comply with. This includes 'District Brightness Zones' and corresponding curfew times and illuminance levels; and
 - Appendices including the 'Considerate Lighting Charter'.

6. In addition to providing requirements for planning application submissions for new development, these guidelines can also be of use to owners and occupiers of existing buildings and structures in the City.
7. The SPD encourages developers to address lighting impacts at an early stage before their designs are finalised. Using these guidelines, appointing experienced consultants, having a dialogue with officers of the City of London Corporation and commissioning early stage studies to assess the lighting impacts will help to meet the City's lighting outcomes.

Considerate Lighting Charter

8. The Considerate Lighting Charter gives an opportunity for building owners, operators and occupiers to make a strong commitment to manage their lighting systems in ways that make a positive contribution to the City.
9. For existing buildings where no new development is proposed, the City Corporation has no legal powers to enforce adherence with the Charter. Building owners, managers and occupiers would, however, incur reputational damage if they were to sign up to the Charter but not adhere to the commitments it contains. The Charter does not change or in any way undermine the City's Environmental Health function, which will continue to investigate complaints of intrusive light and take enforcement action where necessary.
10. Officers are intending to promote the Charter and the SPD to owners, managers and occupiers of existing buildings. This will be done through working with partners such as Business Improvement Districts and major landowners in the City, as well as engagement with small and medium sized businesses through the Climate Action Strategy's Heart of the City programme.

Public consultation and engagement

11. It is proposed that the SPD is consulted on for a period of at least six weeks during December 2022 and January 2023. The statutory consultation period for a SPD is four weeks. A comprehensive engagement plan will be developed for the SPD to include residents, businesses, workers, consultants and other relevant stakeholders. The consultation will include:
 - Public meetings to introduce and receive feedback on the SPD and the Charter;
 - A consultation web page for the SPD;
 - Emails to stakeholders and those signed up to the Corporation's planning consultation database;
 - Workshops with lighting industry professionals.
12. Given the nature of lighting, officers are also exploring the potential for a night walking tour for those interested in the subject and to gain practical insight into how the SPD

would affect the people's experiences of lighting in the City after dark. The aims of the public consultation are:

- To obtain feedback from stakeholders on the draft SPD and use that feedback to improve the document and inform the final version.
- To ensure stakeholders are aware of the SPD and use it to inform development proposals.
- To seek broad consensus from stakeholders including lighting consultants for the final SPD to support a consistent high standard for new development.
- To promote the Considerate Lighting Charter.

13. Following the public consultation, the SPD will be revised and brought to the Planning and Transportation Committee for approval early in 2023. Once the Lighting SPD is adopted it will become a material consideration in the determination of planning applications.

Corporate & Strategic Implications

14. Strategic implications: The Lighting SPD is in line with the aims and objectives of the City of London Corporate Plan 2018-23. This SPD will support the delivery of the Corporate Plan including by ensuring that land-use decisions fully incorporate measures to ensure people are safe and feel safe, people enjoy good health and wellbeing, and our spaces are secure, resilient and well-maintained through the planning system (Corporate Plan, Outcomes 1, 2, 5, 11 and 12).
15. Financial implications: The public consultation exercise and reviewing the final version of the lighting SPD will require consultancy input from those with lighting expertise. This is likely to require additional revenue of expenditure in financial year 2022/23 of approximately £18,000, which will be funded from the planning policy budget.
16. Resource implication: There are no resource implications arising from this report.
17. Equalities implications: The Lighting SPD will contribute to the delivery of the City Corporation's Public Sector Equality Duty 2010 by improving health and wellbeing outcomes for all people who are protected by existing equalities legislation. The SPD has been subject to an initial screening exercise which concluded a detailed Equality Impact Assessment was not needed as the SPD would not have any negative impacts on those who share a protected characteristic.
18. Climate implications: The Lighting SPD will contribute to the delivery of the Climate Action Strategy.
19. Legal implications: The Lighting SPD has been developed in line with the statutory requirements of the Town and Country Planning (Local Planning) (England) Regulations 2012.
20. Risk implications: There are no additional new risks arising from this report.
21. Security implications: There are no security implications arising from this report.

Conclusion

22. This report presents and updates Members on the draft Lighting SPD. It outlines the process of drafting the strategy, the plans for public consultation for at least six weeks during December 2022 and January 2023 and sets out the key principles presented in the SPD. Subject to public consultation and approval by the Planning and Transportation Committee, the SPD will be published and will become a material consideration in the determination of planning applications.

Appendices

- Appendix 1 – City of London Lighting, Supplementary Planning Document.

Background Papers

- Light + Darkness in the City: A Lighting Vision for the City of London, 2018 ([link](#)).
- Our Corporate Plan, 2018-2023.

Report author

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City of London Lighting Supplementary Planning Document

Revision: DRAFT
28/09/2022



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	A. Considerate Lighting Charter
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	D. Glossary

Executive Summary

This Lighting Supplementary Planning Document (SPD) provides guidance for developers on lighting buildings and the spaces between them. It will help developers to meet the requirements of the Development Plan policies that relate to lighting. It covers the design, delivery, operation, and maintenance of artificial light in the public realm within the City of London.

This document also includes the 'Considerate Lighting Charter' which we encourage all those involved in lighting the City to commit to. The Charter sets out simple yet important steps that everyone can take to ensure the:

“... right light, in the right place at the right time, controlled by the right system.”*

A commitment of the Corporation's Lighting Strategy ('Light + Darkness in the City/ A Lighting Vision for the City of London' 2018), this document builds on the implementation of its policies and principles through the planning system.

The SPD sets out the wider legislative and policy context, before making clear what applicants should submit with a planning application and what would be required post-planning permission, as part of the discharge of relevant lighting conditions.

A key aim is for City occupiers to consider and discuss lighting at an early stage of the design of any development to ensure key issues are understood and addressed from the outset.

This document explains the:

- Importance of good lighting;
- Relevant policies, general guidance and legislation;
- Information to be submitted as part of the planning process;
- Lighting outcomes and general principles;
- Technical lighting requirements.

These seek to deliver on a variety of holistic planning outcomes, explained later in this document, in order to demonstrate that lighting schemes have been optimised, based on the particular site-specific circumstances.

Over time, as new developments come forward that follow and this guidance, we will transform the approach to lighting in the City; reducing energy consumption, protecting residential amenity and biodiversity, all the while making the City a safer and more attractive place to be for all its communities after dark.

The SPD has been subject to a comprehensive internal consultation process.



*ILP Guidance Note 01/21 The Reduction of Obtrusive Light

1. Bird's eye view of the City after dark.
Photography by Jason Hawkes

1.0 Introduction

- 1.1 The City of London has become a diverse 24-hour destination – one which seeks to meet the needs of our residents, workers, and visitors by day and, increasingly so, after dark. Given the international dimension of our businesses, many operate around the clock. In addition, our night-time economy is growing in terms of leisure and hospitality. The 'Culture Mile' transformation seeks to cement the position of the City as a major cultural destination both by day and after dark. It is also a 'Destination City' for local, national, and international tourists.
- 1.2 The City of London is also home to a significant residential population. Achieving a vibrant and thriving City at night, which works for all its communities, will depend on lighting that is not only intelligent, functional, and safe, but also creative, sensitive, innovative, and beautiful.
- 1.3 Lighting also has a place in delivering on our Climate Action Strategy (2020-2027) and reducing energy consumption.
- 1.4 In October 2018 we adopted the most comprehensive, holistic Lighting Strategy in London ('Light + Darkness in the City/ A Lighting Vision for the City of London'). This provides the roadmap to the City of the future which sees lighting contributing to our three overarching aims: A flourishing society, a thriving economy and shaping outstanding environments. This SPD should be read in conjunction with that document.
- 1.5 The Lighting Strategy made the following recommendations related to planning:
 - Promote best practice on lighting around design and environmental considerations;
 - Require lighting strategies to be provided as part of the pre-application process where appropriate;
 - Improve communication between key stakeholders regarding function and aesthetic outcomes;
 - Publish detailed planning guidance as to the use of lighting within the City of London to support and enhance the implementation of policy.
- 1.6 This SPD also builds on our Corporate Strategy and policies in the Development Plan, detailing how we will deliver on the Lighting Strategy through the planning system.
- 1.7 Whether it is a proposal for a new building, the alteration of an existing one or new or upgraded public realm, these all have an impact on the character of the City after dark. Artificial light can provide positive benefits, not only on how public and private space is used and how safe it feels, but also how attractive it is. It can also have a negative impact on the ability of residents to enjoy their homes due to obtrusive light, can cause highway safety and accessibility issues and create environmental damage, including harm to local biodiversity.
- 1.8 The aim of this SPD is to ensure that these opportunities and constraints are identified and addressed. It seeks to consider light as a valuable commodity to be managed in an intelligent, sensitive, and innovative way and provide the guidance needed to ensure that the lighting approach to any development meets specific requirements. It aims to provide support in the preparation of lighting information as part of the pre-application process or for an application submission.
- 1.9 Owners, occupiers and managers of existing buildings will be encouraged to adopt the principles set out in this guidance by signing up to the 'Considerate Lighting Charter'. A copy of the Charter is included in Appendix A of this document.
- 1.10 A key aim of the SPD is for City occupiers to consider and discuss lighting at an early stage to ensure issues are understood from the start.



1. View of the Eastern cluster after dark
Photography by Marc Kleen

2.0 Policy, legislation, standards, and guidance

Policy

- 2.1 There are national and local planning policies and guidance that are relevant to lighting.

National

- 2.2 The National Planning Policy Framework (NPPF) comprises Government planning policy for England. The Planning Practice Guidance (PPG) provides further guidance on the policies in the NPPF. The NPPF states that planning policies and decisions should ensure that development “limits the impact of light pollution from artificial light on local amenity, intrinsically dark landscapes and nature conservation”. The PPG contains further guidance on light pollution. Whilst acknowledging the wider benefits of artificial light, it recognises that it is not always necessary, and has the potential to contribute to ‘light pollution’ and ‘obtrusive light’. For maximum benefit it recognises that “it is important to get the ‘right light, in the right place and for it to be used at the right time’”. The PPG also recognises that since it can be costly and difficult to change lighting installations, getting the design correct at the planning stage is important.

- 2.3 The National Design Guide, updated in January 2021, seeks to ensure new development contains street and building lighting of an appropriate and attractive appearance.

London

- 2.4 The London Plan was adopted in March 2021 and provides planning policy for Greater London. It comprises part of the City of London Development Plan, on which decisions on planning applications are made. Although there is no specific policy on lighting in the London Plan, lighting is referenced throughout the Plan including within the Public Realm policy (D8) which states that lighting should be carefully considered and well-designed in order to minimise intrusive lighting infrastructure and reduce light pollution.

City of London

- 2.5 The City of London Local Plan was adopted in January 2015. It contains a number of relevant policies with respect to lighting, including details on the internal and external illumination of buildings and the contribution that lighting makes to the character and townscape of the City after dark, and seeks to reduce energy use and limit light pollution.
- 2.6 The City of London has prepared a draft plan, the City Plan 2036, which was published for Regulation 19 consultation in early 2021. Work is continuing on the Plan, and it remains a material consideration in the determination of applications alongside the adopted City of London Local Plan 2015 and the London Plan 2021. The Plan contains a dedicated Lighting Policy which draws on the adopted Lighting Strategy.

Legislation Environmental

- 2.7 There are number of areas of legislation that are relevant to lighting within the City of London. These relate to both environmental law and listed buildings.
- 2.8 Lighting can be controlled under non-planning legislation and so to avoid conflict in the future, it is pertinent to consider the potential for new development to cause statutory nuisance so as to design it out. Section 102 of the Clean Neighbourhoods and Environment Act 2005 and sections 79, 80 and 82 of the Environmental Protection Act 1990 (as amended) extend the statutory nuisance regime to include the new statutory nuisances from ‘(fb) artificial light emitted from premises so as to be prejudicial to health or a nuisance’. Exclusions are in place for developments used for transport purposes and other premises where high levels of light are required for safety and security reasons, such as bus stations, railway stations, harbours, and good or public service vehicle centres. At a local level, the ‘City of London Various Powers Act’ gives the City Corporation the power to affix lighting infrastructure to any building which fronts City Walkway without prior consent. In practice the City Corporation would discuss with the landowner any proposed

change and when the opportunities arise through development, is willing to discuss how the lighting can be altered to meet the objectives of the Lighting Strategy and this SPD.

Listed Building

- 2.9 There is a separate legislative regime when it comes to the protection of listed buildings, of which there are many in the City. Section 16 of the Planning (Listed Buildings and Conservation Areas) Act 1990, requires applications for listed building consent for any works, which could include external and internal lighting installation and associated infrastructure, to have special regard for preserving the special architectural or historic interest of the structure/building and its setting.
- 2.10 For example, the following would likely require listed building consent:
- External decorative and/or functional lighting.
 - Illuminated signage or advertising.
 - New internal lighting which would affect the special interest of the listed building.
- 2.11 Any proposal would be assessed to ensure it is appropriate and sensitive to the character and appearance of the building. In some instances, the works might also require planning permission. There is an additional requirement, under Section 66 of the Planning (Listed Buildings and Conservation Areas) Act 1990, to have special regard for the listed building and its setting when assessing a lighting scheme which requires planning permission.

Standards and guidance

- 2.12 There are a number of recognised standards and guidance with respect to external lighting in the UK, many of which are produced by independent professional bodies such as the British Standards Institute (BSI), the Chartered institute of Building Services Engineers (CIBSE), the Institution of Lighting Professionals (ILP), and Historic England. These bodies make general recommendations regarding the quality, quantity, distribution and delivery of light and the many technical considerations associated with the illumination of the built environment. A list of useful standards and guidelines can be found in Appendix B of this document.
- 2.13 Whilst the specific guidance in this document shall take precedence, all lighting installations in the City of London, including during construction, should generally conform to the recommendations of the Institution of Lighting Professionals (ILP) ‘Guidance Notes for the Reduction of Obtrusive Light 2020’ as a minimum good practice requirement.
- 2.14 All lighting schemes should also refer to, and where possible improve upon, best practice including British and European Standards, CIBSE Code for Exterior Lighting and other recognised guidance. Designers are also expected to follow the Mayor of London’s Supplementary Planning Guidance ‘Sustainable Design and Construction’ April 2014.
- 2.15 All lighting equipment used should also meet the highest standards of energy efficiency at the time of installation and provide the most efficient use of light, taking into account lumen output, colour rendering and colour appearance and the purpose of the lighting scheme. Embodied energy, circularity of design and manufacturing, recycling and disposal should all be considered.

3.0 Planning Process

3.1 This section sets out how lighting should be addressed through the planning process.

3.2 The following is required:

1. All major developments should be accompanied by a Lighting Strategy (see Table 2) outlining the approach to lighting at pre-application stage.
 2. This should be re-submitted at application stage together with a more detailed Lighting Concept (see Table 3).
 3. A full and final Technical Lighting Design (see Table 4) shall be reserved for condition.
 4. All other applications, whether that be refurbishment alteration, extension or new build, should address how lighting has been considered as part of the Design and Access Statement (in line with SPD).

Pre-planning submission

3.3 Appropriate expertise about lighting should be sought from the start. It may be necessary to employ an experienced and suitably qualified professional lighting designer or illumination engineer, usually a corporate member of the International Association of Lighting Designers (IALD), Institute of Lighting Professionals (ILP), Chartered Institute of Building Services Engineers (CIBSE) or other similar independent professional organisation.

3.4 The information as indicated in ‘Table 1: Design Process for Lighting Development’ should be submitted at each stage, commensurate to the scale of development, addressing the guidance in this document. This process is broadly based on the Royal Institute of British Architects (RIBA) Plan of Work 2020.

Table 1: Design Process for Lighting Development

RIBA Stage	Actions	Notes
0 – Strategic Definition	No action required.	n/a
1 – Preparation and Briefing	Consider the lit context of and potential impact of the lighting. Develop the lighting brief.	Ensure initial brief to design team and incorporates lighting as a key planning requirement. Consider the early appointment of a lighting design professional.
2 – Concept Design	Submit Lighting Strategy (See Table 2 for requirements)	Consider requirements for safety, security, accessibility, inclusion, character, identity, and legibility after dark. Include the strategy for illuminance levels, colour temperature and scale. Define parameters for reduction of obtrusive light and mitigation of impacts on residential amenity and biodiversity both with respect to the design of the building and its external and internal lighting. Set out sustainable lighting criteria.
3 – Spatial Coordination	Submit Lighting Concept (See Table 3 for requirements)	Build upon the Lighting Strategy, developing and clearly communicating the overall lighting design intent.
4 – Technical Design	Submit Technical Lighting Design (See Table 4 for requirements)	Develop the technical response based on the Lighting Strategy, Lighting Concept and any related conditions and/or reserved matters.
5 – Manufacturing and Construction	Comply with any Planning Conditions with respect to lighting as required prior to Practical Completion.	Ensure all conditions with respect to both the Technical Lighting Design and Construction Lighting are met particularly agreed timings in respect of pre-curfew and post-curfew lighting requirements.
6 – Handover	Comply with any Planning Conditions with respect to lighting prior to Final Completion.	Ensure all conditions with respect to balancing and dimming and/or switching of public realm and building lighting are met particularly agreed timings in respect of pre-curfew and post-curfew lighting requirements.
7 – Use	Comply with any Planning Conditions with respect to lighting as required following Final Completion and for the life of the development.	Ensure all conditions with respect to balancing and dimming and/or switching of public realm and building lighting are met particularly agreed timings in respect of pre-curfew and post-curfew lighting requirements.

3.0 Planning Process

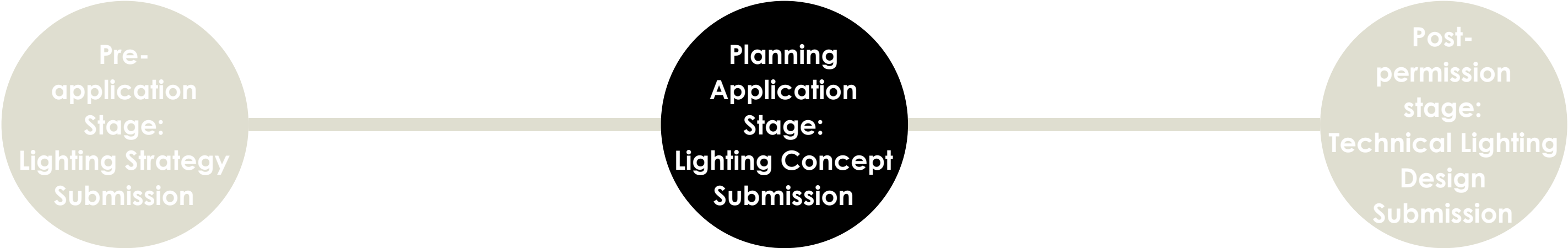


3.5 The following information as indicated in 'Table 2: Lighting Strategy Submission Requirements' should be submitted as part of the development of a 'Lighting Strategy':

Pre-application Stage
Table 2: Lighting Strategy Submission Requirements

Requirement	Description	Note
A. Vision	Illustrated and written description of the high-level creative approach for all external lighting and, where relevant, internal lighting.	To have consideration for the City Corporation's Lighting Strategy (2018).
B. Analysis	Assessment of issues including context, character, safety, security, legibility, accessibility, and sustainability.	To investigate and communicate key design criteria.
C. Approach	Illustrated and written description of the general lighting approach for all external lighting including street and amenity lighting, illuminated signage and media, building and landscape lighting and the illumination of art.	To include night-time sketch visuals.
D. Technical	Strategic diagrams showing proposed average levels of illuminance and uniformity requirements, colour temperature, and scale/ heights of fixtures.	May be based on classes as per BS5489 or other recognised guidance. Should refer to the City Corporation's Lighting Strategy (2018).
E. Residential Amenity	Details of the approach to the reduction of any impact created by the internal lighting related to obtrusive light, such as glare, excessive visual brightness, light spill, and light intrusion, detailing potential mitigation measures.	Important where the development is highly glazed and has the potential to affect sensitive environmental receptors, such as local residences.
F. Environmental Impact	Statements regarding proposed energy use, obtrusive light such as sky glow, glare, excessive visual brightness, light spill, and light nuisance and any potential impacts on local biodiversity should be included along with a commitment to long term maintenance, management, and the reduction in waste, embodied and operational carbon.	Important where the development is highly glazed and has the potential to affect sensitive environmental receptors, such as intrinsically dark spaces, for example, parks, gardens, churchyards or the River Thames.

3.0 Planning Process

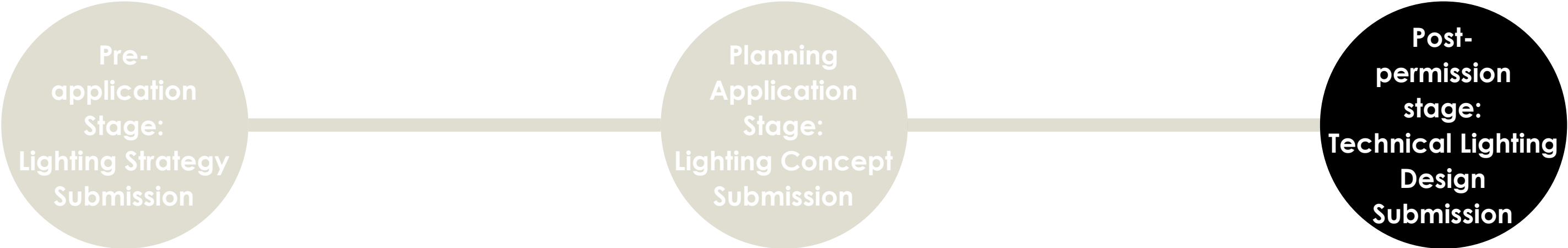


3.6 The following information as indicated in ‘**Table 3: Lighting Concept Submission Requirements**’ should be submitted as part of the development of a ‘Lighting Concept’:

Planning Application Stage
Table 3: Lighting Concept Submission Requirements

Requirement	Description	Note
A. Concept	Illustrated and written description of the detailed Lighting Concept for all external lighting including street and amenity lighting, illuminated signage and media, building and landscape lighting and the illumination of art and, where relevant, internal lighting.	Visual material that clearly explains and illustrates the lighting intent including rendered plans, sections, and elevations, digital models (where relevant) and night-time visuals including CGIs.
B. Technical	Modelling of typical areas of public realm showing illuminance levels and uniformity and of any lighting to façades showing luminance levels.	May be provided as extracts from Relux, Dialux, AGI or other proprietary light modelling software.

3.0 Planning Process



3.7 The following information as indicated in **Table 4: Technical Lighting Design Submission Requirements** should be submitted as part of the development of a 'Technical Lighting Design':

Post-Permission Stage
Table 4: Technical Lighting Design Submission Requirements

Requirement	Description	Note
A. Lighting Layouts	Plans, sections, and elevations as required to indicate the proposed position of all external luminaires.	Luminaires to be referenced to Lighting Equipment Schedule.
B. Lighting Equipment Schedule	Detailed schedule providing the specification for sources, luminaires and accessories (see Table 6 for details for Technical Requirements).	To include description, type, output, power, mounting, driver, size, weight and all accessories and associated columns/bracketry. May specify final recommended manufacturer.
C. Lighting Details	Drawings showing typical details indicating methods of locating/fixing luminaires and associated equipment within the public realm and/or on the building/s .	To show relationship of luminaires to landscape and/or building fabric and should provide drawings at an appropriate scale.
D. Control Methodology	Details of approach to the provision of lighting control including dimming and/or switching to include proposed method of control and level of automation together with proposals for management of the system, lighting scenes and their timings.	Should reference the use of timeclocks, PIRs and other similar devices that may trigger on/off or other lighting states.
E. Technical Information	Details showing lighting calculations indicating illuminance and/or luminance, uniformity, colour temperature and colour rendering criteria for typical areas of public realm and/or building facades. To include details of total installed energy load of all external lighting.	As may be reasonably requested to support any evaluation of the lighting proposals, particularly to demonstrate mitigation of obtrusive light such as sky glow, glare, excessive visual brightness, light spill, and light intrusion.
F. Operation and Maintenance Information	Details of operational requirements for lighting including details of times at which lighting will be switched on and off and/or dimmed together with anticipated timescales and access methods for the cleaning, repair, upgrading and replacement of all lighting and control systems. To include details of proposed recycling and disposal of lighting equipment at end of life.	As may be reasonably required to demonstrate the duration of any impact of the lighting proposals and to confirm that operation and maintenance has been properly considered as part of the design.

4.0 Lighting Guidance

Lighting Outcomes

- 4.1

This section of the SPD provides general guidance and sets out technical requirements for lighting scheme that forms part of a new development. It allows applicants to address City Corporation lighting policy in their planning application. The guidance will be a material consideration when reviewing a lighting scheme submitted as part of a planning application. Schemes that deviate from this guidance and its technical requirements should provide a clear explanation as to the reasons and offer any mitigation as may be required.
- 4.2

Artificial light is an important aspect of 'place-making' and should be carefully managed to address competing demands to achieve the right outcomes. The planning process within the City of London demands that an appropriate approach is taken to the design, deliver, installation and maintenance of all exterior lighting, and interior lighting visible from within the public realm. This is with the view to ensuring that the lighting makes a positive contribution to the cityscape whilst limiting potential adverse impacts and obtrusive light, particularly in respect of residential amenity and biodiversity.
- 4.3

'Table 5: Lighting Outcomes' summarises the key outcomes from any lighting scheme that is submitted as part of a planning application:

Table 5: Lighting Outcomes

Topic	Outcomes
A. Sustainability and climate change	<ul style="list-style-type: none">Minimise embodied energy to help reduce carbon emissions.Minimise operational energy use to help reduce carbon emissions.Employ circularity through design and specification to help reduce material waste.Minimise obtrusive light such as sky glow, glare, excessive visual brightness, light spill and light intrusion that adversely impacts biodiversity, particularly within green spaces and adjacent to or within the river.
B. Residential amenity	<ul style="list-style-type: none">Minimise obtrusive light that adversely impacts local residents created by permanently installed interior, street, amenity, architectural, and landscape lighting and illuminated signs and media.Minimise obtrusive light that adversely impacts local residents created by temporary construction lighting.
C. Public realm	<ul style="list-style-type: none">Employ lighting to help create an attractive, legible, safe and secure public realm after dark.Employ lighting to help promote mobility, sustainable travel and support wayfinding, and accessibility.Employ lighting to help promote culture and the arts.
D. Architecture, heritage, and public art	<ul style="list-style-type: none">Employ lighting to enhance and preserve the City of London's architectural heritage and historic places.Employ lighting to enhance new architecture, but only where justified.Employ lighting to enhance public art.
E. Safe and inclusive design	<ul style="list-style-type: none">Employ lighting to ensure that public places and buildings are accessible for everyone.Employ lighting to help promote inclusion and diversity, and create places where everyone feels safe.Employ lighting to support and promote walking, cycling and the use of public transport.
F. Temporary lighting	<ul style="list-style-type: none">Consider the opportunity for the inclusion of infrastructure to support temporary lighting for festivals and events.Minimise construction lighting to that required to meet safety and security requirements only.

4.0 Lighting Guidance

4.4 This section provides the general principles that apply to lighting development, where relevant. Each principle includes guidelines related to the topics outlined in 'Table 5: Lighting Outcomes'.

Topic A: Sustainability and climate change

4.5 There are many things to think about when considering the use of artificial light in the City of London, whether it is illuminating an open space or landscaped area or highlighting a building. Even the impact of the interior lighting of a building needs to be considered as it can create unwanted impacts on people and the environment. Lighting schemes should aim to carefully balance the social and economic benefits that lighting brings to a development whilst mitigating the environmental consequences. The following general principles can assist in creating sustainable and responsible lighting solutions that minimise their impact on the planet:

Minimising energy Use

4.6 Electric light uses energy. In so doing it can create carbon emissions and uses valuable resources, contributing to climate change. The following general principles aim to help reduce energy used by lighting schemes:

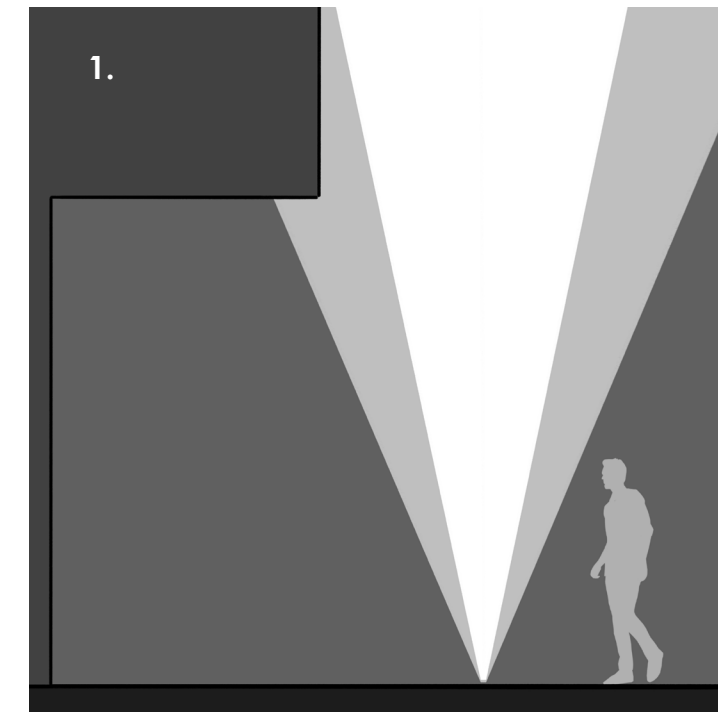
a. Artificial light is a precious commodity and should not be taken for granted. It should be used in a way that minimises waste and promotes moderation. Where artificial light is introduced to a development, it should be done so for a reason, with clear justification, whether functional, aesthetic or both.

- b. Developments should seek to minimise the use of artificial lighting in interior spaces during daylight hours through the provision of natural light as an integral part of the building design. This particularly applies to deep plan office and retail spaces where optimisation of daylight should adhere to best practice.
- c. Buildings should seek to achieve the maximum number of credits for lighting in the BREEAM Assessment (or similar schemes), using the most energy efficient lighting possible.
- d. Lighting schemes should be designed to contribute to the well-being of building occupants through measures such as the WELL standard (or similar schemes).
- e. All developments should ensure all external and internal lighting is automatically turned off when not needed using PIRs and/or timeclocks or other automated control devices to help reduce energy use and waste.
- f. Any architectural lighting, or lighting without an essential function, should be switched off between the agreed 'lighting curfew' and dawn.
- g. Lighting schemes should ensure as much of the energy demand as possible is met through on-site renewable or other forms of renewable energy provision.
- h. Lighting schemes should seek to exploit innovative procurement strategies such as lux-lease arrangements, whereby building owners or tenants lease the luminaires on a pay as you use basis, incentivising efficiency and reducing waste.

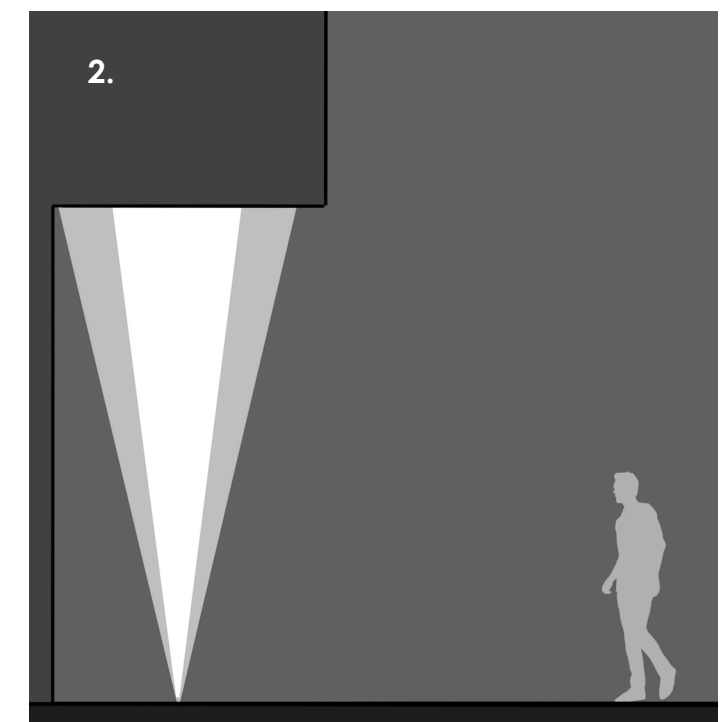
Obtrusive Light

4.7 Obtrusive light is a growing problem in urban centres including the City of London. It includes sky glow, glare, excessive visual brightness, light spill, and light intrusion. Sources of obtrusive light can include street and amenity lighting, security lighting, the exterior and interior lighting of buildings, and illuminated advertising amongst other examples.

- a. The City Corporation's Lighting Strategy (2018) seeks the active reduction of all forms of obtrusive light including sky glow, light spill, glare, excessive visual brightness, and light intrusion.
- b. All developments within the City of London should take measures to limit all aspects of obtrusive light in accordance with the recommendations of this SPD and best practice.
- c. All developments should ensure all external and internal lighting is turned off when not needed to help reduce obtrusive pollution.
- d. All external lighting schemes should avoid directly uplighting the sky and ensure that any light distributed above the horizontal is directly targeted at the surface to be lit and demonstrate this through the planning application details.
- e. All exterior fixtures should be fitted with louvres, snoots, cowls or other accessories that help limit obtrusive light, specifically light spill, glare, and sky glow.



1. Schemes should avoid directly uplighting into the sky.



2. Schemes should ensure that any light distributed above the horizontal is directly targeted at the surfaces to be lit without spilling light into the sky.



4.0 Lighting Guidance

Biodiversity

4.8 Exposure to artificial light at night (ALAN) has the potential to have a negative impact on a wide range of wildlife, from birds, bats, and fish to plant life, insects and other flora and fauna. The impact of artificial lighting on biodiversity is known to be complex and varies with species. It can either attract or repel certain species, interfering with natural feeding, breeding and migration patterns. Particular importance is given to avoiding the lighting of water habitats in relation to bats and fish and the mitigation of light spill from tall, highly glazed buildings with respect to bird strike and interference with patterns of migration. This SPD makes the following general recommendations:

- a. All developments should ensure natural darkness is retained in green areas / corridors at night. Natural darkness is defined as the general condition at night without the addition of artificial light from any development. Where not practical to do so specific 'dark nights' are encouraged during which time lighting is turned off.
- b. Lighting should encourage, or not discourage, biodiversity in green areas / corridors.
- c. Lighting levels should generally be kept as low as possible with light focused only where it is needed in green areas / corridors.
- d. The direct illumination and highlighting of green landscape, including the uplighting of trees and other planting, is discouraged other than where it can be justified in terms of helping to create a more legible environment that directly support inclusion and accessibility.
- e. New developments should prevent light intrusion into green areas / corridors through the detailed design of glazing and by using hoods, cowls, louvres and shields on external lighting.
- f. All lighting next to the River Thames and the riverside should avoid excessive illumination and any spillage into the water which could have detrimental impacts on biodiversity including bird, bat and fish populations and other river species.
- g. All lighting should closely observe and not interfere with established bat corridors.

- h. All lighting near planted areas and hedgerows, should be sensitive to bats, birds, insects and other flora and fauna.
- i. Highly glazed tall buildings should take any necessary mitigation measures to reduce the risk of bird strike due to external and internal lighting.
- j. All major developments, particularly those located adjacent to green space such as gardens, parks, churchyards or the river are advised to take advice from a specialist environmental consultant and/or ecologist who has local knowledge.
- k. All developments should ensure all external and internal lighting is turned off when not needed to protect biodiversity.
- l. Developments should follow the data on species and Sites of Importance for Nature Conservation (SINCs) from Greenspace Information for Greater London (GiGL).



1. Glazed façades without treatment and external lighting with insufficient optical control can cause light trespass intrusion into green areas spaces and potentially create bird strike.



2. Strategically located internal illumination, carefully detailed glazing facades and good optical control on for external lighting can help prevent light trespass intrusion into green areas spaces and birdstrike.



4.0 Lighting Guidance

Topic B: Residential amenity

4.9 Lighting can adversely impact residents' quiet enjoyment of their properties after dark. Consideration should also be given to temporary residents including workers who live in apartments during the week and tourists who stay in hotels and rented apartments, particularly at the weekend. Light spill through windows, even those fitted with blinds and curtains and the direct view of bright external and internal lighting schemes and light sources can not only cause a nuisance but also contribute to health issues including anxiety and sleep deprivation through the disruption of circadian rhythms. The following general principles should be observed:

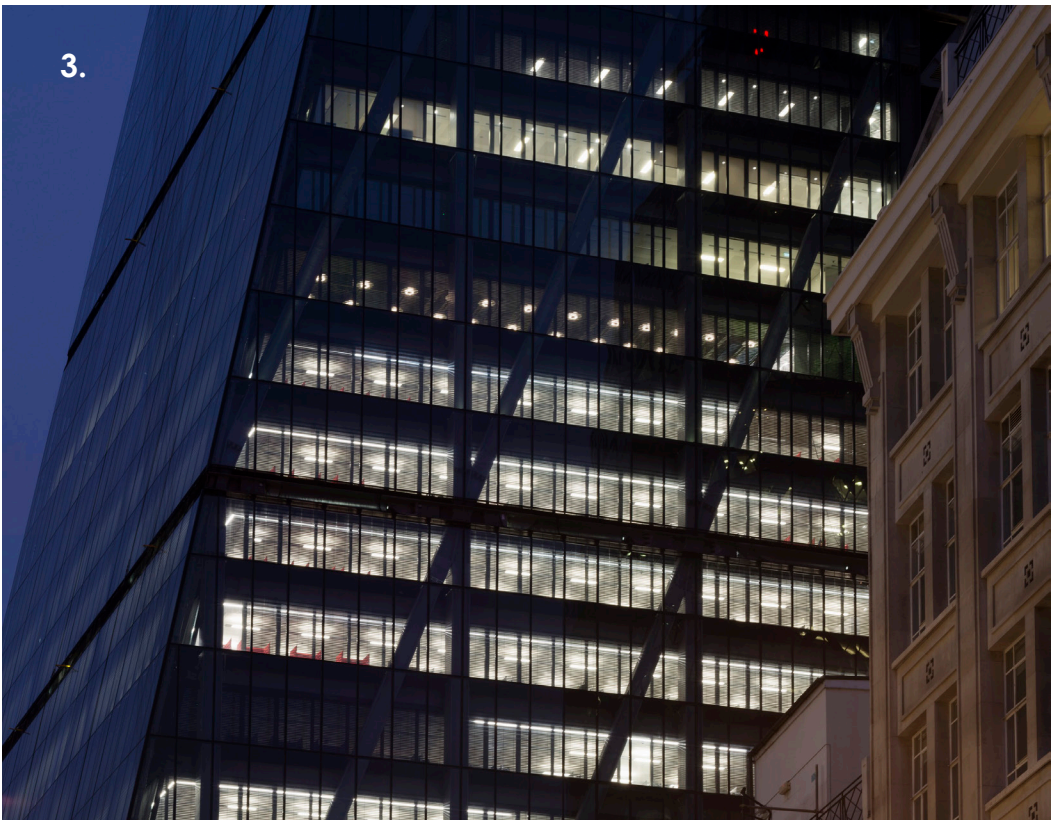
- a. Minimise and mitigate the visual brightness of interior lighting, particularly of highly glazed buildings, when seen from residential properties including the visibility of light fittings and their sources. This includes distant, mid and near views.
- b. Use good optical control and/or baffles to light fixtures to help reduce glare from interior lighting.
- c. Include well-designed presence detection systems to reduce lighting accidentally being left on as well as saving energy.
- d. Consider the solid to void ratio of facades or the use of blinds for developments directly impacting residential areas to help reduce the visibility of interior lighting at night.
- e. Put robust management protocols into place that seek to reduce over-lighting and waste.
- f. Developments should ensure all external lighting is managed in accordance with the Lighting Curfew Times, and all non-essential lighting turned off after 2300h if near to residential properties.
- g. Newly installed street lighting, where visible from residential properties nearby, should be provided with a shield/louver or similar to protect against glare.



1. Bright internal lighting schemes and highly visible light sources can not only cause a visual nuisance but also contribute to health issues.



2. Blinds, coatings, frit patterns and other façade design techniques can help reduce the visibility of interior lighting at night while occupants can still perform their tasks. All developments should switch off the internal lighting when the building is not occupied.



3. Good optical control and baffles to light fixtures can help reduce glare from interior lighting.
Photography by James Newton.

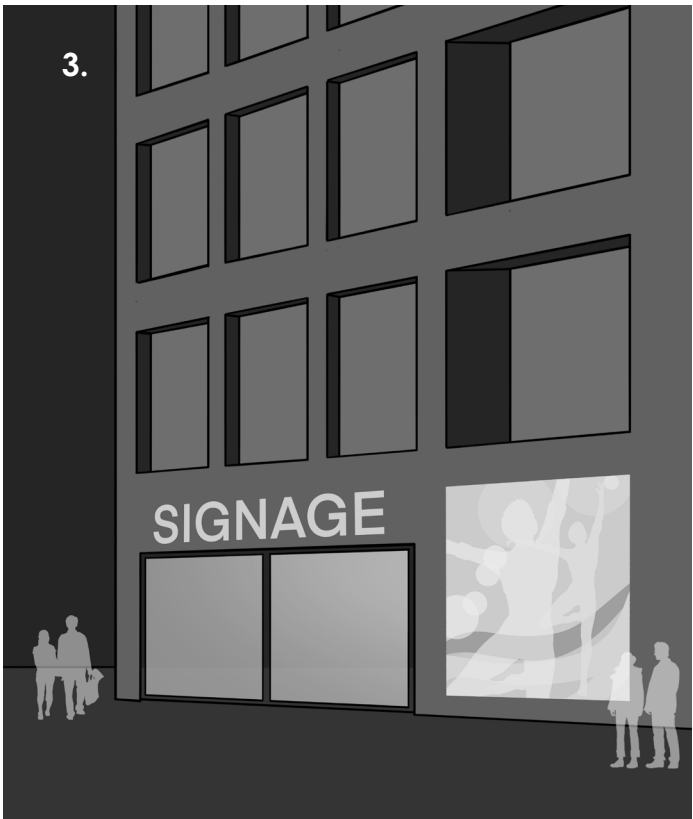
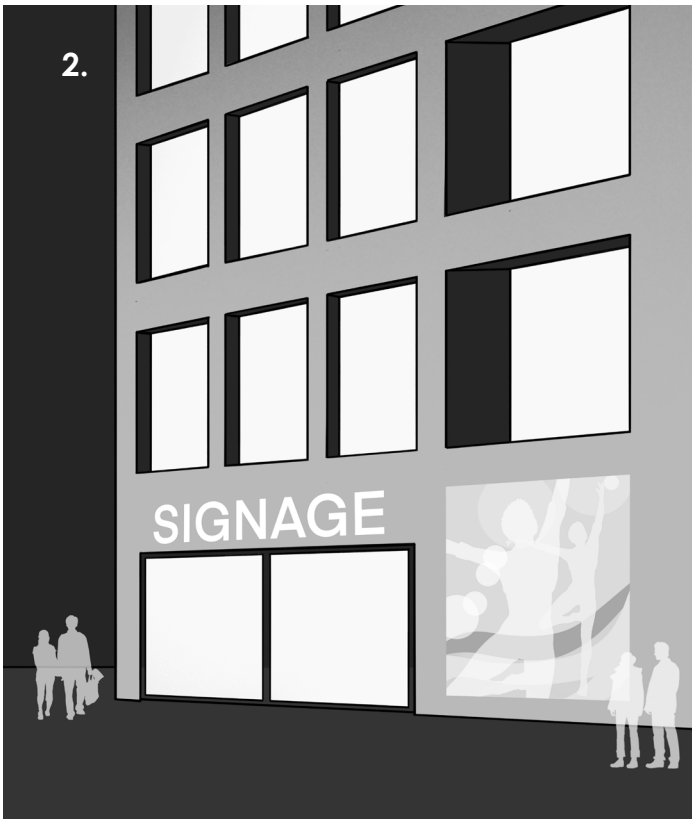
4.0 Lighting Guidance

Topic C: Public realm

4.10 Lighting directly contributes to the character of the City of London after dark. This can range from the experience of pedestrians at street level to an appreciation of the skyline and key landmarks such as St. Paul's Cathedral when seen from a distance. The lighting of all developments should seek to make a positive contribution to the experience of the public realm after dark. Lighting schemes within the public realm should observe the following general principles:

- a. All developments should consider how architectural and public realm lighting can contribute to place-making, character, and ambience to ensure attractive and safe places after dark.
- b. All developments should consider the accommodation of street and amenity lighting from early in the design a process from both a functional and urban design perspective.
- c. All new developments should determine the requirement to fix City of London street and amenity lighting to their facades if required to do so early in the design process.
- d. Where new developments are providing street or amenity lighting illuminance levels, colour temperature and mounting heights should be in strict accordance with the City Corporation's Lighting Strategy (2018) unless otherwise agreed.
- e. Public realm lighting should seek to create a legible environment that reveals key vertical as well as horizontal surfaces but without recourse to creating obtrusive light or glare.
- f. The illumination of all areas of hard and soft landscape should balance the requirements for safety and security after dark with any potential impact on residential amenity and biodiversity.

- g. All public realm lighting should have the provision to be dimmed and controlled to help manage and balance visual brightness.
- h. The requirements for lighting to support CCTV should not over-ride aesthetic and environmental considerations.
- i. Key soft landscape features may be highlighted, but only where appropriate to do so.
- j. Schemes should retain natural darkness in green areas / corridors where safe to do so. Natural darkness is defined as the general condition without the addition of artificial light from any development.
- k. Colour rendering and colour appearance should be carefully considered such that materials and their surface textures, where illuminated, are well lit. Well-lit does not necessarily mean brightly lit.
- l. Consideration should be given to the appearance of any exterior lighting equipment and its associated architectural and electrical infrastructure by day.
- m. Illuminated signage and advertisements, including media screens, should be lit in line with the requirements of Advertising Consent.
- n. The lighting of signs, and external and internal media screens (where visible from the public realm) should be fully dimmable and controllable to help manage visual brightness.
- o. There is a general presumption against the use of non-white spectrum coloured lighting, unless there is a strong justification in the wider public interest.



1. Key landmarks such as St. Paul's Cathedral are part of the character of the City of London skyline after dark.
Photography by James Newton

2. The high brightness of signs and media screens can negatively impact the public realm experience.



3. Controlled signs and media screens can enhance the public realm experience.



4.0 Lighting Guidance

Topic D: Architecture, heritage and art

4.11 The lighting of architecture, including key details and parts of buildings, can make a valuable contribution to the overall experience of the City after dark and directly contribute to its cultural, social and economic life. Whilst the City Corporation encourages the creative and sensitive use of architectural lighting to help enhance its rich heritage not all new developments should necessarily be externally lit. Whilst external lighting that is used to enhance contemporary architecture should therefore generally be minimised, proper consideration should be given to the identity of all developments after dark including the external appearance of the internal lighting. Subject to the agreement of the artist, public art should generally be lit. The following general principles must be observed:

- a. All new developments should consider whether the addition of exterior architectural lighting is desirable. Not all buildings should necessarily have lighting treatments. The inclusion of exterior lighting to buildings that form part of a development should therefore be fully justified as part of any application, particularly in relation to any adjacent heritage, residential or environmentally sensitive site.
- b. The lighting of heritage assets should be undertaken with great care, and be compatible with their conservation and enhancement, but not all heritage assets should be lit, and this will require strong justification.

- c. Where facades are highly glazed to new or refurbished developments, particularly retail frontages and office floor plates, careful consideration should be given to the impact of the interior lighting on the external identity of the development after dark.
- d. Colour rendering and colour appearance of all external and internal lighting should be carefully considered such that materials and their surface textures, if highlighted at all, are well lit. Well-lit does not necessarily mean brightly lit.
- e. In some cases, particularly with tall towers, the impact of the building on the skyline and strategic townscape heritage should also be considered.
- f. Consideration should also be given to the appearance of any exterior lighting equipment by day.
- g. The inclusion of lighting to reveal public art after dark should be carefully considered in terms of brightness, colour and scale such that it provides visual benefit after dark as well as by day subject to the requirements of the artist.
- h. Where 'light art' is employed brightness, colour, scale, and glare should be fully dimmable and controllable.

1. Example of good lighting of an internal office floorplates that positively contributes to the building's external identity after dark.
Bloomberg European HQ – Lighting design by Tillotson Design and Foster + Partners
Photography by James Newton.

2. Considered illumination of heritage structures makes a valuable contribution to the overall experience of the City after dark.
London Wall Place – Lighting design by Studio Fractal
Photography by James Newton.



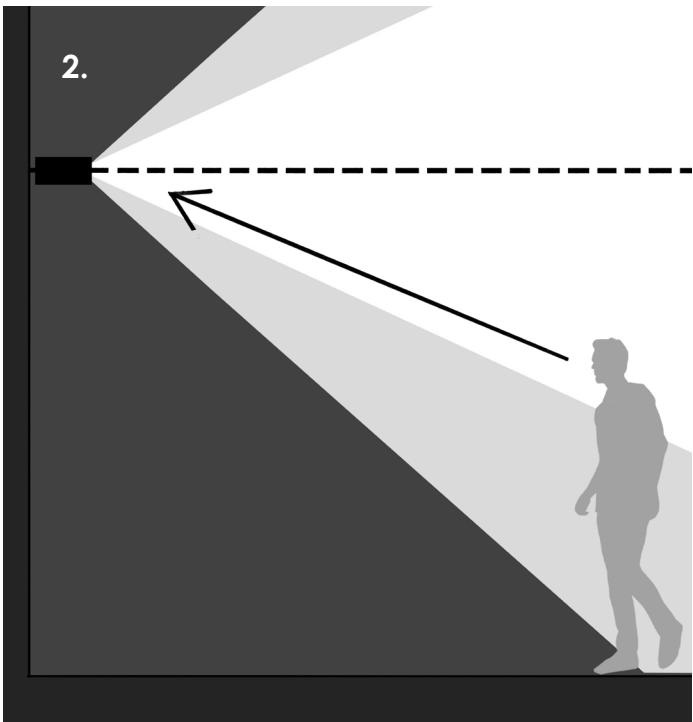
4.0 Lighting Guidance

Topic E:
Safe and inclusive design

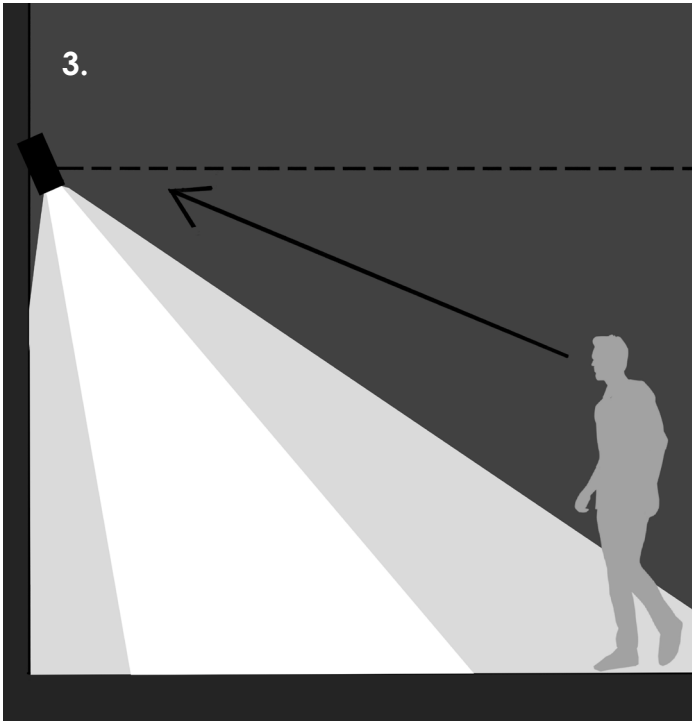
4.12 Lighting should be used to help create safe, inclusive environments for everyone. Lighting design should reinforce the City Corporation's and Mayor's Transport Strategies including the 'Healthy Streets Approach', which seeks to create a public realm that helps improve people's health and their experience of using streets. The following general principles should be observed:

- a. Lighting should be used to create an accessible public realm and public spaces for everyone, particularly after dark. Lighting should be designed to meet the needs of different people, including those with reduced mobility, visual impairments, people who are neuro-divergent, older people, and children.
- b. Lighting design should prioritise the creation of safe and attractive spaces and routes for people walking, cycling and using public transport.
- c. Lighting design should be used to create a safe public realm and public spaces, recognising that softer, warmer, more ambient lighting can help create safer-feeling places than harsh, bright, cooler light. Also, that the lit context, reflections, contrast, glare, spectrum and layering can all influence the sense of safety and security.
- d. In designing for safety and security, lighting design should factor in the experience of different groups, including women and girls, LGBTQ+ people, disabled people and those who are likely to experience hate crime on the basis of their race or religion.
- e. Lighting should be used to celebrate the diversity of the people who live, work and visit the City of London, for example through highlighting public art, commemorative statues, and religious buildings or through temporary, creative lighting installations that celebrate events and festivals for particular communities.

- f. Lighting should be used to enhance the experience of people arriving by public transport including through ambient and creative lighting at a human scale.
- g. New developments should consider how lighting can be provided which encourages vehicles to behave safely, whilst allowing safe passage for pedestrians and cyclists.
- h. Lighting should be designed to reduce the amount of distracting and even disorientating light so as to prevent accidents and assist with the prevention and fear of crime.



2. Glare caused by luminaires can disorient and distract people, especially people those with visual impairments.



3. The appropriate careful direction of light fixtures can help reduce glare and help people better orient themselves.



1. Ambient and creative lighting on a human scale can encourage people to use public spaces after dark. Photography by James Newton.

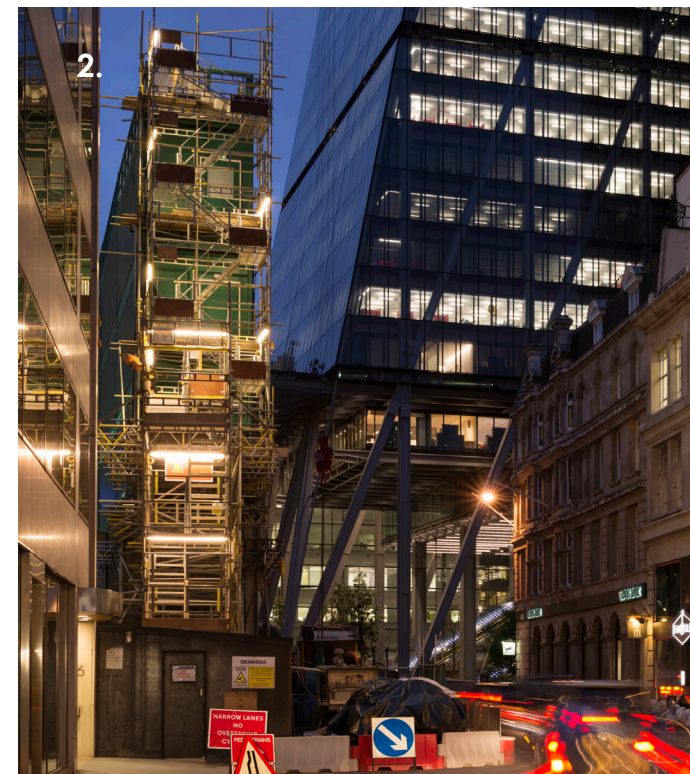
4.0 Lighting Guidance

Topic F: Temporary lighting

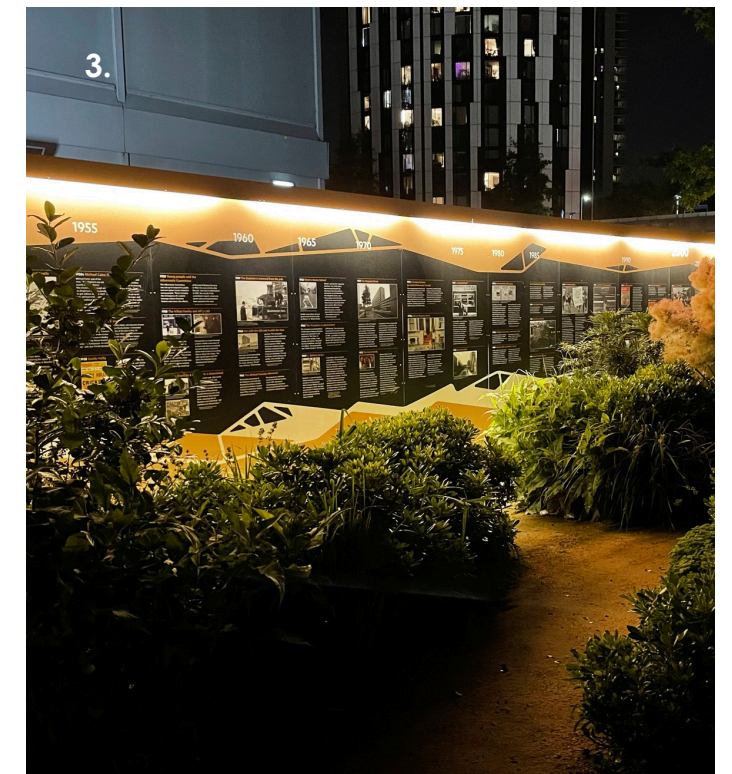
- 4.13 Whilst this SPD is concerned with the design, detailing, delivery, operation, and maintenance of permanent lighting installations, there are two types of temporary lighting which should be considered as part of the planning process where relevant: festive lighting, and construction lighting.
- 4.14 Temporary festive and event lighting can make a positive contribution to the social, economic, and cultural life of the City. Whilst the installation of permanent dynamic lighting schemes are not encouraged i.e. lighting installations that randomly change colour with no clear design purpose or create a visual distraction or nuisance to local residents, it welcomes the provision of infrastructure for the occasional use of dynamic coloured lighting, projections and other forms of artistic night-time intervention as part of national or local celebrations, public and religious holidays and support for causes.
- 4.15 Construction lighting can be in place for many years. Whilst this is essential to the safety and security of construction sites, particularly during the winter months, it is recognised it can have a highly detrimental impact on both residential amenity and biodiversity due to the techniques that are often employed such as area floodlighting.

- 4.16 The following general principles should be observed with respect to both of these forms of lighting which may be subject to planning conditions as part of the approval process:
- The provision of temporary festive lighting both within the public realm and where mounted on or from the building should be considered early in the design where applicable.
 - Where temporary festive lighting is to be employed consideration should be given to the provision of supporting electrical and mechanical infrastructure including externally exposed cabling, sockets, cleats, hooks, eyes and other fixings as part of the façade design.
 - The provision of temporary construction lighting adjacent to or running through a development site, and the illumination of the site itself for safety and security purposes including the lighting of cranes should all be carefully considered as a holistic design.
 - The temporary lighting of construction sites should be designed to minimise obtrusive light including sky glow, glare, light spill, visual brightness, and light intrusion, and avoid creating adverse ecological impacts particularly with respect to residential amenity.
 - Consideration should be given as to how the temporary lighting of construction sites might make a positive contribution to the character and ambience of the local area after dark for the duration of the works.

1. Provision of infrastructure for the occasional and appropriate use of dynamic coloured lighting, projections and other forms of artistic night-time intervention can enhance the public realm after dark.
Photography by James Newton.



2. Temporary construction lighting can cause glare, light spill and light pollution.
Photography by James Newton.



3. Temporary lighting of construction hoarding can make a positive contribution to the character and ambience of the local area and minimise the impact on the ecology.



5.0 Technical Requirements

Technical Requirements

- 5.1 This final section sets out the technical requirements with which all lighting schemes within the City of London for new developments are expected to comply. Where deviation occurs applicants should explain their reasons and justify their design decisions including providing mitigation where needed.
- 5.2 The information as indicated in '**Table 6: Technical Lighting Requirements**' should be submitted as part of the Lighting Equipment Schedule as indicated in '**Table 4: Technical Lighting Design Submission Requirements**':

Table 6: Technical Lighting Requirements

Item	Requirement
Type of source	To be light emitting diode (LED) unless otherwise stated. Where not LED please detail the source and justify its use.
Colour appearance of the source	All exterior and interior light sources (where visible to the public realm) should be in the range of 2300K – 4000K. Where sources are not within this range, or are coloured, please clearly explain the reason.
Colour rendering of the source	All exterior light sources should have a CRI of ≥80. Where sources are not within this range, please clearly explain the reason.
Construction of the luminaire	Details should be provided as to the materials and general construction of the luminaire, its IP and IK rating (where relevant) and its compliance with relevant British Standards, Electrical Regulations and Codes of Practice.
Efficiency of the luminaire	All exterior lighting equipment should achieve an efficiency of ≥ 70 lm/circuit watt. Where equipment does not achieve this efficiency, please clearly explain the reason.
Optical design and aiming of the luminaire	All exterior luminaires should be directed at the target surface and aimed so as not to create obtrusive light such as sky glow, glare, excessive visual brightness, light spill or light intrusion. Where the risk of obtrusive light exists luminaires should be fitted with louvres, cowls or shields. Where no accessories are fitted, please clearly indicate how the design minimises glare.
Mounting methodology	Please indicate the method by which any lighting equipment is fixed within the public realm or to a building and the means by which it is secured to prevent it falling. Where equipment is at low level and/or can be touched by a member of the public details should be provided as to the measures taken to secure the fitting and prevent injury by sharp edges, heat, or electric shock. Details should also be provided as to any measures taken to counter vandalism.
Dimensions and weight	Please state the overall dimensions and weight of each item of lighting equipment.
Lifetime, upgrading and disposal	Details should be provided as to the anticipated lifetime of all exterior lighting equipment, any warranty period provided by its manufacturer and the method by which it will be upgraded to extend its life and/or disposed of at end of life. It is recommended that all luminaires have a warranty of not less than 5 years.
Origin of manufacture and support	Details should be provided as to the origin of manufacture of all exterior lighting equipment and the means by which technical support will be provided during its lifetime.

5.0 Technical Requirements

Obtrusive Light

- 5.3

One of the primary goals of this SPD is to help reduce the environmental impact created by lighting schemes for new developments to protect both residential amenity and biodiversity, whilst at the same time promoting the creation of rich, diverse and visually interesting public realm experience after dark. To do so it has drawn upon general guidance and best practice. This includes 'Guidance Note 01/21 for the reduction of Obtrusive Light 2021' published by the Institution of Lighting Professionals (ILP), which in itself is based on international guidance on obtrusive light as detailed in 'CIE 150:2017 Guide on the Limitation of the Effects of Obtrusive Light from Outdoor Lighting Installations'.
- 5.4

Whilst obtrusive light is also referred to as light pollution, for the purposes of this document it includes sky glow, glare, excessive visual brightness, light spill, and light intrusion that can cause a nuisance or create an adverse impact on both people and biodiversity.
- 5.5

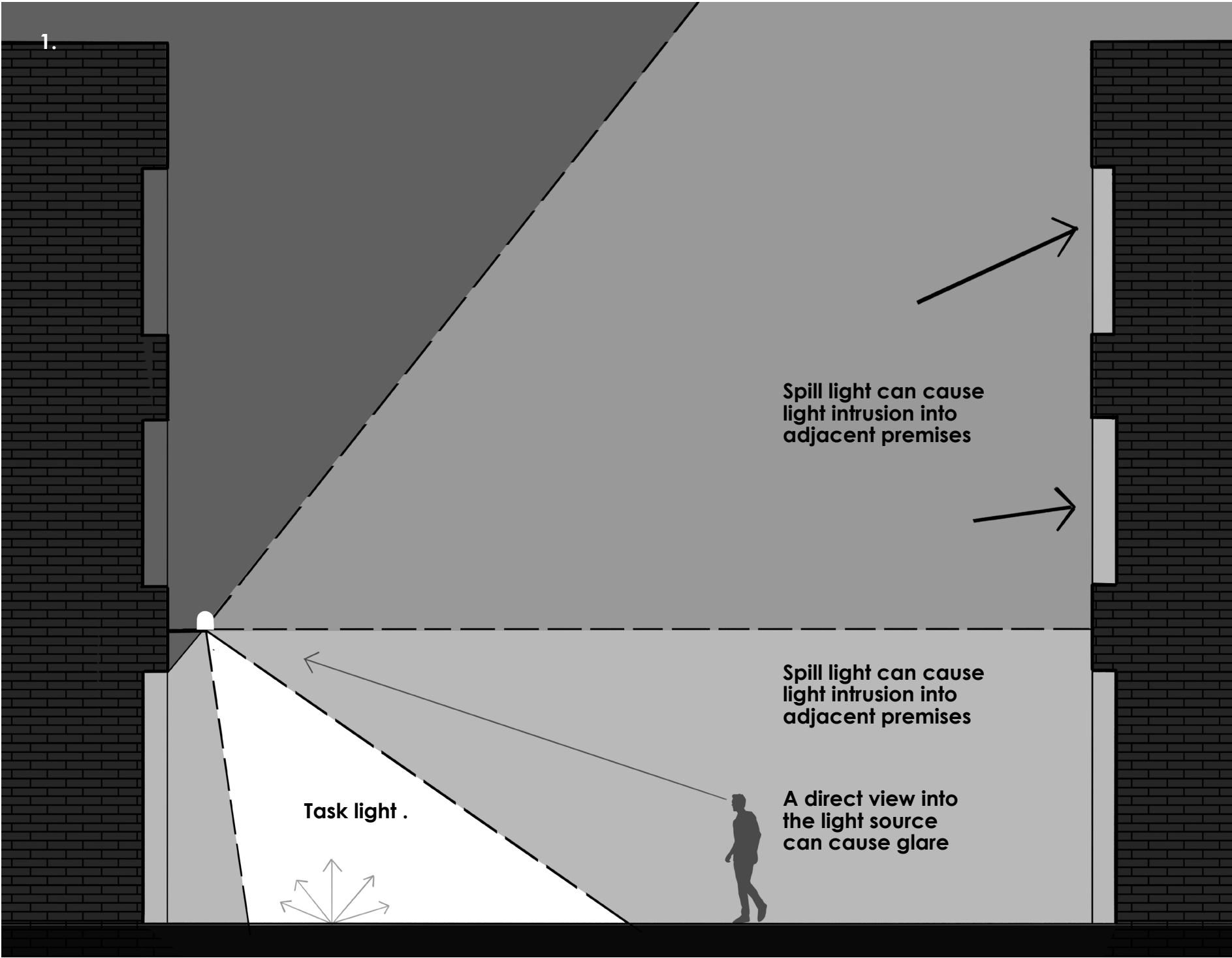
Four things are required to be considered to help minimise obtrusive light created by a lighting scheme whether that is external to the building or internal but visible from outside: The brightness of the light sources, the optical design and distribution of the luminaires, the positioning and mounting of the luminaires, and how they are controlled.
- 5.6

Lighting schemes designed as part of new developments should meet the requirements and provide the information set out in '**Table 7: Environmental Lighting Standards**'. Where deviation from such standards occur applicants should explain their reasons and justify their design decisions including providing mitigation where required.

Table 7: Environmental Lighting Standards

Issue	Requirement	Reason
Sky glow	Provide details of any mitigation measures taken as part of the design and management of the exterior and interior lighting to reduce the risk of contributing to sky glow such as aiming fixtures above the horizontal, their optical design, the inclusion of accessories such louvres, snoots and cowls and the use of lighting control.	To contribute to the reduction of obtrusive light.
Glare	Provide details to demonstrate how glare will be controlled including confirmation that the main beam angle of all light fixtures when directed towards an observer is no more than 45° from the vertical. If aiming angles of luminaires exceed this requirement, clearly explain the reasoning and any mitigation measures that may be taken.	To contribute to the reduction of obtrusive light.
Visual brightness	Provide details, including luminance plots, to demonstrate that the visual brightness of a façade, or illuminated media complies with the requirements of this document (see Tables 9-13) If the visual brightness exceeds these clearly explain the reasoning and any mitigation measures that may be taken.	To contribute to the reduction of obtrusive light.
Light spill	Provide details, including illuminance plots, to demonstrate that light spill from the development complies with the requirements of this document (see Tables 9-13), excluding street and amenity lighting. If the light spill exceeds these, clearly explain the reasoning and any mitigation measures that may be taken.	To contribute to the reduction of obtrusive light.
Light intrusion	Provide details of any mitigation measures taken as part of the design and management of the exterior and interior lighting to reduce the risk of light intrusion into adjoining or neighbouring properties such as blinds, lighting control, etc.	To contribute to the reduction of obtrusive light.
Curfew	Provide details of which luminaires are required to be maintained from dusk to dawn for essential lighting to support safety and security and which luminaires are non-essential and may therefore be switched off at the appointed curfew time (see Table 9).	To contribute to saving energy and reducing obtrusive light.
Energy consumption	State the total energy consumption of the external and internal lighting installation and detail what measures are being taken to minimise energy use.	To show how the development may directly contribute to the City of London's strategy for the reduction of CO2 emissions.

5.0 Technical Requirements



1. Types of obtrusive light.



2. If the visual brightness of signage is too high, it contributes to obtrusive light.



3. If the visual brightness is $\leq 200 \text{ cd/m}^2$ and well balanced, the façade and signage are more legible.



5.0 Technical Requirements

- 5.7

Alongside the requirements set out in 'Table 7: Environmental Lighting Standards' the following Tables 9-12 indicate the general technical standards that lighting should be designed to for all new developments, particularly with respect to light spill and visual brightness.
- 5.8

The City Corporation's Lighting Strategy (2018) describes a variety of different character zones. It is recognised that these different areas of the City are brighter or darker depending on the nature of the activity taking place i.e. commercial office, retail, residential, historic, cultural or mixed use. 'Table 8: District Brightness Zones (DBZ)' indicates the classification of different areas of the City of London into areas of district brightness. Applicants should establish which zone/s applies to their development through consultation with a City of London Planning Officer.
- 5.9

For the avoidance of doubt where a development lies at the boundary of two District Brightness Zones the design should comply with the requirements of the lower brightness zone unless otherwise agreed with the City Corporation. It may also be that different facades of a development may be required to meet the standards of different District Brightness Zones.
- 5.10

Having established the relevant District Brightness Zone/s (DBZ) with the City Corporation that applies to a lighting scheme, the applicant should consult 'Table 9: Lighting Curfew Times' which clarifies the times at which all external lighting, except that specifically required for safety and crime prevention such as street and amenity lighting, should automatically switch off, or dimmed down to pre-agreed levels, unless activated by a passive infrared (PIR) detector or similar presence detector or sensor.
- 5.11

Having established the District Brightness Zone (DBZ) and the Lighting Curfew Times the external lighting, or the internal lighting visible from the public realm, should be designed to meet the criteria stated in 'Table 10: Light Spill – Maximum value for vertical illuminance spilling from a façade' as measured on a vertical plane at a 5m offset from the site boundary of any development. Evidence of compliance with these requirements should be provided through outputs from light modelling studies.
- 5.12

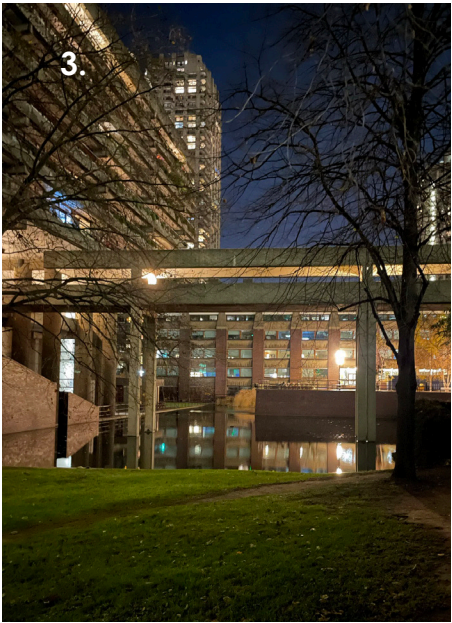
Having established the District Brightness Zone (DBZ) and the Lighting Curfew Times the external lighting, or the internal lighting visible from the public realm, should be designed to meet the criteria stated in 'Table 11: Light Spill – Maximum value for horizontal illuminance spilling from a façade' as measured on a vertical plane at a 5m offset from the site boundary of any development. Where the offset to neighbouring buildings or open spaces is less than 5m the criteria apply to that boundary. Evidence of compliance with these requirements should be provided through outputs from light modelling studies.



1. Example of a District Brightness Zone 1. Photography by James Newton.



2. Example of a District Brightness Zone 2. Photography by James Newton.



3. Example of a District Brightness Zone 3.

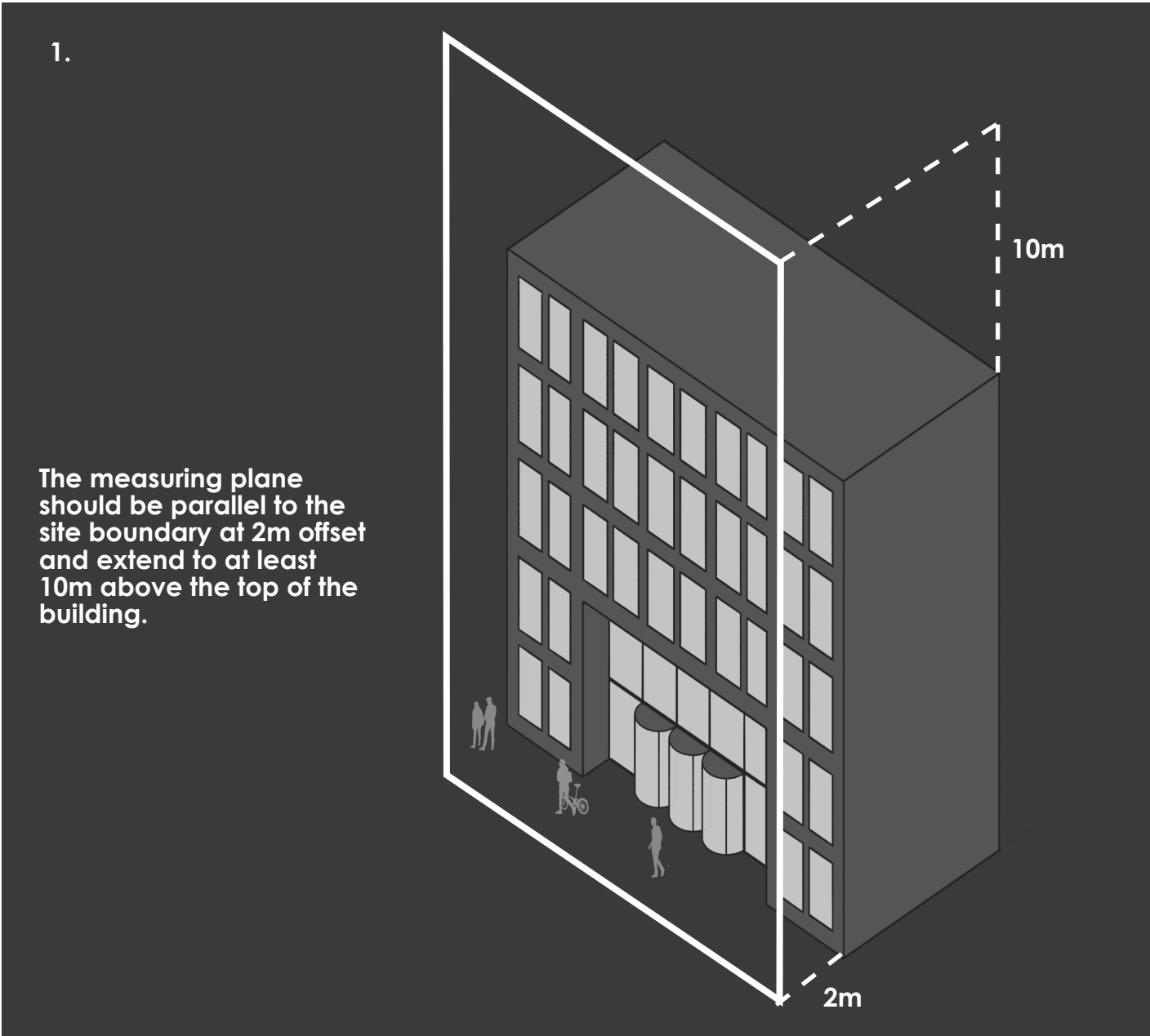
Table 8: District Brightness Zones (DBZ)

DBZ	Class	Area
DBZ1	High	Commercial, retail and transport terminals and other defined high district brightness areas.
DBZ2	Medium	Cultural, tourist and heritage and other defined medium district brightness areas.
DBZ3	Low	Residential, special heritage, landscaped and other defined low district brightness areas.

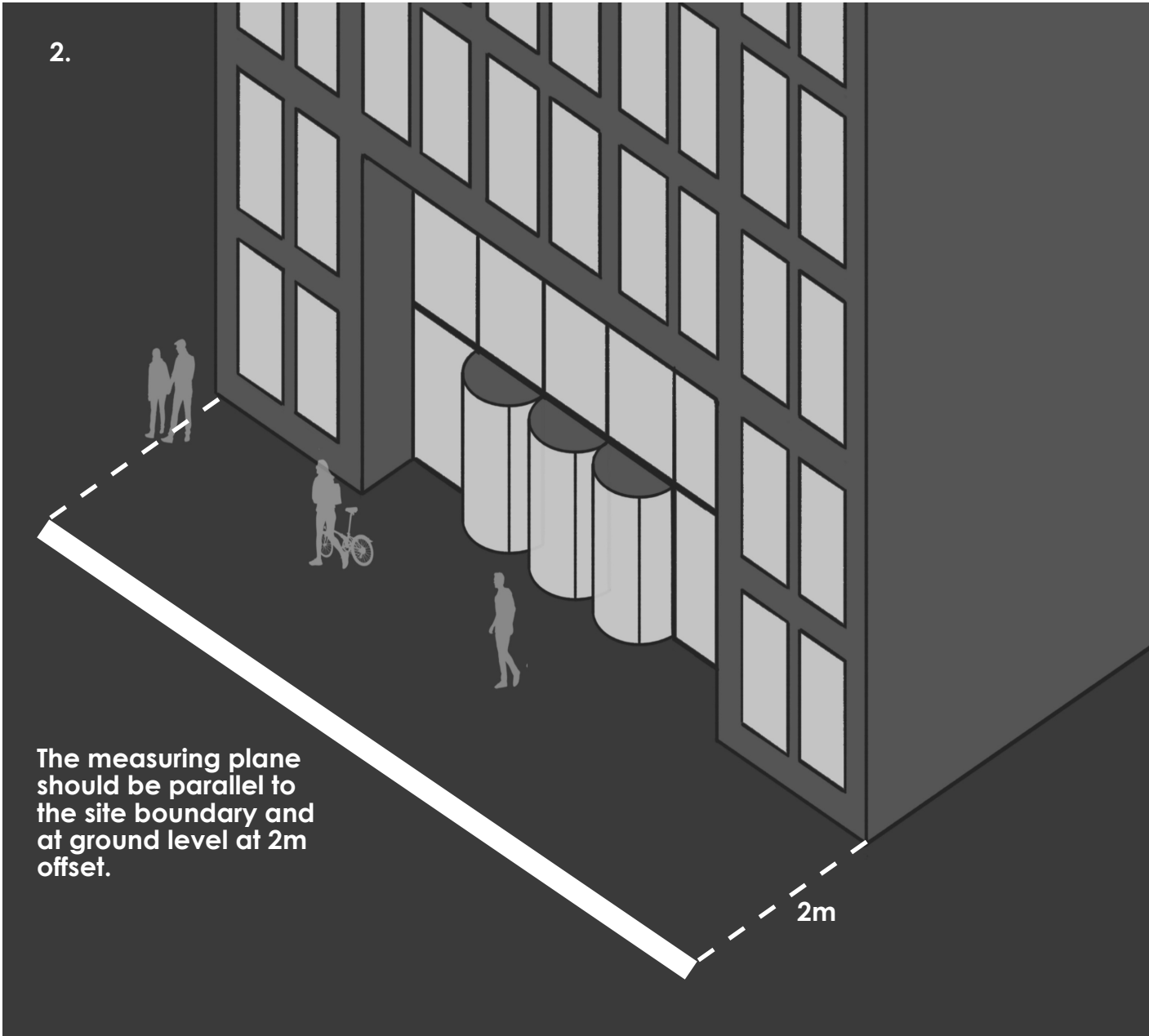
Table 9: Lighting Curfew Times

DBZ	Class	Pre-Curfew	Post-Curfew
DBZ1	High	Sunset to midnight	Midnight to sunrise
DBZ2	Medium	Sunset to 23.00	23.00 to sunrise
DBZ3	Low	Sunset to 22.00	22.00 to sunrise

5.0 Technical Requirements



1. Diagram explaining measuring plane for vertical illuminance.



2. Diagram explaining measuring plane for horizontal illuminance

Table 10: Light Spill – Maximum Vertical Illuminance

DBZ	Class	Pre-Curfew	Post-Curfew
DBZ1	High	15 lux	3 lux
DBZ2	Medium	5 lux	1 lux
DBZ3	Low	1 lux	0.1 lux

Note: The measuring plane should be parallel to the site boundary and extend to at least 10m above the top of the building.

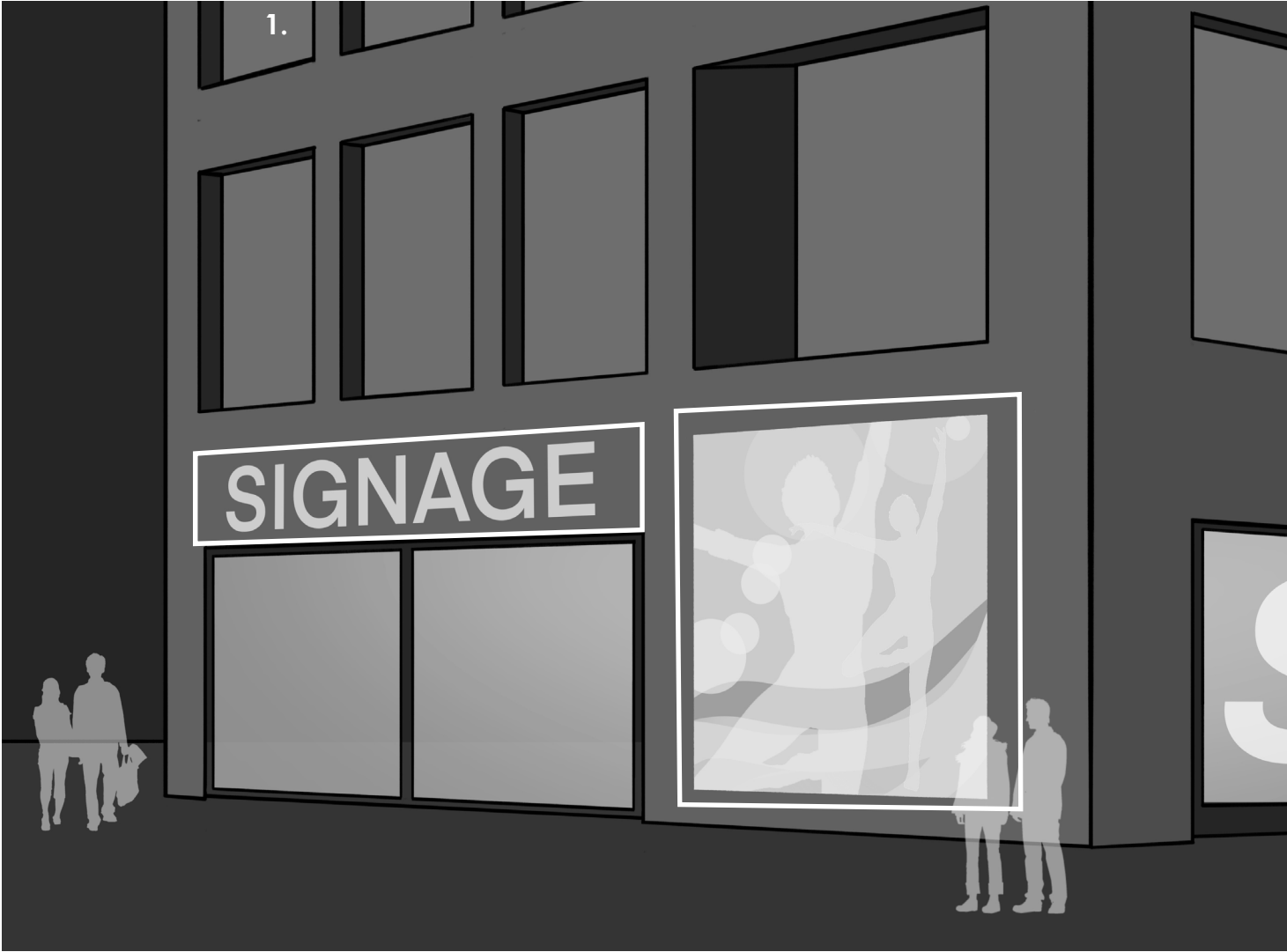
Table 11: Light Spill – Maximum Horizontal Illuminance

DBZ	Class	Pre-Curfew	Post-Curfew
DBZ1	High	15 lux	3 lux
DBZ2	Medium	5 lux	1 lux
DBZ3	Low	1 lux	0.1 lux

Note: The measuring plane should be parallel to the site boundary and at ground level.

5.0 Technical Requirements

5.13 Having established the District Brightness Zone (DBZ) and the Lighting Curfew Times the external lighting, or the internal lighting visible from the public realm, should be designed to meet the criteria stated in 'Table 12 : Visual Brightness – Maximum values of average surface luminance of illuminated media' as measured at the face of the sign/ media screen. Evidence of compliance with these requirements should be provided through outputs from light modelling studies.



1. The measuring plane is the face of the sign/media screen.

Table 12: Visual Brightness – Maximum values of average surface luminance of illuminated media

DBZ	Class	Pre-Curfew	Post-Curfew
DBZ1	High	500 cd/m ²	250 cd/m ²
DBZ2	Medium	200 cd/m ²	100 cd/m ²
DBZ3	Low	100 cd/m ²	50 cd/m ²

Note: The measuring plane is the face of the sign/media screen.

5.0 Technical Requirements

Operation and Maintenance

5.14 Notwithstanding the quality of the lighting design for any development and its compliance with the general principles and technical requirements of this SPD, the way in which the lighting performs after dark each night will be reliant on the manner in which it is operated and maintained. **'Table 4: Technical Lighting Design Submission Requirements'** requires applicants to submit full details of their intended operational and maintenance requirements for the exterior lighting and any interior lighting visible from the public realm. Such details should include the information and details as outlined in **'Table 13 – Requirements for the Operation and Maintenance of Lighting'** as follows:

Table 13: Requirements for the Operation and Maintenance of Lighting

Item	Requirement
Control Methodology	General summary of anticipated methodology for the control of all external lighting and all internal lighting visible from the public realm.
Control System	Details of exterior and interior control systems including general type, control protocol, confirmation of degree to which lighting is dimmable and details of operational interfaces that control the timing of the external lighting and internal lighting visible from the public realm including PIRs, photocells, programmable and astronomic timeclocks.
Operational Times	Details of operational timings and approximate lighting levels as a percentage of full brightness for all external lighting and internal lighting visible from the public realm to demonstrate compliance with pre-curfew and post-curfew lighting requirements as stated in this guidance including details of different lighting moods or scenes.
Maintenance of Lighting Equipment	General method statement for the maintenance of all lighting equipment providing the external lighting and internal lighting visible from the public realm including intervals for inspection and cleaning of lighting equipment including details of access requirements and timings.
Replacement of Lighting Equipment	General statement for the anticipated upgrading and/or replacement of all lighting equipment providing the external lighting and internal lighting visible from the public realm including LED chips, luminaires, accessories and drivers together with details of how such equipment will be recycled or disposed.

Appendices

Appendix A:

Considerate Lighting Charter

City of London Corporation

The City of London Corporation's Considerate Lighting Charter is a set of actions that will help to ensure that buildings and public spaces in the Square Mile achieve the right light, in the right place, at the right time.

Building owners, managers and occupiers in the Square Mile are encouraged to sign up to the Charter. By doing so, they commit to the principles and actions of the Charter, and commit their organisations to minimising the amount of artificial lighting they use.

These 13 actions are the minimum required to comply with the Considerate Lighting Charter. For further guidance, look at the City of London Corporation's Lighting SPD.

Well-managed lighting

1. **Review your lighting system** – Carry out an initial review and update it regularly, with the aim of minimising light spill, reducing energy consumption and improving sustainability.
2. **Consult neighbouring properties** – Particularly residents and other sensitive receptors, as part of the review. Keep neighbouring properties informed about changes to your lighting system.
3. **Detection systems** – Install passive infrared detectors (PIR) or similar detection systems as part of a 'smart' lighting system designed in a way that minimises the amount of light used.
4. **Management** – Embed good lighting practice in your facilities management teams and undertake training for staff on how lighting systems should be operated.
5. **Turn lights off** – Do not leave the lights on in unoccupied interior spaces, particularly commercial spaces and ensure external lighting accords with curfew times in the Lighting SPD.

Comfortable lighting

6. **Glare** – Install low-glare downlighting and louvres to minimise glare and the visibility of lights from outside the building.
7. **Light spill** – Remove or reduce any lighting that is within two metres of a window. Install blinds to minimise light spill outside the building.
8. **Colour temperature** – Do not use lighting that is cooler than 3,000 Kelvin for outside the building, or cooler than 4,000 Kelvin for inside the building, after dark.
9. **Illuminance and brightness** – Put limits on external lights and internal lights that are visible from outside, taking account of the time of day and character of the area. (Tables 10 -12 of the Lighting SPD set out the limits to follow).

Sustainable lighting

10. **Energy waste** – Only use light where deemed absolutely necessary and ensure it is on only when needed.
11. **Reduce carbon impacts** – Procure light fittings that have the minimum embodied carbon and lowest operational energy, and can be easily repaired, replaced and recycled. Consider 'lux leasing' and other circular economy approaches.
12. **Efficiency** – All exterior lighting equipment should achieve an efficiency of more than 70 lumens per circuit watt.
13. **Biodiversity** – Identify local context and design your lighting to limit any impacts on biodiversity.

Appendix B:

Supporting legislation, standards

There are numerous recognised standards and guidelines with respect to external lighting the UK. These make general recommendations regarding the quality, quantity, distribution, and delivery of light and the many technical considerations associated with the illumination of the built environment. Whilst too numerous to cite within this document, the following are recommended for further background information in support of this SPD:

- BS5489-1 2020: Design of road lighting. Lighting of roads and public amenity areas. Code of practice;
- CIBSE/SLL Code for Lighting;
- CIBSE/SLL Lighting Guide LG06/16: The Exterior Environment;
- CIBSE/SLL LGLOL Guide to limiting obtrusive light;
- CIE 115:2010 Lighting of roads for motor and pedestrian traffic;
- CIE 126:1997 Guidelines for minimising sky glow;
- CIE 136:2000 Guide to the lighting of urban areas;
- CIE 150:2017 Guide on the limitation of the effects of obtrusive light from outdoor lighting installations;
- ILP GN 01/20: Guidance note for the reduction of obtrusive light;
- ILP PLG04 Guidance on undertaking environmental lighting impact assessments;
- ILP PLG05 The brightness of illuminated advertisements;
- ILP PLG06 Guidance on installation and maintenance of seasonal decorations and lighting column attachment;
- Historic England: Streets for All Advice for Highway and Public Realm Works in Historic Places;
- Historic England: External Lighting of Historic Buildings;
- Information from the Bat Conservation Trust on artificial lighting, and Eurobats guidelines for consideration of bats in lighting projects.

It should be noted that the above list is not exhaustive. It also relates to good practice guidance not regulation. The advice given by the Institution of Lighting Professionals in relation to their guidance may be seen as applicable to all: "Lighting is a complex subject with both subjective and objective criteria to be considered. The notes are therefore no substitute for professionally assessed and designed lighting, where the various and maybe conflicting visual requirements need to be balanced.

Appendix C:

Construction Lighting

Whilst temporary construction lighting for construction sites after dark is essential to maintaining safety and security on construction sites it can also be a blight creating light spill, glare, light intrusion and other unwanted impacts, particularly with respect to local residents and biodiversity. In some cases temporary construction light may stay in place for many years. It also often changes and develops over time, including the re-positioning of lighting associated with hoardings, scaffolding, site access for vehicles and personnel, site accommodation, open working areas, cranes, concrete batching plants and other construction areas. The following guidance is recommended for all construction sites within the City of London with respect to lighting:

1.0 Introduction

The following guidelines have been prepared to assist with the design, development, delivery, operation, and maintenance of 'Exterior Site Lighting' within the City of London. They aim to provide 'best practice' guidance to principal contractors, their sub-contractors, and other key stakeholders as to the use of artificial light in the external realm in association with construction sites and their immediate curtilage.

2.0 Background

Lighting plays a key role on construction sites, particularly during the winter months when work may be taking place during the hours of darkness. Lighting is used to provide a safe and secure environment for all those that work on, or visit the construction site itself, and for members of the public who are driving, cycling or walking around the perimeter. Whilst the role of such lighting is critical it should be recognised that it also creates several unwanted environmental impacts including:

- Energy use
- Obtrusive light
- Light Pollution
- Waste

This document aims to provide advice as how to improve the balance between the requirement to provide a well-lit working environment and reducing the environmental impact of Exterior Site Lighting to create a sustainable response. This is particularly important as construction sites within the City of London, and their temporary lighting arrangements, will be in place for long periods – often several years. It is therefore important to reduce the impact of such lighting for local residents, biodiversity, and to protect the night sky but without compromise to safety and security.

3.0 Standards

Whilst there are no apparent statutory requirements for Exterior Site Lighting within the UK, it is a requirement of the Health and Safety Executive to safely illuminate construction sites. Guidance is available on the HSE website. This includes links to HSG38 'Lighting at Work'. Whilst this document deals more broadly with health and safety issues around lighting in a range of different workplaces including offices, factories, etc., it also refers to construction sites. It should be noted however, that HSG38 was first published in 1987, and last updated in 1997, since when many changes in lighting technology and the understanding of both the benefits and impacts of artificial lighting on human health and the wider environment have substantively changed. The baseline information from HSE regarding Site Lighting is currently limited to the provision of light but does not include any comment regarding the potential environmental impact or nuisance it can cause. Many other standards exist with respect to the design of exterior lighting which are noted in the appendix to this document. Whilst such guidance refers generally to more permanent schemes, much of the advice can equally apply to temporary conditions, particularly where lighting is to be installed and operated for many years. The most relevant document that provides guidance in respect of light pollution, light spill, over-illumination and other environmental factors with respect to the use of artificial light at night (ALAN) is 'ILP GN 01/20: Guidance note for the reduction of obtrusive light' published by the Institution of Lighting Professionals.

4.0 Principles

The key lighting requirement for all Exterior Site Lighting is providing the right amount of light, of the right type in the right place, and at the right time.

Quantity

Whilst HSE guidance on technology as outlined in HSG38 is outdated, many of its key recommendations remain relevant. The guidance states: “Lighting at work is very important to the health and safety of everyone using the workplace. The quicker and easier it is to see a hazard, the more easily it is avoided. The types of hazard present at work therefore determine the lighting requirements for safe operation.” It is therefore essential that the right amount of light for the visual task is determined in each area of the site. This should generally be determined based on carrying out a risk assessment and/or using the CIBSE Code for Exterior Lighting or similar best practice guidance. Whilst the amount of light (illuminance measured in lux) may be expressed as an average across the task plane its uniformity (evenness of the lighting) is critical. Extremes of contrast should be avoided wherever safety is a key consideration. The more uniform the lighting the better the eye can see and therefore the lower the light level can be. This point is important where measures are being taken to minimise the environmental impact of the lighting including the avoidance of over-illumination and over-specification. The less light that is used the less impact is created.

In the absence of any other guidance the following may be used subject to a proper assessment of risk:

Task (rough construction work)	Average Illuminance (lux)	Minimum Illuminance (lux)	Uniformity (UF)
Areas involving the movement of people and vehicles such as lorry parking or circulation areas	30	5	0.2
Areas involving the movement of people, vehicles and/or machinery such as clearance, excavation and soil work	50	20	0.4

Whilst the background level of illumination as stated this table should be sufficient for many activities, where more detailed tasks are being carried out, or there is a high risk of personal injury, higher levels of illumination may be required. In such cases consideration might be given to the local lighting of such tasks rather than illuminating large areas of the site to a higher level. An alternative may be to raise the level of light across the wider area but only when such tasks are being carried out.

Quality

As important as the quantity of light is its quality. This can be expressed both in terms of colour appearance and colour rendering. Colour appearance is the colour of the light itself i.e. warm, neutral or cool, which is measured as correlated colour temperature (CCT) expressed in Kelvin (K). Whilst not critical to the visual task consideration might be given to the CCT of any exterior lighting in relationship to the site context. By example, warmer light (2700K-3000K) might be employed in a residential area.

Colour rendering is a measure of the ability of a light source and its spectrum to reveal colours accurately and is measured through a ‘colour rendering index’ (CRI) expressed in Ra. Ra100 is identical to the spectrum of daylight which reveals colours accurately. The better the quality of light in terms of its spectral distribution, the higher the CRI and the easier it is to recognise

colours. High CRI (>Ra 80) can allow lighting levels to be slightly lowered when compared with sources with a lower CRI.

It should be noted that the prevailing source technology, light emitting diodes (LED) generally have a very high CRI. They render colours better than many of the more traditional sources of light such as fluorescent and metal halide around which many lighting standards were originally determined.

Another important qualitative issue is glare. There are two types: The first is ‘disability glare’ which is produced directly or by reflection and which impairs the visibility of objects. The second is ‘discomfort glare’ which causes actual visual discomfort. Glare should be avoided as it can cause a wide variety of problems including hampering people’s ability to easily adapt to the dark. With exterior lighting the eye will always adapt to the brightest object in the field of vision which in turn will create problems with the visibility of the surrounding area. Glare can therefore be hazardous in complex and potentially dangerous working environments such as construction sites.

Place

Another critical factor is the manner in which light is distributed to meet the requirements of the visual task within any place. Aside from the distribution of the light having the potential to create issues such as glare it will also impact uniformity and create shadows. By example a focussed light source will create extremely sharp and deep shadow, but the visual brightness of the fitting can be better controlled. An unfocussed or diffused light source will produce a softer flatter light with less harsh shadows but can create more glare.

LEDs themselves are generally bright, glary and highly focussed light sources by their very nature so good optical control is always recommended. This can also greatly enhance the efficiency of the fixture and its source as well as helping to control glare.

Lighting can also be regarded as a ‘place-making’ tool. Whilst Exterior Site Lighting is less likely to be concerned

with character or identity it should be recognised that the overall appearance of a construction site after dark can positively contribute to the brand values and image of the client, the wider development and the construction team, both as responsible ‘good neighbours’ to local communities and in respect off sustainability and environmental impact.

Duration

One of the easiest ways to save energy and reduce unwanted environmental impacts is to use less light. This can not only be achieved through designing for lower light levels but also by ensuring that lighting is turned off, or at least right dimmed down, when there is no human presence. The duration of any lighting can be controlled by photocells, timeclocks or presence detection. These can either control light fittings either individually or as a network.

Photocells can be used to raise or lower, turn off and turn on light sources related to the availability of daylight i.e. at dusk or dawn.

Timeclocks can provide simple pre-programmed on/off instructions. Astronomic timeclocks are pre-programmed to control lighting in relation to the daily change to sunset and sunrise times.

Presence detection will raise or lower, switch on or off light fittings when triggered by the presence of a person or vehicle.

It is recommended that these various forms of control are used to manage energy and mitigate environmental impacts through regulating the use and amount of light at a different times for different purposes, including dimming lighting down to a security setting or switching it off altogether at an agreed ‘curfew’ time.

5.0 Environmental Impact

As previously stated, Exterior Site Lighting can directly contribute to environmental impact that can cause harm to people, flora and fauna, and the planet. Such impacts are created in several ways:

Energy Use: Light is a highly visible form of energy use. The less light we use the more we reduce the carbon footprint of any site which in turn reduces the depletion of the earth's natural resources in the form of valuable fossil fuels. Whilst solid state lighting technology such as LED and control systems can help reduce energy use through achieving greater efficiencies energy use can be further reduced and better managed through good design.

Light Pollution: Artificial light is an industrial product that can create pollution. Light pollution not only conceals our view of the stars on a clear night but can also harm local ecologies, particularly bird, bat and insect populations. Light pollution is not only caused by direct upward light but also reflected light from brightly illuminated horizontal or vertical surfaces. Security lighting is recognised as one of the major contributors to light pollution.

Light Intrusion: Light intrusion (also called Light Spill) is a form of light pollution. In the context of this guidance, it refers to light that strays over the site boundary into neighbouring areas. This is known as light trespass. Uncontrolled light spill can cause problems for people and biodiversity. Light spilling through bedroom windows of residences local to a site can create problems with sleep patterns leading to health issues. Light spilling into ecologically sensitive zones can harm both flora and fauna upsetting the natural balance, impacting the migration patterns of birds, attracting insects that change the feeding patterns of predators and causing stress to plants, trees and other flora.

Over-Illumination: The use of higher levels of light than are needed or maintaining illumination when not required, can be referred to as over-illumination. Over-illumination is often created by the over-specification of light sources and lighting equipment. With well-designed lighting 'brightest is not always best' and 'less can often be more'. Whilst safety and security is of paramount importance this should not be achieved through the careless use of more light than is required to achieve such objectives.

Waste: As well as wasted energy and wasted light, lighting can also create waste through the redundancy of lighting equipment and supporting electrical infrastructure. This is particularly the case with temporary lighting where fittings are sometimes discarded rather than being re-used or re-purposed. Low cost fixtures often break or LED sources fail prematurely. They are also often unable to be upgraded, repaired or even recycled. Every effort should be made to reduce unnecessary waste and to re-use site lighting. Consideration should be given to the whole-life cost, circularity, embodied energy, ability to be repaired, upgraded and/or recycled for each component within the systems that deliver the Exterior Site Lighting.

6.0 Recommendations

Exterior Site Lighting is often designed to spill high levels of light into the environs of a construction site using bright and uncontrolled fittings such as floodlights mounted on hoardings, site offices, gantries, towers and cranes. Such lighting is often over-specified, over-bright, glary and light polluting spilling light well outside the boundary of the site itself.

Whilst 'temporary' in nature Exterior Site Lighting can often be in place for many years creating visual problems for local residents, office workers and members of the public who pass by, overlook or otherwise engage with the site.

It is the recommendation of this report that all Exterior Site Lighting is designed, developed, specified, procured, delivered, controlled and maintained to reduce unwanted and unnecessary environmental impacts as far as it is reasonably possible. If carefully and professionally designed, this can be achieved without compromise to health and safety and security.

Beyond the general recommendations already made in this guidance the Exterior Site Lighting to all construction sites within the City of London should adhere to the following specific recommendations:

- The quantity of light used should not exceed the recommendations of the CIBSE Code for Exterior Lighting and/or HSE Guide HSG38. Wherever possible consideration should be given to further reducing light levels, particularly where overlooked by, or in close proximity to residences or areas of ecological importance.
- The correlated colour temperature of the light (CCT) should be no greater than 4000K (neutral white). Where the site is local to residential areas consideration should be given to using 3000K or less (warm white).
- All light sources shall produce white light in the range of 4000K-2700K and the use of coloured lighting should be avoided unless otherwise agreed.
- The colour rendering of all light sources should not be less than Ra80 to aid recognition.
- A 'lighting curfew' time should be agreed after which all exterior lighting is switched off or dimmed down to 10% of its designed level.
- Whilst lighting should be designed to support CCTV arrangements this should not be to the detriment of the local environment. CCTV cameras should be specified or switched to low light level mode post-lighting curfew.
- All light sources should be directed at the ground or onto vertical surfaces such that light does not spill into the sky or beyond the site boundary.
- All light sources should be fixed or tilted such that they light above the horizontal.
- All light sources should be fully or partially shielded to prevent a direct view of the light sources.
- All area floodlights or similar wide-beam luminaires should be fitted with louvres, snoots, shields and/or hoods to help reduce glare, light spill, and light pollution.
- All bulkheads should be shielded such that upward light spill is avoided, particularly where fitted to public hoardings.
- All continuous or discontinuous linear light sources, especially those fixed to hoardings, should be concealed behind shields or pelmets to avoid direct views of the source.
- All illuminated signage, graphics and/or media screens should be controlled such that they do not become a glare source or a visual nuisance.
- Consideration should be given to the use of blinds in windows of all site accommodation where interior lighting levels are in excess of 200 lux and/or unshielded ceiling mounted light sources are visible from outside, particularly

where the site is in close proximity to residences or sensitive ecological areas.

- Tower cranes should not be lit other than with specific task lighting for safe access and/or operation.
- All lighting should be fully dimmable or capable of being switched down in increments of 25%.
- All lighting systems and lighting equipment should be controlled by either a centralised or localised system of photocells, timeclocks or presence detectors to allow the lighting to be fully controlled according to an agreed series of times.
- Lighting should be controlled across the site such that three lighting 'scenes' can be created and managed as follows:
 - Early evening: The brightest scene, particularly in the winter months, to support an active site. Lighting levels to different areas and tasks to comply with the recommendations of this report.
 - Late evening: A reduced lighting scene where areas with no activity have the lighting switched off or dimmed down to a security level of 10% of full output.
 - Post-lighting curfew: The lowest lighting scene where all lighting on the site is either switched off or reduced to 10% of full output.
- The addition of electrical infrastructure to support the temporary creative illumination of events and holidays such as Christmas should be considered as part of community outreach.

Appendix D: Glossary

The following is a glossary of terms to help the reader understand some of the more technical terminology used within this document. It is adapted from a full and more detailed glossary published as part of the SLL Lighting Handbook. Further information is also available through many of the standards, codes and guides that are listed in Appendix B.

Adaptation

Adaptation is the ability of the human eye to adjust to various levels of light.

Astronomical time clock

A timing device or software function designed to switch lighting on at dusk and off at dawn in relation to the day of the year at a given geographical location.

Average illuminance

(See illuminance). Illuminance averaged over the specified surface area measured in lux. In practice this can be derived either from the total luminous flux falling on the surface divided by the total area of the surface or, alternatively, from an average of the illuminances at a representative number of points on the surface.

Average luminance

(See luminance). Luminance averaged over the specified surface measured in candela per square meters (cd/m²). In practice, this may be approximated by an average of the luminance at a representative number of point on the surface.

Brightness

Attribute of a visual perception according to which an area appears to emit (or reflect) more or less light.

Brightness contrast

Subjective assessment of the difference in brightness between two or more surfaces seen simultaneously or successively.

Colour contrast

Subjective assessment of the difference in colour between two or more surfaces seen simultaneously or successively.

Correlated colour temperature (CCT)

The Correlated Colour Temperature of a lamp refers to the chromaticity of the light emitted. CCT is measured in degrees Kelvin (K). The warmer the appearance of the light source, the lower the degrees of Kelvin.

Colour rendering (CRI)

Colour rendering is the ability of a light source to reproduce surface colours as faithfully as possible compared to a reference light source (e.g. daylight). It is identified by the colour rendering index (CRI). The highest colour rendering is Ra = 100.

Colour consistency

Colour consistency refers to the average amount of variation in chromaticity among a batch of supposedly identical lamp samples. To limit this variation, the lighting industry uses a colour consistency system based on MacAdam ellipses.

Cowl

Shaped semi-cylindrical device fitted to the front of a luminaire that restricts the view of the light source.

Curfew

Time period during which stricter requirements (for the control of obtrusive light) will apply. Note: it is often a condition of use of lighting applied by a government controlling authority, usually the local government.

Cut-off

Technique used for concealing lamps and surfaces of high luminance from direct view to reduce glare.

Diffused lighting

Lighting in which the light on the working plane or on an object is not incident predominantly from a particular direction.

Direct lighting

Lighting by means of luminaires having a distribution of luminous intensity such that the fraction of the emitted luminous flux directly reaching the working plane, assumed to be of infinite extent, is 90% to 100%.

Directional lighting

Lighting in which the light on a plane or on an object is predominantly from a particular direction.

Disability glare

Glare that impairs the vision of objects without necessarily causing discomfort. Disability glare can be produced directly or by reflection.

Discomfort glare

Glare that causes discomfort without necessarily impairing the vision of objects. Discomfort glare can be produced directly or by reflection.

Driver

Device connected between the supply and one or more LED lamps which serves mainly to limit the current and/or regulate the voltage to the lamp(s) to the required value.

Efficacy

Luminous efficacy of luminaires corresponds to the ratio between the light output (lm) and the input power (W). Luminous efficacy is measured in lm/W.

Emergency lighting

Lighting provided automatically for use when the supply to the normal lighting fails.

Flicker

Impression of unsteadiness of visual sensation induced by a light stimulus whose luminance or spectral distribution fluctuates with time.

Floodlighting

Lighting of a scene or object, usually by projectors, in order to increase considerably its illuminance relative to its surroundings.

General lighting

Substantially uniform lighting of an area without provision for special local requirements.

Glare

Glare is the sensation produced by bright areas within the field of view and may be experienced either as discomfort glare or disability glare. Discomfort glare arises from light sources or luminaires whose luminance is greater than the eye can adapt to. Disability glare impairs the vision of objects without necessarily causing discomfort. See also disability glare and discomfort glare.

Illuminance

Illuminance describes the quantity of light emitted by a light source falling on a surface, and it is measured in lux. Illuminance (lx) = luminous flux (lm) / area (m²).

Indirect lighting

Lighting created by reflecting light off a surface.

Ingress Protection (IP) ratings

Numerical index used to define levels of sealing effectiveness of electrical enclosures, including luminaires, against intrusion from foreign bodies (tools, dirt etc) and moisture.

Integral lighting

Lighting system consisting of lamp(s), luminaire(s) and associated mechanical and electrical control devices which forms a permanent part of the built environment.

Intensity

See luminous intensity.

IK rating

Numerical index used to define the degrees of protection provided by electrical enclosures (including luminaires) against external mechanical impacts.

Lamp

Light source made in order to produce an optical radiation, usually visible.

LED (light emitting diode)

Solid state device emitting optical radiation (light) when excited by an electric current.

Life of lighting installation

Period after which the installation cannot be restored to satisfy the required performance because of nonrecoverable deteriorations.

Light Trespass

Light Trespass occurs when poorly shielded or poorly aimed fixtures cast light into unwanted areas, such as buildings, neighbouring property, and homes. This negative effect of outdoor lighting crosses property lines and detracts from property values and our quality of life - often affecting our ability to sleep and maintain good health.

Local lighting

Lighting for a specific visual task, additional to and controlled separately from the general lighting.

Louvres

Fixed or adjustable blades or baffles on windows to restrict daylight and/or preclude sunlight or to restrict or reflect some portion of the light from the lamp or light source associated with a luminaire.

Luminaire

Another term for a light fitting.

Luminance

Luminance is a measure of the luminous intensity per unit area of light travelling in a given direction measured in candelas per square metre (cd/m^2). It describes the amount of light that passes through, is emitted or reflected from a particular area, and falls within a given solid angle. Luminance distribution in the visual field controls the adaptation level of the eyes which affects task visibility and visual comfort. Too high luminances can give rise to glare and too high luminance contrasts can cause fatigue from constant re-adaptation of the eyes.

Luminance meter

Instrument for measuring luminance.

Luminous environment

Lighting considered in relation to its physiological and psychological effects.

Maintained emergency luminaire

Luminaire in which emergency light sources are operating at all times when normal lighting or emergency lighting is required.

Maintained illuminance

Value below which the average illuminance on the specified area should not fall.

Maintained luminance

Value below which the average luminance on the specified area should not (unit: $\text{cd} \cdot \text{m}^{-2}$).

Maintenance cycle

Repetition of lamp replacement, lamp/luminaire cleaning and room surface cleaning intervals.

Maintenance factor

Ratio of illuminance produced by the lighting installation after a certain period to the illuminance produced by the installation when new.

Obtrusive light

Spill light which because of quantitative, directional or spectral attributes in a given context gives rise to annoyance, discomfort, distraction or reduction in the ability to see essential information.

PIR (passive infrared)

Movement detector used as part of a presence or absence detection system.

Presence detection

The automatic detection of presence in a space in order to switch the luminaires on during space occupancy.

Reflectance

Ratio of the reflected radiant or luminous flux to the incident flux in the given conditions.

Reflections

See veiling reflections.

Scene setting

A software function or manually via a scene setting switch in order to select the available lighting scenes in a space.

Snoot

Cylindrical device fitted to front of luminaire to restrict the view of the light source.

Sky Glow

Sky Glow is a result of light fixtures that emit a portion of their light directly upward into the sky where light scatters, creating a diffuse glow above a city or town.

Spacing

Distance between the light centres of adjacent luminaires of the installation.

Spacing to height ratio

Ratio of spacing to the height of the geometric centres of the luminaires above the reference plane.

Spill light

Light emitted by a lighting installation which falls outside the boundaries of the area for which the lighting installation is designed.

Uniformity

Uniformity is the ratio between the lowest illuminance level and the average illuminance, measured in an illuminated area. $U_0 = E_{\min} / E_{\text{av}}$ upward flux ratio.

Veiling reflections

Specular reflections that appear on the object viewed and that partially or wholly obscure the details by reducing contrast.

Visual comfort

Subjective condition of visual wellbeing induced by the visual environment.



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Committees: Port Health and Environmental Services	Date: 10 October 2022
Subject: Air Quality Annual Status Report for 2021	Public
Which outcomes in the City Corporation's Corporate Plan does this proposal aim to impact directly?	2 and 11
Does this proposal require extra revenue and/or capital spending?	N
Report of: Juliemma McLoughlin, Executive Director, Environment	For information
Report author: Ruth Calderwood, Air Quality Manager	

Summary

As part of its statutory duties for London Local Air Quality Management, the City of London Corporation is required to produce an Annual Status Report and submit the report to the Greater London Authority and the government. The report is designed to demonstrate progress with actions contained within the latest Air Quality Strategy and to present air quality monitoring data. A copy of the full report, which is produced using a prescribed template, will be made available on the Corporation web site and is available on request. A summary report containing the monitoring data, is attached to this report as Appendix 1.

Despite the ongoing disruption due to the impact of the COVID-19 pandemic during 2021, good progress was made with a wide range of actions and air quality monitoring continued throughout the year.

The City Corporation runs what is probably the densest and most comprehensive network of air quality monitoring equipment in the country. Air quality data was collected in 2021 using three nitrogen dioxide (NO₂) continuous analysers, three particulate PM₁₀ analysers and two particulate PM_{2.5} analysers. Nitrogen dioxide data was also collected at 105 sites using low-cost diffusion tubes.

The impact of the COVID 19 pandemic on levels of air pollution in the Square Mile was still apparent in 2021. Since 2019 there has been a significant drop in annual average concentrations of NO₂. In both 2020 and 2021, nearly all locations met the annual objective of 40µg/m³ with overall concentrations being very slightly higher in 2021 than 2020.

The impact of the COVID-19 pandemic on the level of particulate matter was less significant. This is because particulate matter is made up of many sources, some of which travel very long distances and stay in the air for a long time. Levels of particulate matter in the air at any given time are also strongly influenced by weather conditions. Roadside sites did however see a reduction in annual mean PM₁₀

concentrations in 2021, when compared to 2020, with background levels remaining the same. PM_{2.5} remained the same at roadside with background levels being slightly reduced.

The Square Mile has experienced significant improvements in air quality. This is set to continue as further measures in the City Corporation's Air Quality Strategy are implemented. Action to improve air quality is strongly supported across the organisation by a wide range of policies and strategies. This is most notable in planning policy, the Transport Strategy and the Climate Action Strategy.

Recommendation

Members are asked to:

- Note the contents of the Air Quality Annual Status Report for 2021

Main Report

Background

1. The City of London Corporation has a statutory duty to assist the Mayor of London and the UK government in taking action to reduce levels of air pollution so that concentrations of pollutants meet health-based limits as soon as possible. The City Corporation also has a responsibility to protect public health.
2. The City Corporation's latest Air Quality Strategy 2019 – 2024 was adopted in September 2019. It outlines actions that will be taken to fulfil the City Corporation's statutory responsibility for Local Air Quality Management, and for reducing the health impact of air pollution on residents, workers, and visitors to the Square Mile.
3. The City Corporation has a statutory obligation to submit an Annual Status Report to the Mayor of London and the government. The report must outline progress towards actions within the existing Air Quality Strategy and provide the results of air quality monitoring undertaken. A copy of the full report, which is produced using a prescribed template, will be made available on the Corporation web site. It is also available on request. A summary report containing the air quality data is attached as Appendix 1.

Air Quality Data

4. The amount of air quality monitoring taking place in the Square Mile has increased in recent years. In 2021, data was collected using long-term continuous monitors at three nitrogen dioxide (NO₂) sites, three particulate PM₁₀ sites and two particulate PM_{2.5} sites. Data collected over the past three years for these sites is presented in Table 1.

5. Concentrations of air pollution are compared to health-based limits. Limits in the UK are taken from those set by the European Union, which were based on 2005 World Health Organisation Air Quality Guidelines. The Guidelines were updated in 2021 and, in most cases, tightened. The new guidelines have not been incorporated into domestic legislation but are presented in Table 1 for information. The government has recently consulted on adopting a new annual average limit for PM_{2.5} of 10µg/m³.
6. In 2021, nitrogen dioxide data was also collected at 105 sites using low-cost diffusion tubes. Data from diffusion tubes is less accurate than from the continuous analysers. It is, however, very useful to show long term trends and highlight hot-spot locations. The data for all sites is presented in both the full report and the summary report, which is attached as Appendix 1.

Location	Pollutant	UK legal limit	WHO Guideline		Annual average 2019 (µg/m ³)	Annual average 2020 (µg/m ³)	Annual average 2021 (µg/m ³)
			2005	2021			
The Aldgate School (background)	NO ₂	40	40	10	33	22	23
	PM ₁₀	40	20	15	19	16	16
	PM _{2.5}	25	10	5	12	12	11
Upper Thames Street (roadside)	NO ₂	40	40	10	73	45	46
	PM ₁₀	40	20	15	27	24	19
Beech Street (roadside)	NO ₂	40	40	10	62	29	31
	PM ₁₀	40	20	15	22	18	15
Farringdon Street (roadside)	PM _{2.5}	25	10	5	14	12	12

Table 1

7. Levels of nitrogen dioxide are reducing across the Square Mile. In both 2020 and 2021 there was a significant drop in annual average concentrations of nitrogen dioxide measured at roadside when compared to 2019. This was principally due to the impact of the COVID-19 pandemic. In 2021 nearly all locations met the annual objective of 40µg/m³.
8. Background concentrations of nitrogen dioxide also reduced dramatically, with the analyser at the Aldgate School measuring an annual average of 23µg/m³. This was slightly higher than in 2020 when it was 22µg/m³ but down from 33µg/m³ in 2019.
9. PM₁₀ concentrations have also declined, though not by the same magnitude as nitrogen dioxide. This is because particulate matter is made up of many sources,

some of which travel very long distances and stay in the air for a long time. Levels of particulate matter in the air at any given time are also strongly influenced by weather conditions.

10. The concentration of PM_{2.5} in Farringdon Street and the Aldgate School continue to be well below the annual average limit value, but above the current World Health Organisation guideline and just above the government's proposed new UK limit of 10µg/m³.

Progress with Actions

11. The City Corporation published its latest Air Quality Strategy in 2019. The strategy details actions that are being taken to improve air quality. The Air Quality Annual Status Report includes progress with each action. Despite the impact of the COVID-19 pandemic on working practices during 2021, good progress was made with a wide range of actions. Examples are given below:

- Continued to use the content of the Emission Reduction (Local Authorities in London) Private Members Bill to influence discussions with Defra about options for new powers for local authorities.
- Hosted a London Borough's 'Sharing Best Practice in Air Quality' event, with over 50 attendees.
- Hosted and chaired four meetings of the London Air Quality Steering group
- Jointly lead the Pan London Vehicle Idling Action Project with the London Borough of Camden and delivered a very successful London wide advertising campaign.
- Undertook research into the sources of PM_{2.5} in the Square Mile
- Responded to complaints of unnecessary engine idling. All were dealt with informally; no Penalty Charge Notices or Fixed Penalty Notices were issued during 2021
- Undertook 40 audits of construction sites to ensure compliance with emission requirements for on-site equipment
- Inspected all shops likely to sell solid fuels to check for compliance with new Solid Fuel Regulations
- Worked with the Port of London Authority on a Clean Air Thames project to trial engine emission retrofit on river vessels.
- Partnered with Clean City Award Scheme to provide a 'Air Quality and Climate Change' award
- Created a factsheet for health professionals summarising the health impacts of air pollution and delivered webinars for health practitioners.
- Reviewed air quality action plans for five City schools and four nurseries
- Undertook a year-long Citizen Science air quality monitoring project on the Barbican and Golden Lane Estates with over 50 participants
- Continued to promote air quality through a monthly air quality e-newsletter, Twitter and LinkedIn

Corporate & Strategic Implications

Strategic implications

12. Air quality policy and action at the City Corporation is framed in the Air Quality Strategy 2019 – 2024. It is supported by the Climate Action Strategy, Transport Strategy, Responsible Business Strategy, Procurement Strategy and draft City Plan.

13. The work on air quality directly supports two Corporate Plan outcomes:
‘People enjoy good health and wellbeing’
‘We have clean air, land and water’

Financial implications

14. None.

Resource implications

15. None

Legal implications

16. None

Risk implications

17. Air quality is listed as a Corporate risk. The most recent Deep Dive into the risk was presented to Audit and Risk Management Committee in January 2021.

Equalities implications

18. Action to improve air quality has a positive impact on all sections of the population. The benefit is greatest for children and the elderly as they are more susceptible to the health impacts of air pollution. There is also a positive impact on individuals whose lives are affected by asthma and other respiratory and cardiovascular conditions.

Security implications

19. None

Conclusion

20. The City Corporation has completed its 2021 Air Quality Annual Status Report. This fulfils part of the City Corporation’s statutory obligations for London Local Air Quality Management.

21. Despite the impact of the COVID-19 pandemic on activity in the Square Mile, good progress was made with a wide range of actions and air quality monitoring continued throughout the year.

22. The impact of the response to the COVID-19 pandemic led to a dramatic reduction in concentrations of nitrogen dioxide across the Square Mile. Levels of PM₁₀ also reduced but by a smaller amount. PM_{2.5} largely remained the same.
23. The Square Mile has experienced significant improvements in air quality, particularly for nitrogen dioxide. This is set to continue as further measures in the City Corporation's Air Quality Strategy are implemented. Action to improve air quality is strongly supported across the organisation by a wide range of policies and strategies. This is most notable in planning policy, the Transport Strategy and the Climate Action Strategy.

Appendices

- Appendix 1 – Air Quality Annual Status Summary Report for 2021

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Appendix 1

Air Quality Annual Status Summary Report for 2021

Air Quality Monitoring data

1. Nitrogen Dioxide (NO₂)

The current UK legal limit is an annual mean of 40µg/m³. The World Health Organisation (WHO) published new air quality guidelines in 2021, these have not been adopted in the UK. The WHO recommended annual average guideline for nitrogen dioxide is 10µg/m³.

Long term continuous analysers

Site	Site type	Annual Mean (µg/m ³)						
		2015	2016	2017	2018	2019	2020	2021
The Aldgate School	Urban Background	42	42	38	32	33	22	23
Beech St	Roadside	89	85	80	69	62	29	31
Walbrook Wharf	Roadside	98	92	92	87	73	45	46

Long term diffusion tube sites

Site	Site type	Annual Mean (µg/m ³)						
		2015	2016	2017	2018	2019	2020	2021
St Bartholomew's Hospital Courtyard	Urban Background	38	49	63	50	42	33	31
St. Andrew's Church, Queen Victoria St	Roadside	53	56	52	50	41	28	28
St Dunstan's Church, Fleet Street	Roadside	87	81	82	70	57	31	36
Speed House, Barbican Estate	Urban Background	33	35	32	31	28	19	19
Guinness Trust Estate, Mansell St	Roadside	56	51	48	46	39	33	27

Diffusion tube sites measuring the impact of the Bank on Safety traffic scheme

Site	Annual Mean ($\mu\text{g}/\text{m}^3$)					
	2016	2017	2018	2019	2020	2021
Bank 1 - Cannon Street	78	65	50	40	38	37
Bank 2 - Queen Victoria Street	72	59	58	51	35	31
Bank 3 - King Street	52	52	52	47	30	30
Bank 5 - Magistrates Court	66	63	53	56	36	32
Bank 6 - King William Street	76	70	61	61	42	35
Bank 8 - Lombard Street	59	56	56	45	30	28
Bank 10 - Cornhill Bank Junction	71	67	66	57	31	30
Bank 11 - Cornhill-Royal Exchange	61	57	62	41	26	27
Bank 12 - Threadneedle Street	85	69	62	42	31	28
Bank 13 - 31 Old Broad Street	59	57	53	45	29	26
Bank 14 - Wormwood Street	64	61	57	49	33	32
Bank 15 - 3 London Wall	64	54	65	53	35	38
Bank 16 - 81 London Wall	60	59	62	53	38	41
Bank 17 - 55 Moorgate	69	66	66	52	36	36
Bank 18 - 85 Gresham Street	53	54	52	46	30	30
Bank 19 - Lothbury	45	44	45	39	24	24
Bank 20 - Princes Street	78	74	69	49	36	34
Bank 22 - Gracechurch Street /Leadenhall	-	66	62	51	34	36
Bank 23 - Fish Street Hill	-	66	61	43	32	31

Diffusion tube sites measuring the impact of the Low Emission Neighbourhood

Site	Annual Mean ($\mu\text{g}/\text{m}^3$)				
	2017	2018	2019	2020	2021
Len 1 - Giltspur Street	53	43	38	28	27
Len 3 - Beech Street- Near Barbican Station	69	62	50	33	30
Len 4 - Aldersgate	62	57	47	41	35
Len 5 - Viscount Street	40	37	-	24	22
Len 6 - Corner of Whitecross Street / Beech Street	46	42	40	23	25
Len 7 - Silk Street	41	41	36	26	24
Len 8 - Fore Street	41	38	34	25	25
Len 9 - London Wall/ Brewers Hall Gardens	48	49	42	30	36
Len 10 - Aldermanbury	38	37	31	24	23
Len 15 - Fann Street	-	41	36	23	23
Len 16 - Moor Lane	-	39	30	25	23

Diffusion tube sites – other, including schools and nurseries

Site	Annual Mean ($\mu\text{g}/\text{m}^3$)			
	2018	2019	2020	2021
Southwark Bridge	41	35	29	31
London Bridge	37	35	26	26
Liverpool Street	71	52	38	35
Fenchurch Avenue	36	35	26	25
Fetter Lane	56	44	29	30
St Mary at Hill's Churchyard	33	31	21	21
St Pauls Cathedral	41	39	24	24
Whittington Gardens	42	37	26	26
Goodmans Yard	-	44	25	28
Goldman Sachs			24	25
Citigen			30	30
Hatching Dragons Nursery			22	22
Bright Horizons Nursery			24	21
St Pauls Choir School front railings			31	28
CoL Boys School access ramp			21	23
Charterhouse Square School				25

Diffusion tube sites to support the Transport Strategy

Site	Annual Mean ($\mu\text{g}/\text{m}^3$)			
	2018	2019	2020	2021
T2 - Byward Street	67	51	35	40
T3 - Seething Lane	71	57	44	46
T4 - Crosswall	50	44	26	27
T5 - Minories	62	49	36	37
T6 - Stoney Lane	40	39	25	25
T7 - Heneage Lane	42	33	27	25
T9 - 150 Bishopsgate	74	48	36	34
T10 - St Mary Axe	50	42	26	25
T11 - Old Broad Street	40	31	26	27
T12 - Upper Thames Street	48	53	40	39
T13 - Blackfriars Bridge	62	56	41	38
T14 - Victoria Embankment	68	57	38	38
T15 - Fleet Street	62	47	36	30
T16 - Ludgate Hill	61	50	31	31
T17 - Museum of London	66	55	36	35
T18 - London Wall	65	52	39	36
T19 - West Poultry Ave	51	38	30	26
T20 - The Fable	58	51	38	30
T21 - North Old Bailey	73	56	36	43
T22 - Leadenhall St/ Creechurch Lane	-	-	-	28
T 23 - The Gherkin	-	-	-	27
T24 - St Mary's Axe/Bury Court	-	-	-	26

Diffusion tube sites to support the Beech Street Zero Emissions Street Project

Site	Annual Mean ($\mu\text{g}/\text{m}^3$)		
	2019	2020	2021
Aldersgate Street	47	39	39
Bunhill Row/Chiswell Street	40	26	25
Moore Lane/Ropemaker Street	34	29	26
Moorgate	52	32	34
London Wall/ Moorgate	52	36	37
London Wall	49	34	35
Wood Street	29	24	24

PM₁₀ Data

The current UK legal limit is an annual mean of $40\mu\text{g}/\text{m}^3$. The new World Health Organisation guideline is $15\mu\text{g}/\text{m}^3$.

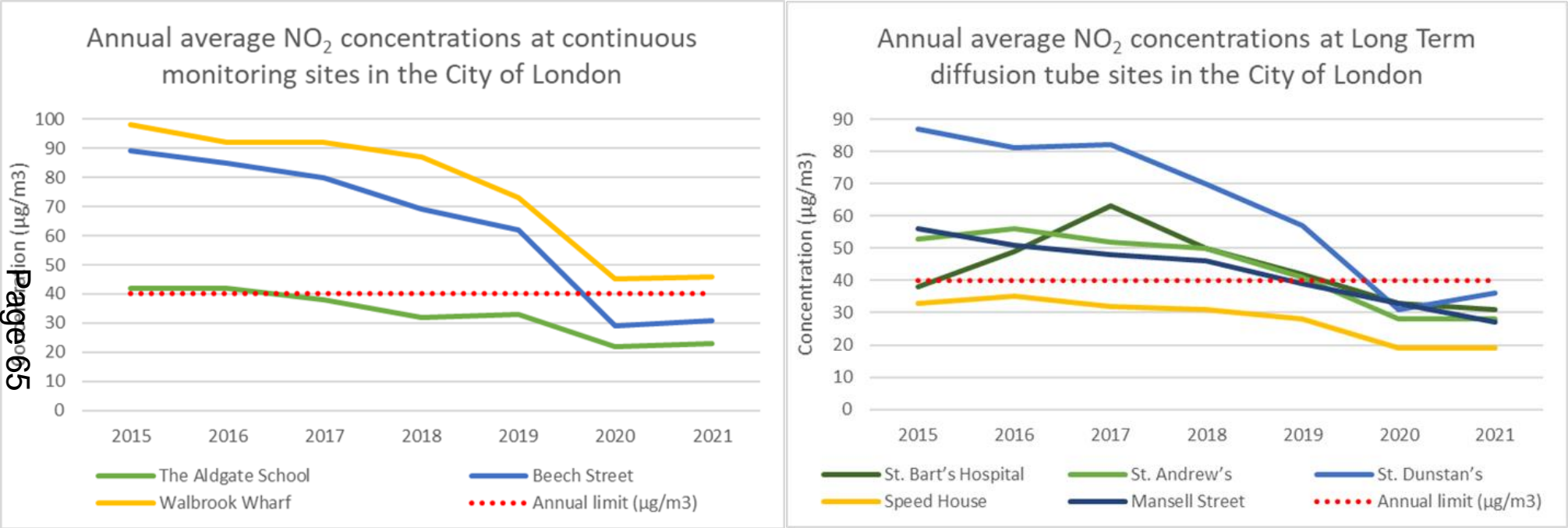
Site	Annual Mean ($\mu\text{g}/\text{m}^3$)						
	2015	2016	2017	2018	2019	2020	2021
The Aldgate School	23	24	23	21	19	16	16
Beech St	28	25	23	24	22	18	15
Upper Thames St	41	35	32	32	27	24	19

PM_{2.5} Data

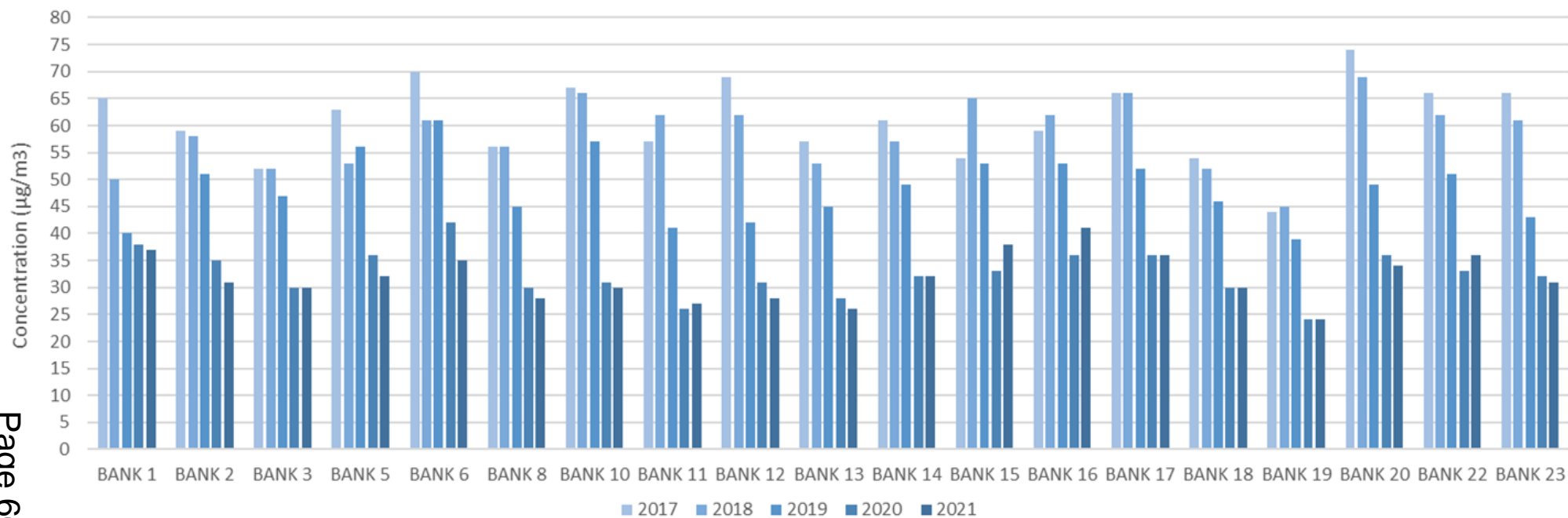
The government has proposed an annual average limit of $10\mu\text{g}/\text{m}^3$ which is likely to be adopted later this year. The new World Health Organisation guideline is $5\mu\text{g}/\text{m}^3$.

Site	Annual Mean ($\mu\text{g}/\text{m}^3$)					2021
	2016	2017	2018	2019	2020	
Farringdon Street	16	16	16	14	12	12
The Aldgate School	15	14	12	12	12	11

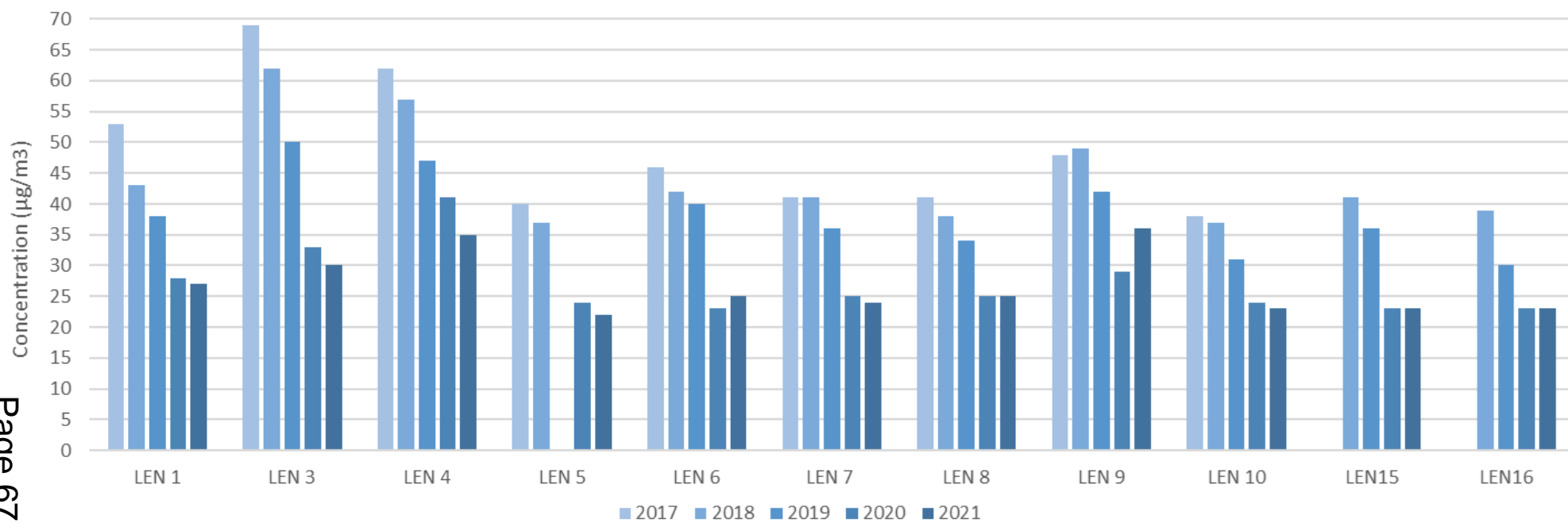
Graphs



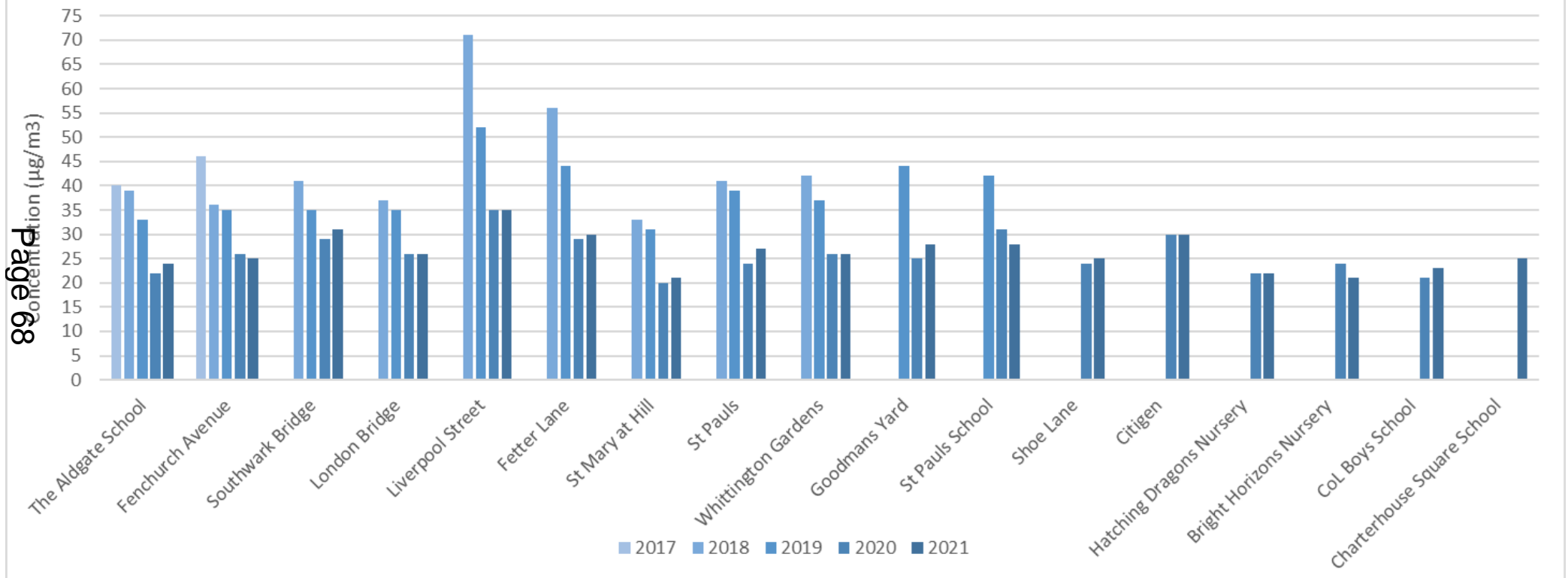
Annual average NO₂ concentrations at Bank diffusion tube sites in the City of London 5 year trend



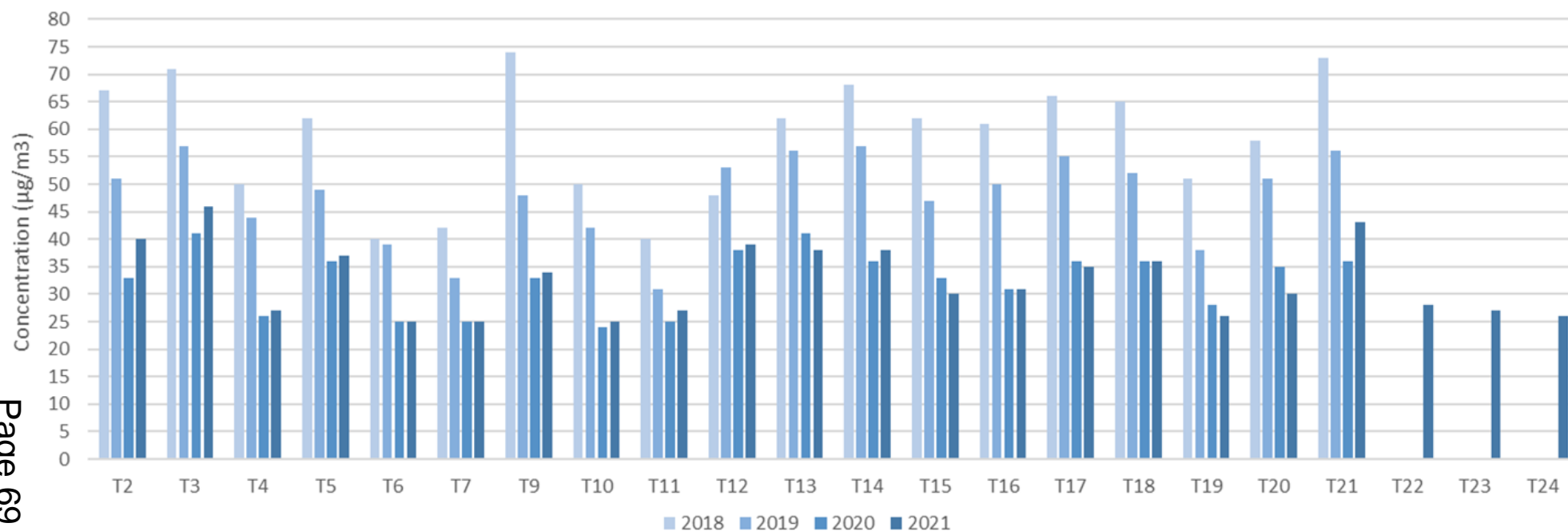
Annual average NO₂ concentrations at LEN diffusion tube sites in the City of London 5 year trend

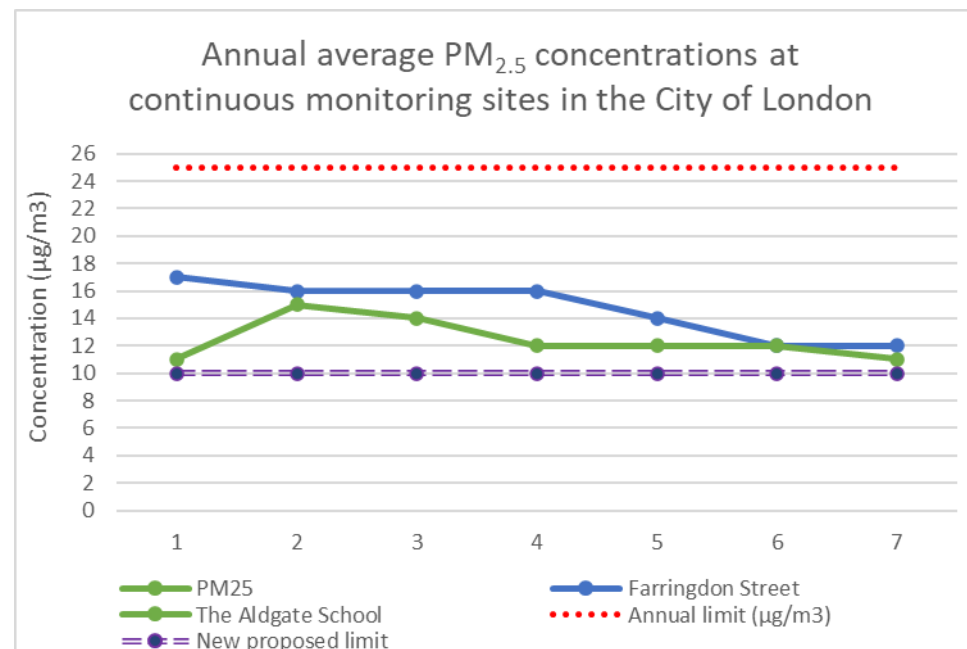
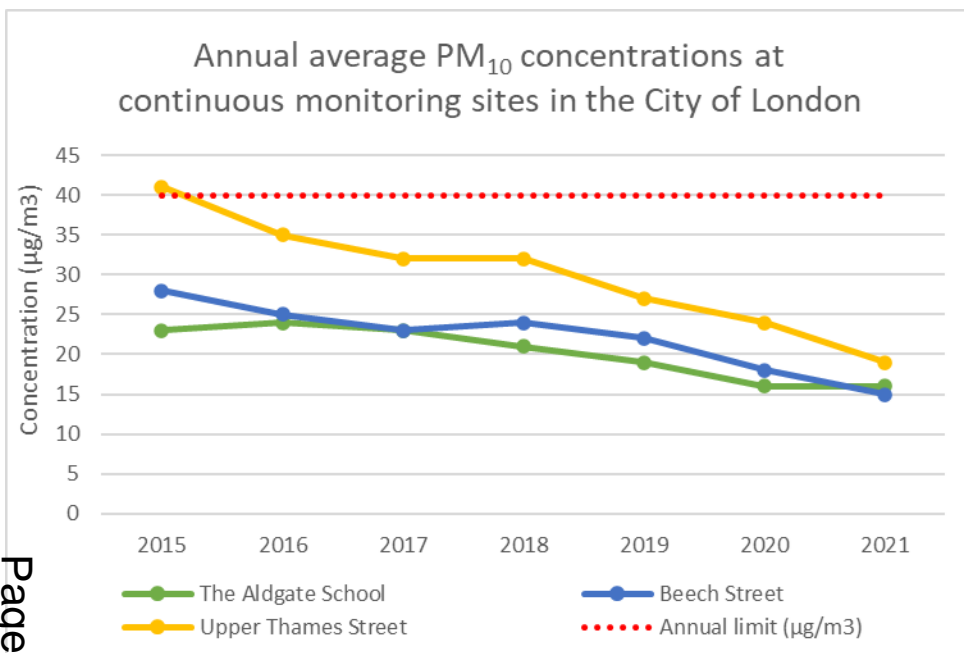


Annual average NO₂ concentrations at additional diffusion tube sites in the City of London



Annual average NO₂ concentrations at Transport Strategy diffusion tube sites in the City of London 4 year trend

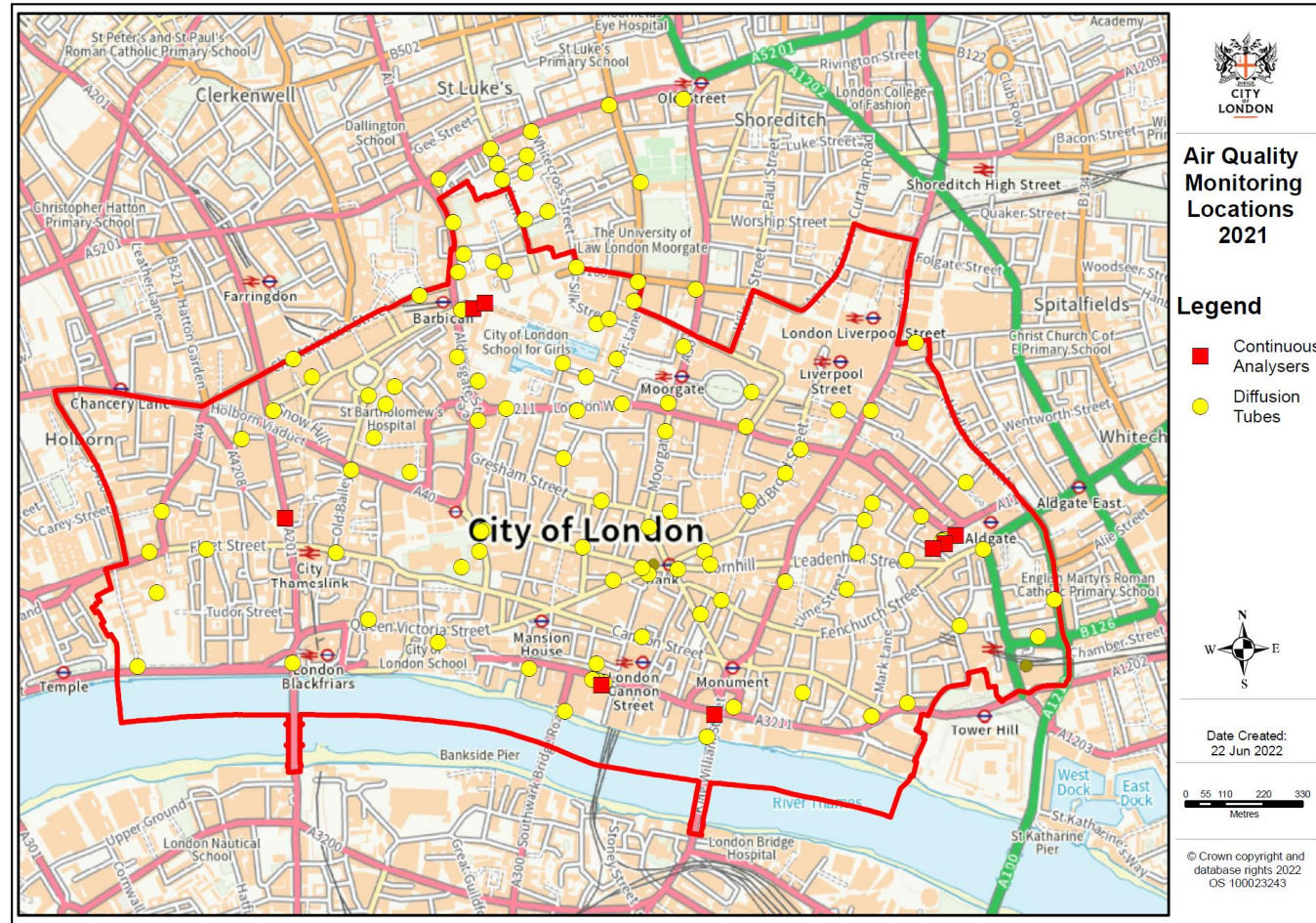




Air quality monitoring locations, 2021

Air quality monitoring locations are reviewed annually. Some core monitoring sites are maintained, and other sites are added and removed according to the needs of research projects, planned programmes and local investigations or concerns.

Locations where monitoring took place during 2021 are shown below. Nitrogen dioxide was measured on some roads in the London Borough of Islington to measure the impact of the zero-emission street pilot. This data isn't included in the Annual Status Report as the report is designed to represent the status of air quality in the Square Mile.



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Committee(s): Port Health & Environmental Services Committee	Dated: 10 October 2022
Subject: Risk Management Update Report	Public
Which outcomes in the City Corporation's Corporate Plan does this proposal aim to impact directly?	All
Does this proposal require extra revenue and/or capital spending?	N
Report of: Juliemma McLoughlin, Executive Director Environment	For Information
Report authors: Joanne Hill, Business Planning and Compliance Manager	

Summary

This report provides the Port Health and Environmental Services Committee with assurance that risk management procedures in place within the Environment Department are satisfactory and that they meet the requirements of the corporate Risk Management Framework.

Risk is reviewed regularly within each service area as part of the ongoing management of operations. In addition to the flexibility for emerging risks to be raised as they are identified, a process exists for in-depth periodic review of the risk register.

This report considers the key risks managed by the following service areas which fall within the remit of your Committee:

- Port Health and Public Protection Division
- City Operations: Cleansing Service

Recommendation

Members are asked to:

- Note the report and the actions being taken by the Environment Department to monitor, mitigate and effectively manage risks arising from their operations.

Main Report

Background

1. The Risk Management Framework of the City of London Corporation requires each Chief Officer to report regularly to Committee on the key risks faced by their department.
2. To fulfil this requirement, the key risks of the service areas of the Environment Department which fall within the remit of the Port Health and Environmental Services Committee are presented to you every four months.
3. Risk Management is discussed regularly by the Department's Senior Leadership Team and at the meetings of each service area's Senior Management Team.
4. Between Management Team meetings, risks are reviewed in consultation with risk and control owners, and updates are recorded in the corporate risk management system (Pentana).

Current Position

5. Over recent months, a full review has been undertaken of all risks and risk management processes across the Environment Department. The scores, descriptions and mitigating actions of all risks have been fully reviewed and updated; they have been assessed in accordance with the City of London's Risk Matrix (Appendix 1) which takes into account the likelihood of a risk occurring and the potential impact of the risk should it occur. New risks have been added where necessary and others have been removed.
6. This report provides an update on the key risks that exist in relation to the operations of service areas of the Environment Department which fall within the remit of the Port Health and Environmental Services Committee:
 - Port Health and Public Protection Division
 - City Operations: Cleansing Service
7. In accordance with the Corporate Risk Management Framework, only Corporate and Departmental level risks are reported to Committee. Service level risks are only reported by exception, i.e. if there are significant changes which are considered to be of interest to Members.

Summary of key risks

8. The Register of key risks held by the Port Health and Public Protection Division and the City Operation Division's Cleansing Service (Appendix 2) includes one Amber (Corporate) risk and two Red Departmental risks. One Amber service level risk is also included as it has recently been de-escalated from a Departmental risk.

9. CR21 - Air Quality (Current risk: Amber, 12)

This corporate risk remains at a score of 12 (possible with a major impact) with a target to reduce it to 6 (possible; serious) by the end of 2024. A range of mitigating actions are being undertaken to address the risk.

The 2021 annual report on air quality data has been approved by Defra and the GLA and is presented to this Committee in a separate paper.

10. ENV-PHPP 001 Brexit – Impact on Port Health and Animal Health (Current risk: Red, 24)

This departmental level risk continues to be held at a score of 24 (possible with an extreme impact). Currently, the target is to reduce the risk to a score of 6 (possible; serious) by the end of 2023, but this is dependent upon further developments and policy decisions by Government which are beyond our direct control.

11. ENV-CO-GC 002 - Road traffic collision caused by City of London staff or contractor who is unfit to drive while on City business (Current risk: Red, 16).

This departmental risk remains at a score of 16 (unlikely but an extreme impact). We are unable to reduce the risk score until the HR department has resolved ongoing technical issues with the 'Driver Check' database. Cleansing Managers are working closely with senior HR colleagues to progress this work and hope to be in a position to reduce the risk to a score of 8 (rare; extreme) by the end of this year.

Other significant changes

12. Env-CO-GC 006 - A major incident, such as flooding or fire, makes Walbrook Wharf unusable as a depot (Current risk: Amber, 8)

This was previously a Departmental level risk for the Department of the Built Environment. However, it is now considered that the risk can be appropriately managed at service level within the new Environment Department and it has been de-escalated accordingly.

As a service level risk for the Cleansing Service, the risk is scored as Amber 8: unlikely but with a major impact on the ability to deliver cleansing and waste services should it occur. We are unable to further reduce the likelihood or impact of the risk, but undertake appropriate actions, including regular review and testing of the Business Continuity Plan, to maintain the risk at its current score.

Identification of New Risks

13. New and emerging risks are identified through a number of channels, the main being:

- Directly by Senior Management Teams as part of the regular review process.

- In response to ongoing review of progress made against Business Plan objectives and performance measures, e.g., slippage of target dates or changes to expected performance levels.
- In response to emerging events and changing circumstances which have the potential to impact on the delivery of services, such as Brexit and the COVID-19 pandemic.
- The risk register may be refreshed over and above the stated process for review and oversight, in response to emerging issues or changing circumstances.

Corporate & Strategic Implications

14. **Strategic implications:** Effective management of risk is at the heart of the City Corporation's approach to delivering cost effective and valued services to the public as well as being an important element within the corporate governance of the organisation.
15. **Financial implications:** None
16. **Resource implications:** None
17. **Legal implications:** None
18. **Risk implications:** The proactive management of risk, including the reporting process to Members, demonstrates that each service area is adhering to the requirements of the City of London Corporation's Risk Management Policy and Strategy.
19. **Equalities implications:** There are no proposals in this report that would have an impact on people protected by existing equality legislation.
20. **Climate implications:** None
21. **Security implications:** None

Conclusion

22. Members are asked to note that risk management processes within each service area adhere to the requirements of the City Corporation's Risk Management Framework. Risks identified within the operational and strategic responsibilities of each area are proactively managed.

Appendices

- Appendix 1 – City of London Corporation Risk Matrix
- Appendix 2 – Environment Department Key Risks (Port Health & Environmental Services Committee)

Contact

Joanne Hill, Business Planning and Compliance Officer, Environment Department

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E: Joanne.Hill@cityoflondon.gov.uk

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City of London Corporation Risk Matrix (Black and white version)

Note: A risk score is calculated by assessing the risk in terms of likelihood and impact. By using the likelihood and impact criteria below (top left (A) and bottom right (B) respectively) it is possible to calculate a risk score. For example a risk assessed as Unlikely (2) and with an impact of Serious (2) can be plotted on the risk scoring grid, top right (C) to give an overall risk score of a green (4). Using the risk score definitions bottom right (D) below, a green risk is one that just requires actions to maintain that rating.

(A) Likelihood criteria

	Rare (1)	Unlikely (2)	Possible (3)	Likely (4)
Criteria	Less than 10%	10 – 40%	40 – 75%	More than 75%
Probability	Has happened rarely/never before	Unlikely to occur	Fairly likely to occur	More likely to occur than not
Time period	Unlikely to occur in a 10 year period	Likely to occur within a 10 year period	Likely to occur once within a one year period	Likely to occur once within three months
Numerical	Less than one chance in a hundred thousand (<10-5)	Less than one chance in ten thousand (<10-4)	Less than one chance in a thousand (<10-3)	Less than one chance in a hundred (<10-2)

(B) Impact criteria

Impact title	Definitions
Minor (1)	Service delivery/performance: Minor impact on service, typically up to one day. Financial: financial loss up to 5% of budget. Reputation: Isolated service user/stakeholder complaints contained within business unit/division. Legal/statutory: Litigation claim or find less than £5000. Safety/health: Minor incident including injury to one or more individuals. Objectives: Failure to achieve team plan objectives.
Serious (2)	Service delivery/performance: Service disruption 2 to 5 days. Financial: Financial loss up to 10% of budget. Reputation: Adverse local media coverage/multiple service user/stakeholder complaints. Legal/statutory: Litigation claimable fine between £5000 and £50,000. Safety/health: Significant injury or illness causing short-term disability to one or more persons. Objectives: Failure to achieve one or more service plan objectives.
Major (4)	Service delivery/performance: Service disruption > 1 - 4 weeks. Financial: Financial loss up to 20% of budget. Reputation: Adverse national media coverage 1 to 3 days. Legal/statutory: Litigation claimable fine between £50,000 and £500,000. Safety/health: Major injury or illness/disease causing long-term disability to one or more people Objectives: Failure to achieve a strategic plan objective.
Extreme (8)	Service delivery/performance: Service disruption > 4 weeks. Financial: Financial loss up to 35% of budget. Reputation: National publicity more than three days. Possible resignation leading member or chief officer. Legal/statutory: Multiple civil or criminal suits. Litigation claim or find in excess of £500,000. Safety/health: Fatality or life-threatening illness/disease (e.g. mesothelioma) to one or more persons. Objectives: Failure to achieve a major corporate objective.

(C) Risk scoring grid

Likelihood	Impact				
	X	Minor (1)	Serious (2)	Major (4)	Extreme (8)
	Likely (4)	4 Green	8 Amber	16 Red	32 Red
	Possible (3)	3 Green	6 Amber	12 Amber	24 Red
	Unlikely (2)	2 Green	4 Green	8 Amber	16 Red
	Rare (1)	1 Green	2 Green	4 Green	8 Amber

(D) Risk score definitions

RED	Urgent action required to reduce rating
AMBER	Action required to maintain or reduce rating
GREEN	Action required to maintain rating

This is an extract from the City of London Corporate Risk Management Strategy, published in May 2014.

Contact the Corporate Risk Advisor for further information. Ext 1297

October 2015

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Environment Department Key Risks (Port Health & Environmental Services Committee)

Report Author: Joanne Hill

Generated on: 16 September 2022


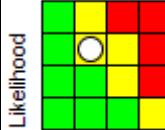



Risk no, title, creation date, owner	Risk Description (Cause, Event, Impact)	Current Risk Rating & Score		Risk Update and date of update	Target Risk Rating & Score		Target Date/Risk Approach	Current Risk score change indicator
CR21 Air Quality (Corporate Risk) 07-Oct-2015 Ruth Calderwood	<p>Cause: Levels of air pollution in the City, specifically nitrogen dioxide and fine particles, impact on the health of residents, workers and visitors. The City Corporation has a statutory duty to take action to improve local air quality.</p> <p>Event: The City of London Corporation is insufficiently proactive and resourced, and does not have the right level of competent staff, to be able to fulfil statutory obligations, as a minimum, in order to lower levels of air pollution and reduce the impact of existing air pollution on the health of residents, workers and visitors.</p> <p>Effect: The City Corporation does not fulfil statutory obligations and air pollution remains a problem, impacting on health. Potential for legal action against the Corporation for failure to deliver obligations and protect health. Adverse effect on ability to deliver outcomes 2 and 11 of the Corporate Plan</p>	<p>Likelihood</p> <p>Impact</p>	12	<p>The risk remains unchanged. Defra has consulted on a new target for PM2.5. Consultation comments have been submitted supporting the proposed target but moving the compliance date from 2040 to 2030. The new target should be announced shortly</p> <p>30 Aug 2022</p>	<p>Likelihood</p> <p>Impact</p>	6	31-Dec-2024	
						Reduce	Constant	

Action no	Action description	Latest Note			Action owner	Latest Note Date	Due Date
CR21 001h	Develop baseline model for compliance assessment and publish annual report of air quality data	The 2021 annual status report has been submitted to, and approved by, Defra and the GLA and will be presented to October PHES committee			Ruth Calderwood	16-Sep-2022	31-Dec-2025

Appendix 2

CR21 001i	100% of vehicles owned or leased by the CoL are electric or hybrid by 2025	The City Corporation continues to add zero emission vehicles to its fleet with 5 hybrid and 17 pure electric vehicles. A database has been created of fleet carbon and air pollution (NOx and PM) emissions	Ruth Calderwood	30-Aug-2022	31-Dec-2025
CR21 001j	Develop and support an Emission Reduction Private Members Bill for London local authorities	Meetings continue with DEFRA to discuss options for new powers to deal with non-transport sources of air pollution. This includes direct one -to-one meetings and workshops and commenting on consultation documents.	Ruth Calderwood	30-Aug-2022	31-Dec-2022
CR211	Assess percentage compliance rate with NO2 target	An assessment is underway for the % of the area of the Square Mile that meets the annual average nitrogen dioxide target. Concentrations during 2021 were similar to 2020 so a similar result is anticipated	Ruth Calderwood	30-Aug-2022	31-Dec-2024

Risk no, title, creation date, owner	Risk Description (Cause, Event, Impact)	Current Risk Rating & Score		Risk Update and date of update	Target Risk Rating & Score		Target Date/Risk Approach	Current Risk score change indicator
ENV-PHPP 001 Brexit - Impact on Port Health and Animal Health (Departmental Risk) <div>Page 83</div>	<p>Cause: The outcome of Brexit negotiations does not secure continuity of contracts, access to talent, ongoing grant funding and/or security of supply chains.</p> <p>Event: The City Corporation services fail to prepare appropriately for the end of the Brexit transition period. Uncertainty around the potential outcomes until it is too late to react.</p> <p>Effect: There is a range of potential impacts. The City Corporation's services are disrupted due to increases/changes in trade and as supply chains and contracts are reassessed, potentially increasing cost and reprioritisation of resources. Increased risk to public, animal and environmental health due to legislative changes. Increased risk and cost to consumers. Inadequate IT support if current EU software is replaced by bespoke UK systems that do not have sufficient functionality. Reduction in income if charging regimes are not established as part of Brexit. Potential for increased workload depending on whether agreement is reached from 'no deal' (check everything), through to no checks on EU products based and on risk via a full reciprocal arrangement (status quo).</p>	 <p>Likelihood</p> <p>Impact</p>	24	<p>On 28 April 2022, Government announced that the further import controls on EU goods which were due to be phased in from July, will not be introduced in 2022. However, the controls that have already been introduced will remain in place.</p> <p>The statement goes on to say that Government "<i>will publish a Target Operating Model in the Autumn that will set out our new regime of border import controls and will target the end of 2023 as the revised introduction date for our controls regime, which will deliver on our promise to create the world's best border on our shores</i>".</p> <p>The CoL has received Defra funding to ensure readiness for previous implementation dates. However, the latest funding ended on 30 June 2022; the CoL is in discussions with Defra regarding future funding and Border Operating Models.</p>	 <p>Likelihood</p> <p>Impact</p>	6	31-Dec-2023	
08-Nov-2016 Gavin Stedman				02 Sep 2022		Reduce	Constant	

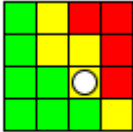
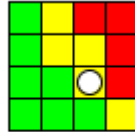
Appendix 2

Action no	Action description	Latest Note	Action owner	Latest Note Date	Due Date
ENV-PHPP 001c	Engage with stakeholders to assist in the identification of impacts and possible mitigations. Ensure Remembrancer and CoL depts are fully aware of the implications of Brexit on PH and PP and that they lobby accordingly.	Our previous actions have been completed. We are awaiting more details about the next implementation stages before considering further lobbying. This action is reviewed monthly.	Gavin Stedman	02-Sep-2022	31-Dec-2023
ENV-PHPP 001d	Respond promptly to policy decisions from the UK Government and the outcome of negotiations.	We are awaiting more details about the next implementation stages before considering further lobbying. This action is reviewed monthly.	Gavin Stedman	02-Sep-2022	31-Dec-2023

Risk no, title, creation date, owner	Risk Description (Cause, Event, Impact)	Current Risk Rating & Score		Risk Update and date of update	Target Risk Rating & Score		Target Date/Risk Approach	Current Risk score change indicator
ENV-CO-GC 002 Road traffic collision caused by City of London staff or contractor who is unfit to drive while on City business (Departmental Risk) Page 85 <								

Action no	Action description	Latest Note	Action owner	Latest Note Date	Due Date
ENV-CO-GC 002c	Monitor the percentage of City of London staff who have completed Driver Check and ensure that it remains above 92.5%.	Pending completion of work by HR to improve the certainty regarding who works for the City of London, this risk remains RED. Whilst going through the information with HR, an IT issue has arisen with the data so this has to be resolved and the matter has been escalated. Part of the	Vince Dignam	28-Aug-2022	31-Dec-2022

	<p>Monitor the percentage of City of London staff who have been identified, through Driver Check, as drivers (or managers of drivers) who have completed the Corporate Transport Policy online training course and ensure that it remains above 92.5%.</p> <p>Monitor overall completion rates for both driver check and the online training course and ensure that it remains above 92.5%.</p> <p>Monitor the collection and periodic monitoring of driver licence details (and, in the case of grey fleet drivers, vehicle details).</p>	<p>escalation has now proven successful but there are still issues with the reporting systems and information on the HR systems.</p> <p>In the meantime, we have carried out a manual overview of the data and calculated with HR that of the 5,000 people on the HR system, 140 have not completed Driver Check; that is 97% of City of London staff have completed Driver Check.</p> <p>Until HR have resolved the automatic reporting mechanism, this will remain a red risk but it is monitored very closely.</p>			
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Risk no, title, creation date, owner	Risk Description (Cause, Event, Impact)	Current Risk Rating & Score		Risk Update and date of update	Target Risk Rating & Score		Target Date/Risk Approach	Current Risk score change indicator
ENV-CO-GC 006 A major incident, such as flooding or fire, makes Walbrook Wharf unusable as a depot (Service-level Risk) Page 87 27-Mar-2015 Joe Kingston	Cause: A major incident, such as flooding or fire. Event: Walbrook Wharf unusable as a depot. Impact: Unable to clean streets, collect waste or maintain City of London Police vehicles. City of London unable to meet its contractual arrangements with third parties who use the depot for their commercial purposes.	Likelihood  Impact	8	A Review of actions from the Business Continuity Plan exercise in October 2021 was carried out: the contractor and the City have updated lessons learned and added the Business Continuity Plan as a live document to the governance for review. The Business Continuity Plan was discussed at the Quarterly Partnership board meeting in January 2022 and the next Business Continuity Exercise is scheduled for October 2022. We accept that we are unable to reduce the likelihood of the risk occurring, or the impact should it occur. However, we continue to undertake appropriate mitigating actions to maintain the risk at its current level. 24 Aug 2022	Likelihood  Impact	8	Accept	Increasing

Action no	Action description	Latest Note	Action owner	Latest Note Date	Due Date
ENV-CO-GC 006a	Conduct annual Business Continuity Exercise	A Review of actions from the Business Continuity Plan exercise in October 2021 was carried out: the contractor and the City have updated any lessons learned and added the Business Continuity Plan as a live document to the governance for review. The Business Continuity Plan was discussed at the Quarterly Partnership board meeting in January 2022 and next Business Continuity Exercise is scheduled for October 2022.	Vince Dignam	13-Jul-2022	31-Oct-2022

Committee(s): Port Health & Environmental Services Committee	Dated: 27 September 2022
Subject: Business Plans 2022/23: Progress Report (Period 1, April-July)	Public
Which outcomes in the City Corporation's Corporate Plan does this proposal aim to impact directly?	1, 2, 5, 6, 8, 11, 12
Does this proposal require extra revenue and/or capital spending?	No
Report of: Juliemma McLoughlin, Executive Director, Environment	For Information
Report authors: Joanne Hill – Business Planning & Compliance Officer	

Summary

This report provides an update on progress made during Period 1 (April-July) 2022/23 against the High-Level Business Plans 2022/23 for the following service areas of the Environment Department which fall within the remit of your Committee:

- The Cleansing Service
- The Port Health and Public Protection Division, including the City of London Cemetery and Crematorium

Recommendation(s)

Members are asked to:

- Note the content of this report and its appendices.

Main Report

Background

1. Your Committee is responsible for the follow service areas of the Environment Department:
 - The Cleansing Service
 - The Port Health and Public Protection Division, which includes the City of London Cemetery and Crematorium
2. The 2022/23 High-Level Business Plan of each service area was approved by your Committee in January 2022. The plans set out the key aims, workstreams and key performance indicators (KPIs) for the year ahead.
3. To ensure your Committee is kept informed, progress made against the High-Level Business Plans is reported to you on a periodic (four-monthly) basis, along with current financial information. This approach allows Members to ask questions and have a timely input into areas of particular importance to them.

Cleansing Service

4. Appendix 1 contains an update on the Cleansing Service's performance during Period One. Headline performance information is provided as infographics. This is followed by detailed KPI results.
5. Updates on progress against key workstreams and other achievements during the period are summarised below:
 - a) The focus of the Cleansing Service during this period has been the continuing adjustments required as the City recovers from the pandemic and footfall returns. There has been a particular emphasis on cleansing related to anti-social behaviour and the increasing night-time economy. The Cleansing Service has been working closely with colleagues in the City of London Police, Licensing and Environmental Health to tackle these issues.
 - b) The Garden Waste Trial that commenced in March continued with residents from Barbican, Golden Lane and Tudor Rose Court able to take green waste from their balcony or garden to the dedicated collection points for recycling. A report on the outcome of this trial will be brought to this committee in November 2022.
 - c) The Circular Economy Strategy is nearing completion of a first draft document following which it will be consulted with internal departments and a paper will be brought to this committee outlining the headline objectives.
 - d) The Management Team continued to monitor the 12 Key Performance Indicators (KPIs) set out in the Waste Collection and Street Cleansing contract. Performance against the KPIs remains good with no significant failures in the past 12 months.
 - e) The Platinum Jubilee celebrations in July were successfully delivered with Street Environment Officers and our cleansing contractor, Veolia, working hard over the long weekend to ensure that all visitors and dignitaries attending the events saw the City at its finest.

Port Health and Public Protection Division (PH&PP) - including the City of London Cemetery and Crematorium

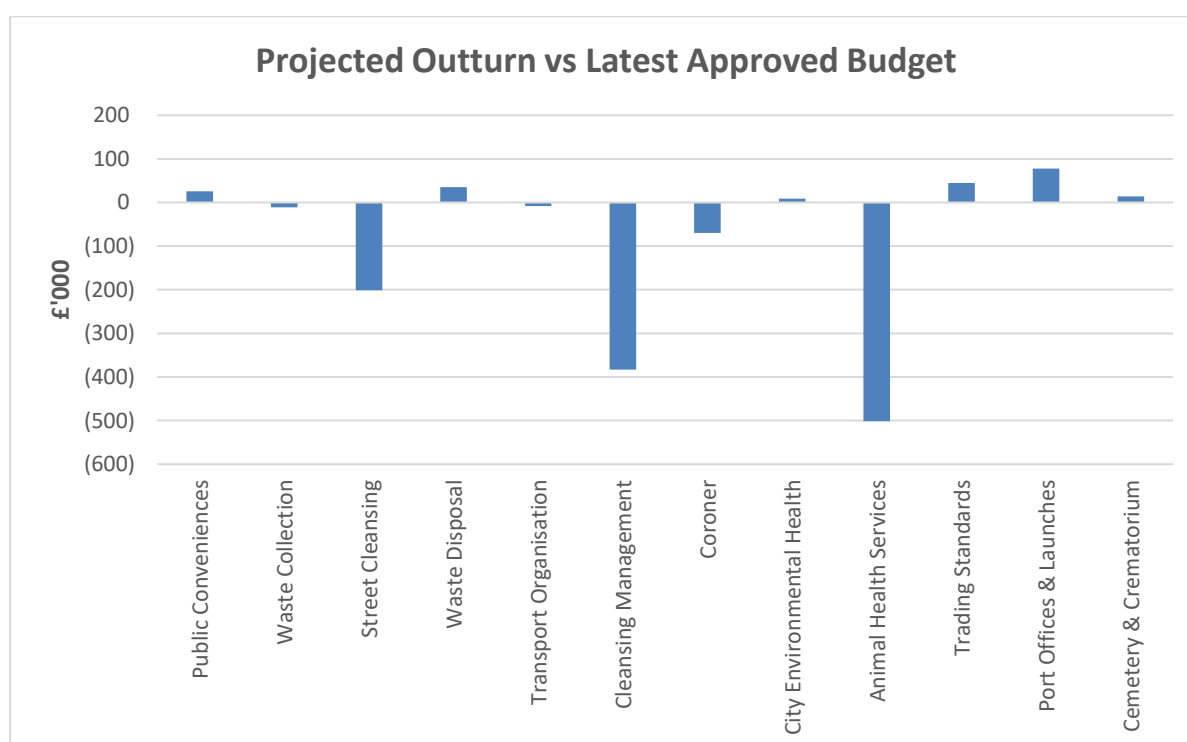
6. Appendix 2 contains an update on the Port Health and Public Protection Division's performance during Period One. Headline performance information is provided as infographics. This is followed by detailed KPI results.
7. Updates on progress against key workstreams and other achievements during the period are summarised below:

- a) The Citizen Science air quality monitoring programme at Barbican and Golden Lane Estates was completed, with over 40% reduction in nitrogen dioxide since 2014.
- b) The refreshed Al Fresco Eating and Drinking Policy went live and the streamlined renewal of 164 licences for a further year, until September 2023, is underway.
- c) At the Ports and HARC, officers continued to fully engage with the UK Government on plans for new Border controls: food, feed and live animals to advise and help shape policy.
- d) The Commercial Environmental Health Team continued to meet the requirements of the FSA Recovery Plan which extends to 2023/24; stage 3 of the Plan has now been reached: 'Return to (a new) normality'.
- e) Implementation of the Noise Strategy has continued through collaboration with contractors, developers, TfL, the Highways Team and the Planning Division, to minimise the impacts of works and developments. The Pollution Control Team is developing a project with TfL and Westminster City Council to improve the control of, and communications regarding, lane rental street works.
- f) The Construction Impacts Levy Scheme continues to be implemented, with two new posts created (funded by Levy scheme income) to enhance the service provided to developers, residents and businesses.
- g) At the Cemetery and Crematorium, orders have been placed for two of the three pieces of operational equipment which need to be replaced: a small excavator and a tractor. Approval for purchase of the final item, a new excavator, is currently being sought through the Gateway process and it is hoped that this will be resolved soon. The new burial area, now known as the Haywood Lawn, will become operational by the end of September 2022.
- h) The Licensing, Pollution Control and Commercial Environmental Health Teams have participated in Operation Reframe. This is a partnership approach to facilitate the night-time economy by providing high visibility presence, with the goal of making people feel safe in the City of London. Partners include the CoL Police; British Transport Police; special constables; street pastors; the Mental Health Nursing Team; Samaritans, and the Dog Unit.
- i) Environmental Health Officer, Toby Thorp received the Primary Authority Ambassador Highly Commended Award at the Regulatory Excellence Awards 2022. Toby has been fundamental to the success of Primary Authority across London and has supported local authorities across the country to think about

their Primary Authority offers. His work has highlighted the positive impact regulation can have on supporting businesses, protecting consumers, and promoting economic growth.

Financial Information

8. The end of July 2022 monitoring position for the Environment Department shows a projected year end overspend of £1.8.46m overall.
9. Within that overall total, the Executive Director is forecasting a projected year end overspend of £967k for her services reporting to the Port Health and Environmental Services Committee.



Notes:

1. Zero is the baseline latest approved budget for each Division of Service.
 2. Graph shows projected outturn position against the latest approved budget.
 3. A variance above the baseline is favourable i.e., either additional income or reduced expenditure.
 4. A variance below the baseline is unfavourable i.e., additional expenditure or reduced income.
 5. Overall the Committee is forecasting an overspend of £967k at year end.
10. Appendix 3 sets out a more detailed financial analysis of each division of service relating to this Committee, including reasons for significant budget variations (generally those over £50k).
 11. The largest factors contributing to the projected overspend for this Committee are:
 - The Committee's share of departmental unidentified savings.

- A reduction in income at Heathrow Animal Reception Centre mainly as a result of reduced throughput due to limitations on capacity whilst not fully staffed and high levels of cancellations due to airline disruptions. The Assistant Director Animal Health and Welfare, with support from the Director of Port Health & Public Protection, has subsequently developed a plan to increase throughput which should largely mitigate this reduction and bring income back close to target.
 - The element of the annual price uplift in the Veolia contract which could not be met through contract efficiencies.
12. The Executive Director is continuing to seek further opportunities to address the projected overspend for the Department and the financial position has greatly improved from the standard 4-month reporting cycle (Apr-Jul) used in this report.
13. The end of August position for the Environment Department is now forecasting an overspend of £176k. This significant improvement of £1.67m from the position reported at the end of July is primarily due to improved income projections from planning application fees and PPAs, additional Construction/Deconstruction Levy and improved Heathrow Animal Reception Centre trade, plus ongoing salary vacancies.
14. Within that overall total overspend of £176k, the Executive Director is forecasting a projected year end overspend of £31k for her services reporting to the Port Health and Environmental Services Committee, an improvement of £936k from the position reported at the end of July.

Corporate & Strategic Implications

Strategic implications – The monitoring of key improvement objectives and performance measures links to the achievement of the aims and outcomes set out in the Corporate Plan 2018-23.

Financial implications – Financial implications are addressed within this report, with further detail included in the appendices.

Resource implications – None.

Legal implications – None.

Risk implications – Risks to achieving the objectives set out in the Business Plan of each service area are identified and managed in accordance with the City of London Risk Management Framework. Risk Registers are reported to this Committee on a regular basis.

Equalities implications – None.

Climate implications – None.

Security implications – None.

Appendices

Appendix 1 – Cleansing Service, Period 1 2022/23

- a) Infographics summary information
- b) Progress against Key Performance Indicators

Appendix 2 - Port Health & Public Protection Division, Period 1 2022/23

- a) Infographics summary information
- b) Progress against Key Performance Indicators

Appendix 3 – Financial information (as at 31 July 2022)

Background Papers

‘Draft High-Level Business Plans 2022/23’ (PH&ES Committee, 18 January 2022)

Contacts

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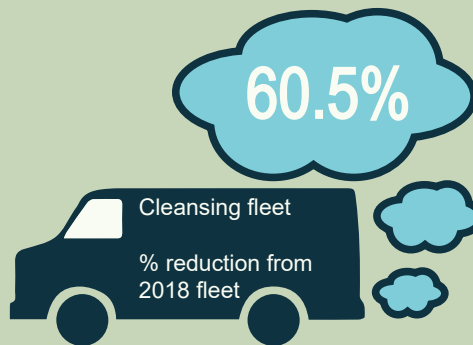
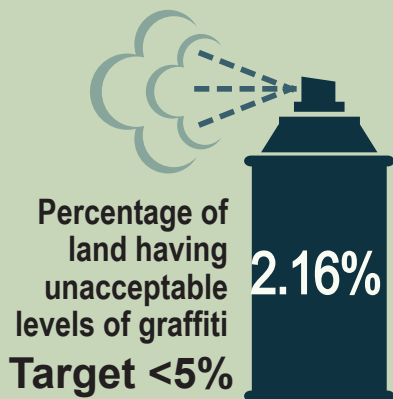
T: 020 7332 1301

Financial information:

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Public Toilets
usage for the period
103,117
Target 198,000



Percentage of household waste sent for reuse, recycling and composting

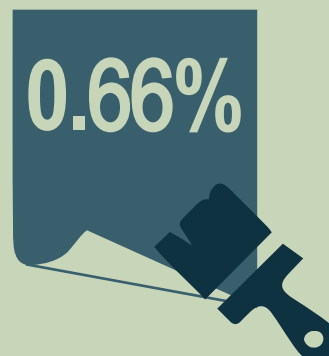
Target 32%



0.0%
Percentage of land having unacceptable levels of detritus
Target <5%

Number of members in the scheme

Target 80



Percentage of land with unacceptable levels of fly-posting
Target <5%



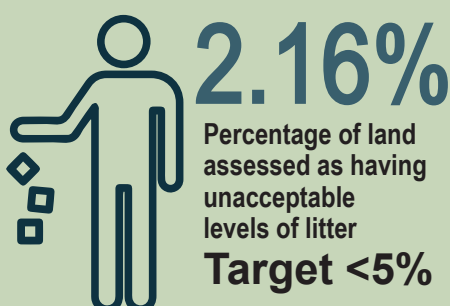
Target 75



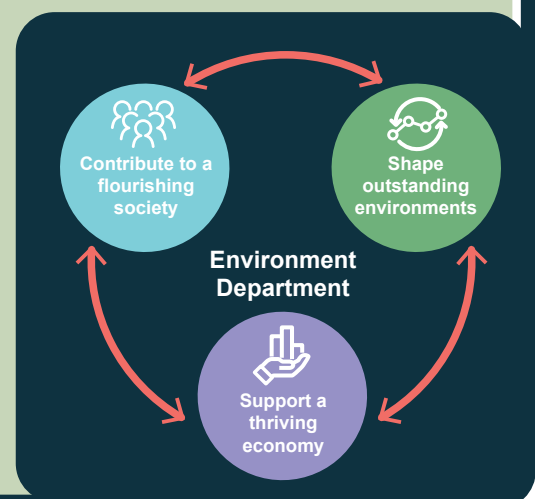
Number of members in the scheme
252
Target 300



Clean Streets Partnership



Kilograms per household of waste collected
Target below 125kg



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Cleansing Service
Progress against Key Performance Indicators
Period One: 1 April - 31 July 2022

Performance Measure	Performance 2021-22	Target 2022-23	Performance Period One 2022-23
NI 191: Kilograms of waste collected per household.	331.97kg	<375kg per annum <125kg per period	114.68kg
NI 192: Percentage of household waste sent for reuse, recycling or composting.	32.22%	>32%	29.25%
NI 195: Percentage of City land with unacceptable levels of litter, graffiti etc. ^{*1}	1.25%	<5%	1.25%
<i>Litter</i>	2.16%	<5%	2.16%
<i>Detritus</i>	0%	<5%	0%
<i>Graffiti</i>	2.16%	<5%	2.16%
<i>Flyposting</i>	0.66%	<5%	0.66%
Reduction of carbon footprint of cleansing fleet vehicles. ^{*2}	60.5%	TBC	TBC
Number of plastic bottles saved due to water refill points (approx.).	75,000	Improve	98,068
Public toilet usage.	125,591	594,000 per annum 198,000 per period	103,117
Community Toilet Scheme: number of members.	66	75	53
Clean Streets Partnership: number of members.	252	300	252
Clean City Awards Scheme: number of members.	66	80	45
^{*1} This indicator is independently monitored by Keep Britain Tidy. The results shown for Period One are those from the last survey which was undertaken in March 2022. The next survey is due in October 2022. ^{*2} This figure shows the reduction in carbon from the last fleet in 2018 to the most recent full year of data available (2021). This indicator's collection and calculation methodology is being developed to provide more timely and consistent data.			

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Period One 2022/23

Public Protection



185

food hygiene inspections conducted
(2021/22 period 1: 86)

Food Hygiene Rating Scheme: profile of food businesses



Require improvement
(0-2 rating)

Broadly compliant
(3-5 rating)

Period 2
2021/22

29

1632

Period 1
2022/23

36

1587

272



noise complaints investigated
(2021/22 period 1: 249)

5

cases where enforcement action was undertaken in relation to unlicensed street trading



977

Trading Standards complaints & service requests received
(2021/22 period 1: 1051)



Number:

Burials
262

Cremations
729

% market share in relation to the 7 neighbouring boroughs:

6.8%

18.9%

Port Health

Products of Animal Origin Consignment checks

2523

physical checks
(2021/21 period 1: 2394)

4786

documentary checks
(2021/21 period 1: 4028)



Products of Non Animal Origin Consignment checks

1636

physical checks
(2021/21 period 1: 1538)

12416

documentary checks
(2021/21 period 1: 11398)

Animal Health



151

Animal Health inspections carried out
(2021/21 period 1: 218)



5485

consignments of animals through Heathrow Animal Reception Centre
(2021/21 period 1: 7327)

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Port Health and Public Protection Division
Progress against Key Performance Indicators
Period One: 1 April - 31 July 2022

Performance Measure		Performance 2021-22	Target 2022-23	Performance Period One 2022-23
Air Quality Percentage of the City's area that meets the health-based Limit Values and WHO Guidelines for nitrogen dioxide levels by 31 March 2023. (Ultimate target is 90% by 31 March 2025).		93% (at the end of 2020. 2021 data is not yet available)	90% by 31 March 2025	N/A Annual measure
Port Health Proportion of imported food and feed consignments that satisfy the checking requirements cleared within five days.	a) Products of Animal Origin (POAO)	66%	85%	85% *1
	b) High Risk Products of Non-Animal Origin (PNAO)	96%	85%	93%
Port Health Proportion of imported food and feed consignments (Products of Non-Animal Origin - PNAO) subjected to documentary controls within five days.		94%	85%	94%
Heathrow Animal Reception Centre Percentage of missed flights for transit of animals caused by the Heathrow Animal Reception Centre.		0%	<1%	<1%
Trading Standards Respond to 100% of victims of investment fraud identified to the Trading Standards Service within five working days to advise on the risk of repeat targeting, assess the need for safeguarding interventions and initiate the safeguarding process where appropriate.		100%	100%	100%
Pollution Control *2 90% of justifiable noise complaints investigated result in a satisfactory outcome.		99%	90%	100%
Commercial Environmental Health: Food Safety *3 Over the course of the year, secure a positive improvement in the overall Food Hygiene Ratings Scheme (FHRS) ratings profile for City food establishments compared to the baseline profile at 31 March 2013.		Improved profile	Improved profile	N/A Annual measure
Commercial Environmental Health: Health & Safety Complete the annual risk-based cooling towers inspection programme in order to ensure that the risk of Legionnaires' disease is being effectively managed by all those responsible.		100%	100%	N/A Annual measure
Cemetery and Crematorium Number of burials		857	830 (annual target)	262
Cemetery and Crematorium Number of adult cremations		2,460	2,460 (annual target)	729
Cemetery and Crematorium Market share of burials in relation to the Cemetery and Crematorium's seven neighbouring boroughs.		7.50%	7.50%	6.90%

Performance Measure	Performance 2021-22	Target 2022-23	Performance Period One 2022-23
Cemetery and Crematorium Market share of cremations in relation to the Cemetery and Crematorium's seven neighbouring boroughs.	20.80%	21.40%	19%
Cemetery and Crematorium Amount of gas used to heat the Modern Crematorium (kWh)	20,726 kWh	21,500 kWh (annual target)	6,026 kWh
Cemetery and Crematorium Energy generations from solar power - electricity in kWh	26,075 kWh	25,750 kWh (annual target)	8,129 kWh
<p>*1 The requirement for enhanced checks on Brazilian imports continues to impact clearance rates at London Gateway. The percentage given for April-July 2022 excludes Brazilian imports. The clearance rate for Brazilian products only was 54% within 5 days.</p> <p>*2 Percentage of total justified noise complaints investigated resulting in noise control reduction to an acceptable level and/or prevention measures; complaints may or may not be actionable through statutory action.</p> <p>*3 The purpose of this indicator is to show an overall improvement in the FHRS rating profile across all City food establishments by the end of the year. The target cannot be expressed as a specific percentage since any increase will indicate achievement.</p>			

Port Health & Environmental Services Committee
Local Risk Revenue Budget as at 31 July 2022
(Expenditure and unfavourable variances are shown in brackets)

	Latest Approved Budget 2022/23 £'000	Forecast for the Year 2022/23		Notes
		Forecast Outturn £'000	(Over) / Under £'000	
<u>Port Health & Environmental Services (City Fund)</u>				
Public Conveniences	(484)	(458)	26	
Waste Collection	(1,943)	(1,954)	(11)	
Street Cleansing	(4,522)	(4,723)	(201)	1
Waste Disposal	(944)	(909)	35	
Transport Organisation	(275)	(283)	(8)	
Cleansing Management	358	(25)	(383)	2
Coroner	(303)	(373)	(70)	3
City Environmental Health	(1,994)	(1,985)	9	
Animal Health Services	1,670	1,169	(501)	4
Trading Standards	(450)	(405)	45	
Port Offices & Launches	(552)	(474)	78	5
Cemetery & Crematorium	1,840	1,854	14	
TOTAL PORT HEALTH & ENV SRV COMMITTEE	(7,599)	(8,566)	(967)	

Notes:

- 1. Street Cleansing** - The forecast overspend is due to contract price uplift that could not be offset by efficiencies.
- 2. Cleansing Management** - The projected overspend is due mainly to the Committee's share of departmental unidentified savings, partly offset by a transfer from reserves to reduce the overspend.
- 3. Coroner** - The projected overspend is mainly due to increased pay costs as a result of a higher than usual workload
- 4. Animal Health Services** - The projected overspend is mainly due to a reduction in income resulting from limitations on capacity whilst not fully staffed and high levels of cancellations due to airline disruptions.
- 5. Port Offices & Launches** - The projected underspend is mainly due to staff vacancies.

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