

POPULARWORKS

CYCLE CAFE

Environmental Statement Volume 3: Technical Appendices

ABERFELDY VILLAGE MASTERPLAN



POPLAR WORKS

CYCLE CAFE

Table of Contents

Volume 1: Environmental Statement Main Report

- Chapter 1: Introduction
- Chapter 2: EIA Methodology
- Chapter 3: Alternatives and Design Evolution
- Chapter 4: The Proposed Development
- Chapter 5: Demolition and Construction
- Chapter 6: Socio-Economics
- Chapter 7: Traffic and Transport
- Chapter 8: Air Quality
- Chapter 9: Climate Change
- Chapter 10: Noise and Vibration
- Chapter 11: Archaeology
- Chapter 12: Water Resources, Drainage and Flood Risk
- Chapter 13: Wind Microclimate
- Chapter 14: Daylight, Sunlight, Overshadowing, Light Pollution and Solar Glare
- Chapter 15: Effect Interactions
- Chapter 16: Likely Significant Effects and Conclusions
- Chapter 17: Mitigation and Monitoring Schedule
- Chapter 18: Glossary and Abbreviations

Volume 2: Townscape, Visual Impact and Heritage Assessment

- Part 1: Townscape and Visual Impact Assessment
- Part 2: Built Heritage Assessment

Volume 3: Technical Appendices

- Appendix: Introduction
 - Annex 1: EIA Wayfinding
 - Annex 2: Statement of Competence
- Appendix: EIA Methodology
 - Annex 1: EIA Scoping Report
 - Annex 2: EIA Scoping Opinion
 - Annex 3: EIA Scoping Opinion Response
 - Annex 4: Cumulative Schemes List and Map
 - Annex 5: Cumulative Schemes Assessment Matrix
 - Annex 6: Phase 1 Ground Conditions Report
- Appendix: Demolition and Construction
 - Annex 1: Outline Construction Environmental Management Plan (CEMP)
- Appendix: Socio Economics
 - Annex 1: Socio-Economics Planning Policy Context
 - Annex 2: Education and Healthcare Facilities within Local Impact Area

- Appendix: Air Quality
 - Annex 1: Glossary
 - Annex 2: Traffic Data
 - Annex 3: Model Verification Study

- Appendix: Climate Change
 - Annex 1: Trium Climate Change Technical Note

- Appendix: Noise and Vibration
 - Annex 1: Introduction to Noise
 - Annex 2: Glossary of Terms
 - Annex 3: Legislation, Policy and Guidance
 - Annex 4: Unattended Survey Results – P1
 - Annex 5: Unattended Survey Results – P2
 - Annex 6: Unattended Survey Results – P3
 - Annex 7: Unattended Survey Results – P4
 - Annex 8: Statistical Analysis of Background Sound Levels – P1
 - Annex 9: Statistical Analysis of Background Sound Levels – P2
 - Annex 10: Statistical Analysis of Background Sound Levels – P3
 - Annex 11: Statistical Analysis of Background Sound Levels – P4
 - Annex 12: Daytime Noise Contour, 1.5m
 - Annex 13: Night-time Noise Contour, 1.5m
 - Annex 14: ANC Acoustics Ventilation and Overheating Risk Categories
 - Annex 15: Traffic Data

- Appendix: Water Resources, Drainage, Flood Risk
 - Annex 1: Flood Risk Assessment
 - Annex 2: Drainage Strategy
 - Annex 3: Thames Water – Potable Water Supply Correspondence
 - Annex 4: Sustainable Urban Drainage System (SuDS) Proforma

- Appendix: Archaeology
 - Annex 1: Archaeological Desk Based Assessment

- Appendix: Wind Microclimate
 - Annex 1: Policy and Guidance
 - Annex 2: Technical Appendix

- Appendix: Daylight, Sunlight, Overshadowing; Light Pollution and Solar Glare
 - Annex 1: Planning Policy
 - Annex 2: Methodology and Baseline Results
 - Annex 3: Scenario Overviews and Window Maps
 - Annex 4: Daylight and Sunlight Results
 - Annex 5: Overshadowing Results
 - Annex 6: Solar Glare Results

- Appendix: Built Heritage
 - Annex 1: Built Heritage Statement

Appendix: Introduction

Annex 1: EIA Wayfinding

Annex 2: Statement of Competence

Appendix: Introduction

Annex 1: EIA Wayfinding

Annex 2: Statement of Competence

SCHEDULE 4 INFORMATION REQUIREMENTS – LOCATION OF INFORMATION WITHIN THE ES

	Information for Inclusion in Environmental Statements, as Specified in Schedule 4 of the EIA Regulations 2017 (as amended)	How the EIA addresses the Information Specifications
1.	A description of the development, including in particular:	
(a)	a description of the location of the development;	ES Volume 1: Chapter 1: Introduction
(b)	a description of the physical characteristics of the whole development, including, where relevant, requisite demolition works, and the land-use requirements during the construction and operational phases;	ES Volume 1: Chapter 4: The Proposed Development Chapter 5: Demolition and Construction
(c)	a description of the main characteristics of the operational phase of the development (in particular any production process), for instance, energy demand and energy used.	ES Volume 1: Chapter 4: The Proposed Development
	...nature and quantity of the materials and natural resources (including water, land, soil and biodiversity) used; and	ES Volume 1: Chapter 4: The Proposed Development Chapter 5: Demolition and Construction
(d)	an estimate, by type and quantity, of expected residues and emissions (such as water, ...	ES Volume 1: Chapter 4: The Proposed Development Chapter 12: Water Resources, Drainage and Flood Risk
	...air, ...	ES Volume 1: Chapter 8: Air Quality ES Volume 3: Appendix Air Quality
	...soil and subsoil pollution,	ES Volume 1: Chapter 2: EIA Methodology
	...noise, vibration, ...	ES Volume 1: Chapter 10: Noise and Vibration ES Volume 3: Appendix Noise and Vibration
	...light, ...	ES Volume 1: Chapter 14: Daylight, Sunlight and Overshadowing, Light Pollution and Solar Glare ES Volume 3: Appendix Daylight, Sunlight and Overshadowing, Light Pollution and Solar Glare
	...heat, radiation and ...	ES Volume 1: Chapter 2: EIA Methodology Chapter 9: Climate Change Chapter 14: Daylight, Sunlight and Overshadowing, Light Pollution and Solar Glare ES Volume 3: Appendix Daylight, Sunlight and Overshadowing, Light Pollution and Solar Glare
	...quantities and types of waste produced during the construction and operation phases;	ES Volume 1: Chapter 4: The Proposed Development Chapter 5: Demolition and Construction
	2.	A description of the reasonable alternatives (for example in terms of development design, technology, location, size and scale) studied by the developer, which are relevant to the proposed project and its specific characteristics, and an indication of the main reasons for

	Information for Inclusion in Environmental Statements, as Specified in Schedule 4 of the EIA Regulations 2017 (as amended)	How the EIA addresses the Information Specifications
	selecting the chosen option, including a comparison of the environmental effects.	
3.	A description of the relevant aspects of the current state of the environment (baseline scenario) ...	ES Volume 1: Chapter 2: EIA Methodology Chapter 3: Alternatives and Design Evolution Technical Chapters 6– 14 ES Volume 2: Built Heritage Assessment; and Townscape and Visual Impact Assessment
	...and an outline of the likely evolution thereof without implementation of the development as far as natural changes from the baseline scenario can be assessed with reasonable effort on the basis of the availability of environmental information and scientific knowledge.	ES Volume 1: Chapter 2: EIA Methodology Technical Chapters 6 – 14 ES Volume 2: Built Heritage Assessment; and Townscape and Visual Impact Assessment
4.	A description of the factors specified in regulation 4(2) likely to be significantly affected by the development: population, human health, ...	ES Volume 1: Chapter 6: Socio-economics Chapter 8: Air Quality Chapter 10: Noise and Vibration Chapter 13: Wind Microclimate Chapter 14: Daylight Sunlight and Overshadowing, Light Pollution and Solar Glare ES Volume 3: Appendix Socio-economics Appendix Air Quality Appendix Noise and Vibration Appendix Daylight, Sunlight and Overshadowing, Light Pollution and Solar Glare
	...biodiversity (for example fauna and flora), ...	ES Volume 1: Chapter 2: EIA Methodology Chapter 4: The Proposed Development ES Volume 3: Appendix EIA Methodology, Annex 1
	...land (for example land take),	ES Volume 1: Chapter 2: EIA Methodology ES Volume 3: Appendix EIA Methodology, Annex 1
	...soil (for example organic matter, erosion, compaction, sealing), ...	ES Volume 1: Chapter 2: EIA Methodology ES Volume 3: Appendix EIA Methodology, Annex 1
	...water (for example hydromorphological changes, quantity, quality), ...	ES Volume 1: Chapter 2: EIA Methodology Chapter 12: Water Resources, Drainage and Flood Risk ES Volume 3: Appendix Water, Resources, Drainage and Flood Risk
	...air, ...	ES Volume 1: Chapter 8: Air Quality ES Volume 3:

	Information for Inclusion in Environmental Statements, as Specified in Schedule 4 of the EIA Regulations 2017 (as amended)	How the EIA addresses the Information Specifications
		Appendix Air Quality
	...climate (for example greenhouse gas emissions, impacts relevant to adaptation), ...	ES Volume 1: Chapter 4: The Proposed Development Chapter 9: Climate Change Technical Chapters 6 – 14
	...material assets, cultural heritage, including architectural and archaeological aspects, and landscape...	ES Volume 1: Chapter 11: Archaeology ES Volume 2: Built Heritage Assessment; and Townscape and Visual Impact Assessment ES Volume 3: Appendix Archaeology
5.	A description of the likely significant effects of the development on the environment resulting from, inter alia:	
(a)	the construction and existence of the development, including, where relevant, demolition works.	ES Volume 1: Chapter 5: Demolition and Construction
(b)	the use of natural resources, in particular land, soil, ...	ES Volume 1: Chapter 4: The Proposed Development Chapter 5: Demolition and Construction
	...water and ...	ES Volume 1: Chapter 2: EIA Methodology Chapter 4: The Proposed Development Chapter 12: Water Resources, Drainage and Flood Risk
	...biodiversity, ...	ES Volume 1: Chapter 2: EIA Methodology ES Volume 3: Appendix EIA Methodology, Annex 1
	...considering as far as possible the sustainable availability of these resources;	ES Volume 1: Chapter 4: The Proposed Development Chapter 5: Demolition and Construction Technical Chapters 6 – 14
(c)	the emission of pollutants, ...	ES Volume 1: Chapter 2 EIA Methodology Chapter 8: Air Quality Chapter 9: Climate Change ES Volume 3: Appendix EIA Methodology, Annex 1 Appendix Air Quality
	...noise, vibration, ...	ES Volume 1: Chapter 10: Noise and Vibration ES Volume 3: Appendix Noise and Vibration
	...light, ...	ES Volume 1: Chapter 14: Daylight, Sunlight and Overshadowing, Light Pollution and Solar Glare ES Volume 3: Appendix Daylight, Sunlight and Overshadowing, Light Pollution and Solar Glare
	...heat and radiation, ...	ES Volume 1:

	Information for Inclusion in Environmental Statements, as Specified in Schedule 4 of the EIA Regulations 2017 (as amended)	How the EIA addresses the Information Specifications
		Chapter 4: The Proposed Development Chapter 14: Daylight, Sunlight and Overshadowing, Light Pollution and Solar Glare ES Volume 3: Appendix Daylight, Sunlight and Overshadowing, Light Pollution and Solar Glare
	...the creation of nuisances, ...	ES Volume 1: Chapter 8: Air Quality Chapter 10: Noise and Vibration ES Volume 3: Appendix Air Quality Appendix Noise and Vibration
	...and the disposal and recovery of waste;	ES Volume 1: Chapter 2: EIA Methodology Chapter 4: The Proposed Development Chapter 5: Demolition and Construction ES Volume 3: Appendix EIA Methodology, Annex 1
(d)	the risks to human health, cultural heritage or the environment (for example due to accidents or disasters);	ES Volume 1: Chapter 2: EIA Methodology Technical Chapters 6 – 14 ES Volume 2: Built Heritage Assessment; and Townscape and Visual Impact Assessment ES Volume 3: Appendix EIA Methodology, Annex 1 Appendix: Water Resources, Drainage and Flood Risk
(e)	the cumulation of effects with other existing and/or approved projects, taking into account any existing environmental problems relating to areas of particular environmental importance likely to be affected or the use of natural resources;	ES Volume 1: Technical Chapters 6 – 14 ES Volume 2: Built Heritage Assessment; and Townscape and Visual Impact Assessment
(f)	the impact of the project on climate (for example the nature and magnitude of greenhouse gas emissions) and the vulnerability of the project to climate change; and	ES Volume 1: Chapter 4: The Proposed Development Chapter 9: Climate Change Technical Chapters 6 – 14
(g)	the technologies and the substances used.	ES Volume 1: Chapter 4: The Proposed Development Chapter 5: Demolition and Construction Technical Chapters 6 – 14
6.	A description of the forecasting methods or evidence, used to identify and assess the significant effects on the environment, including details of difficulties (for example technical deficiencies or lack of knowledge) encountered compiling the required information and the main uncertainties involved.	ES Volume 1: Chapter 2: EIA Methodology Technical Chapters 6 – 14 ES Volume 2: Built Heritage Assessment; and Townscape and Visual Impact Assessment
7.	A description of the measures envisaged to avoid, prevent, reduce or, if possible, offset any identified significant adverse effects on the environment and, where appropriate, of any proposed monitoring	ES Volume 1: Chapter 4: The Proposed Development Chapter 5: Demolition and Construction

	Information for Inclusion in Environmental Statements, as Specified in Schedule 4 of the EIA Regulations 2017 (as amended)	How the EIA addresses the Information Specifications
	arrangements (for example the preparation of a post-project analysis). That description should explain the extent, to which significant adverse effects on the environment are avoided, prevented, reduced or offset, and should cover both the construction and operational phases.	Technical Chapters 6 – 14 Chapter 17: Monitoring and Mitigation Schedule ES Volume 2: Built Heritage Assessment; and Townscape and Visual Impact Assessment
8.	A description of the expected significant adverse effects of the development on the environment deriving from the vulnerability of the development to risks of major accidents and/or disasters which are relevant to the project concerned. Relevant information available and obtained through risk assessments pursuant to EU legislation such as Directive 2012/18/EU(c) of the European Parliament and of the Council or Council Directive 2009/71/Euratom(d) or UK environmental assessments may be used for this purpose provided that the requirements of this Directive are met. Where appropriate, this description should include measures envisaged to prevent or mitigate the significant adverse effects of such events on the environment and details of the preparedness for and proposed response to such emergencies.	ES Volume 1: Chapter 2: EIA Methodology Chapter 13: Wind Microclimate Chapter 14: Daylight, Sunlight and Overshadowing ES Volume 3: Appendix EIA Methodology: Annex 1
9.	non-technical summary of the information provided under paragraphs 1 to 8.	ES Non-Technical Summary
10.	A reference list detailing the sources used for the descriptions and assessments included in the environmental statement.	ES Volume 1: Chapter 1: Introduction Chapter 2: EIA Methodology Technical Chapters 6 – 14 ES Volume 2: Townscape, Visual Impact and Built Heritage Assessment ES Volume 3: Technical Appendices

Appendix: Introduction

Annex 1: EIA Wayfinding

Annex 2: Statement of Competence



October 2021

Aberfeldy New Masterplan: Competent Expert and Relevant Experience

Regulation 18(5) of The Town and Country Planning (Environmental Impact Assessment) Regulations 2017 (as amended) (referred to as 'the EIA Regulations') require that to ensure the completeness and quality of the ES:

- '(a) the developer must ensure that the environmental statement is prepared by competent experts'; and
- '(b) the environmental statement must be accompanied by a statement from the developer outlining the relevant expertise or qualifications of such experts'.

As set out in **ES Volume 1, Chapter 1: Introduction**, Trium is an environmental consultancy specialising in urban regeneration and property development projects in the United Kingdom (UK), with a specific focus in London. Trium is therefore considered to be 'competent experts' as referenced in the EIA Regulations. In addition, and for completeness, Table 1 below sets out the company, persons and expertise of all the key technical specialists that have worked on the EIA.

Table 1: Experts Involved in the Production of the ES and their Relevant Experience

Discipline	Company	Person(s)	Expertise
EIA Coordination	Trium	Vanessa Thorpe	Vanessa is a Chartered Environmentalist and Technical Director at Trium, with over 17 years' experience of managing and directing EIA projects, Environmental Appraisals and Constraints Reports, Screening and Scoping requests, and technical environmental reports. Vanessa has directed and managed EIA projects for a range of developments including masterplans, urban regeneration, residential, mixed-use, transportation, rail and industrial developments in various locations throughout the UK and internationally.
		Hamid Atta	Hamid is a Practitioner at the Institute of Environmental Assessors and Senior Consultant at Trium Environmental Consulting with 5 years of experience specialising in EIA coordination, EIA Scoping and the production of high quality EIAs. His experience covers a wide range of large estate regenerations and smaller urban regeneration schemes predominantly in London and the south east of the UK.
Noise and Vibration	Entran	Stuart Berry	Stuart is a Senior Consultant with 9 years' experience in conducting environmental noise and vibration impact assessments for a range of project types. Stuart holds an MSc in Environmental and Architectural Acoustics and is a member of the Institute of Acoustics.
Air Quality	Entran	Nick Davey	A specialist in the field of air quality with a track record of expert witness experience. Nick has over 24 years experience of carrying out air quality impact assessments for a range of developments, particularly in the renewable energy, residential, health care, power generation, utilities, waste, highways, industrial and retail sectors, involving the use of various modelling/ monitoring techniques and appearing as expert witness. Nick has previously lead air quality teams in large multi-discipline consultancies prior to becoming one of the founding Directors of Entran Ltd in 2005. Experience of designing, procuring and operation of air quality monitoring networks for high profile projects such as DEFRA/ EA AURN network. Nick has also completed PhD research relating to air quality impact assessment and associated methodologies. Nick has experience of working on numerous large-scale complex projects both in the UK and the Middle East.
Traffic and Transport	Velocity	Tom Mabelson	Tom is a Director at Velocity Transport Planning with over 13 years of experience providing transport planning, design and assessment to support development projects. Tom has directed and managed projects across a range of development scales and land uses including significant regeneration schemes. Tom is a Member of the Chartered Institute of Highways and Transportation and a Member of the Transport Planning Society.
Socio-economics	Hatch	Zoe Crampton	The socio-economic lead is an Associate Director at Hatch with over fifteen years of experience in undertaking socio-economic development research and in producing Socio-economic ES Chapters. Recent project experience includes: Stag Brewery, LB Richmond: Socio-economic assessment and Health Impact Assessment and preparation of chapter for the ES of a major mixed-use scheme in LB Richmond

Discipline	Company	Person(s)	Expertise
			Bow River, LB Tower Hamlets: Socio-economic assessment and Health Impact Assessment and preparation of chapter for the ES of a residential-led scheme in LB Tower Hamlets Station Hill, Reading: Socio-economic assessment and Health Impact Assessment and preparation of chapter for the ES of a major mixed-use scheme in Reading Purfleet, Thurrock: Socio-economic assessment and preparation of chapter for the ES of a new town centre and residential scheme in Purfleet. Zoe has the following qualifications: BA Geography (Hons) University of Birmingham
Wind Microclimate	RWDI	Aimee Crook	Aimee obtained a Prince2 certificate in Project Management in January 2019. Aimee has been working at RWDI since 2011 and has assisted and managed a wide range of projects since then, dealing with a global client list including the UK, Middle East and Europe. <ul style="list-style-type: none"> • Palm 360, Dubai • James Street, Liverpool • St John's Manchester • Bestseller Tower, Denmark • Bollo Lane, Acton, London • Southall Sidings, London • Pope's Road, Brixton
Climate Change	Greengage	Manon Dangelser	Manon has over four years' experience in environmental services, and previous experience in the civil engineering field. She has gained a broad knowledge of sustainability, having conducted analyses in energy, circular economy, whole life cycle, flood risk, overheating and daylight, as well as BREEAM and HQM assessments, on numerous residential, commercial, and mixed-use developments. She manages a range of projects in the UK and provide sustainability guidance to design teams from early concept stage.
Daylight, Sunlight and Overshadowing	GIA	Lotte Tobermann	Since graduating with an MSc in Environmental Planning, Lotte joined GIA in 2019, having previously worked in EIA consultancy. Lotte's role entails the coordination and preparation of Daylight, Sunlight, Overshadowing, Solar Glare and Light Pollution EIA scoping reports and Environmental Statement chapters.
Archaeology	TVAS	Steve Preston	Over 20 years' experience of archaeological fieldwork and reporting, including preparing archaeological contributions to Environmental Impact Assessments.
		Elsbeth St. John-Brooks	Environmental and Geoarchaeology specialist; Over 13 years' experience working in the field, an extensive academic and laboratory background in archaeology and well versed in writing reports including fieldwork and desk-based reports;
Built Heritage Assessment (Volume II)	KM Heritage	Anne Roache	Anne Roache MSc MA is a built heritage professional of broad experience having worked for leading commercial organisations in the fields of property, planning and law. She holds an MSc in Historic Building Conservation and an MA Library & Information Studies - affording her expertise in archival research and interrogation. Anne began her career in the research team of international real estate consultancy, Jones Lang LaSalle and was for some years Director of Research at a large international law firm. This experience has given her an in-depth understanding of the legislative and policy framework governing the built environment. At KMHeritage, Anne provides advice and guidance to clients on all aspects of the historic built environment and has been involved in a wide range of residential, commercial and municipal projects throughout England including advising on a significant project in the UNESCO World Heritage Site Liverpool Maritime Mercantile City.
Townscape, Visual Impact Assessment (Volume II)	Peter Stewart Consultancy	Peter Stewart	Peter Stewart is a chartered architect. After fifteen years in practice in central London, he was appointed Deputy Secretary of the Royal Fine Art Commission (RFAC), and then Director of the design review programme at CABE (the body which, at that time, was the Government's advisor on architecture and urban design). In 2005 he founded Peter Stewart Consultancy. Since then, he has provided advice on architecture, urban design and the historic environment, and overseen the production of townscape and heritage impact assessments as part of an EIA, in respect of hundreds of projects. He has served as a member of the London Advisory Committee of English Heritage (now Historic England).



Discipline	Company	Person(s)	Expertise
		Jonathan Freeman	Jonathan Freeman is an RTPI Accredited town planner with over 18 years' experience, working across the public and private sectors. Experience includes working as a conservation and design officer at LB Hackney; coordinating the delivery of major planning applications at AECOM; and working as an advisor in the CABE/Design Council design review team. He has worked as a project lead at Peter Stewart Consultancy over the last 7 years, writing a number of Townscape, Visual Impact, and Built Heritage Assessments for Environmental Statements.
Demolition and Construction	Blue Sky Building	Tim Cole	<p>Tim Cole is an experienced construction project manager with a proven track record of delivering technically complex high-profile demolition & construction projects, having worked in the construction industry for 45 years. He has a proven ability of working with keynote consultants on high quality, complex projects.</p> <p>A firm believer that successful projects are achieved by proper understanding of client requirements, accurate briefing and clear planning from inception, Tim has specialised in Preconstruction organisation of major schemes through feasibility and Planning stages for the last 10 years.</p> <p>Previous Projects include:</p> <ul style="list-style-type: none"> • MSG – The Sphere. Preconstruction logistics and strategy planning for this unique proposed entertainment venue development in Stratford; • North West Cambridge Development. Author of Construction Advisor's report for the programme, logistics and procurement of this "new town" style residential development for the University of Cambridge; and • Bloomberg Square . Preconstruction manager for major construction of complex City commercial office headquarters scheme in a congested City of London location. <p>Qualifications: MCIOB</p>
Water Resources, Flood Risk Assessment and Drainage	Meinhardt	Gurdeep Bansal	Gurdeep is an Associate Director at Meinhardt, with over 14 years' experience of civil engineering experience, with a key focus on drainage design and flood risk. Gurdeep has managed an array of different projects from mixed use/residential, hospitality, urban regeneration throughout the UK, providing advice and design from feasibility all the way to construction, including planning application documents, such as Drainage Strategies, Flood Risk Assessments, Foul Drainage Assessments, Water Resources and Flood Risk ES Chapters as well as other technical drainage and flood risk related reports.

Appendix: Methodology

Annex 1: EIA Scoping Report

Annex 2: EIA Scoping Opinion

Annex 3: EIA Scoping Opinion Response

Annex 4: Cumulative Schemes List and Map

Annex 5: Cumulative Schemes Assessment Matrix

Appendix: Methodology

Annex 1: EIA Scoping Report

Annex 2: EIA Scoping Opinion

Annex 3: EIA Scoping Opinion Response

Annex 4: Cumulative Schemes List and Map

Annex 5: Cumulative Schemes Assessment Matrix



Aberfeldy New Masterplan EIA Scoping Report

Prepared for:
Ecoworld International and Poplar Harca

Date:
August 2021

Trium Environmental Consulting LLP
4 Cavendish Square
London
W1G 0PG
+44 (0) 20 3887 7118
hello@triumenv.co.uk
www.triumenvironmental.co.uk

Project Reference: TEC0187

This report has been prepared for the Client by Trium Environmental Consulting LLP with all reasonable skill, care and diligence and in accordance with the Client's particular and specific instructions. This report is issued subject to the terms of our Appointment, including our scope of Services, with the Client.

This report has been prepared for, and is intended solely for the use of, the Client alone and accordingly is personal to the Client. The Report should not be disclosed, exhibited or communicated to any third party without our express prior written consent. Trium Environmental Consulting LLP accepts no responsibility whatsoever to any third parties to whom this report, or any part thereof, is disclosed, exhibited or communicated to, without our express prior written consent. Any such party relies upon the report at their own risk.

Trium Environmental Consulting LLP disclaims any responsibility to the Client and others in respect of any matters outside the agreed scope of the Services.

Trium Environmental Consulting LLP shall be under no obligation to inform any party of any changes or updates in respect of any matter referred to or contained in the Report.

This report is the Copyright of Trium Environmental Consulting LLP. Any unauthorised use or reproduction by anyone other than the Client is strictly prohibited.

CONTENTS

INTRODUCTION..... 1

 Overview..... 1

 Structure of the EIA Scoping Report..... 2

EIA AND THE SCOPING PROCESS..... 3

 EIA Purpose and Process..... 3

 The Scoping Process..... 4

SITE CONTEXT..... 5

 Site Location..... 5

 Existing Environmental Context..... 5

RELEVANT PLANNING HISTORY..... 8

THE PROPOSED DEVELOPMENT AND PLANNING APPLICATION..... 9

 Overview of the Proposed Development..... 9

 Hybrid Planning Application..... 10

PLANNING CONTEXT..... 11

 Planning Policy Context..... 11

EIA METHODOLOGY..... 14

 EIA Methodology and Approach to Assessment of the Proposed Development..... 14

 Baseline Conditions..... 15

 Sensitive Receptors..... 15

 Demolition and Construction..... 15

 Completed Development..... 16

 The Format of the Planning Application..... 17

 Cumulative Effects and Effect Interactions..... 19

 Reasonable Alternatives..... 20

DETERMINING EFFECT SIGNIFICANCE – TERMINOLOGY AND APPROACH..... 20

 Reference to ‘Impact’ and ‘Effect’..... 20

 Receptor Sensitivity and Magnitude of Impact..... 20

 Identification of a Resultant Effect..... 21

 Effect Scale..... 21

 Effect Nature..... 21

 Geographic Extent of Effect..... 21

 Effect Duration..... 21

 Direct and Indirect Effects..... 22

 Effect Significance..... 22

TOPICS TO BE SCOPED IN..... 23

 Air Quality..... 23

 Climate Change..... 24

 Daylight, Sunlight, Overshadowing, Light Pollution and Solar Glare..... 28

 Noise and Vibration..... 31

 Health..... 33

 Socio Economics..... 34

Townscape and Visual Impact Assessment..... 40

Traffic and Transport..... 43

Wind Microclimate..... 52

Archaeology (Buried Heritage)..... 55

Built Heritage..... 58

TOPICS TO BE SCOPED OUT..... 61

 Ecology and Biodiversity..... 61

 Daylight, Sunlight and Overshadowing – Internal, new receptors within the Proposed Development..... 64

 Geoenvironmental (Ground Conditions, Groundwater and Land Take and Soils)..... 64

 Water Resources, Drainage and Flood Risk..... 68

 Project Vulnerability..... 72

 Electronic (TV and Radio) Interference..... 73

 Waste..... 73

SCOPE SUMMARY..... 78

 FORMAT AND CONTENT OF THE EIA..... 79

REQUEST FOR AN EIA SCOPING OPINION..... 81

APPENDICES

APPENDIX A - Site Location and Redline Planning Application Boundary.....

APPENDIX B – Information for Inclusion within an ES: Way Finding.....

APPENDIX C– Cumulative Schemes.....

APPENDIX D – Archaeological Desk-Based Assessment.....

APPENDIX E - Preliminary Ecological Appraisal.....

APPENDIX F - Geoenvironmental Desk Study.....

APPENDIX G - Viewpoints.....

INTRODUCTION

Overview

1. EcoWorld & Poplar HARCA (hereinafter referred to as the 'Applicant') are seeking part-detailed and part-outline planning permission (commonly known as and referred hereafter as a "Hybrid planning application") for the proposed redevelopment of the Aberfeldy New Masterplan.
2. The site covers a total area of 9.69 hectares (ha) (herein referred to as the 'site') and falls within the administrative boundary of the London Borough of Tower Hamlets (LBTH). Figure 1 and Figure 2 show the indicative redline planning application boundary and site location plan respectively. The redline boundary plan include areas of land with the potential to be included within the planning application boundary as shown in Figure 1. The final decision on their inclusion as part of the redline planning application boundary will be subject to agreement with the LBTH on the best approach in securing the delivery of works to those areas of land.
3. The components of the respective outline and detailed parts of the planning application are as follows:
 - Outline part: The remainder of the site, which will provide approximately 1,330 residential units and approximately 5,000sqm of non-residential uses.
 - Detailed part: Providing approximately 270 residential units and a new high street and approximately 2,500sqm of non-residential uses.
4. The combined detailed and outline parts are referred to herein as the 'Proposed Development', which will include the phased demolition of non-retained structures and clearance of the site, and construction over a number of phases. Flexibility is being sought in the uses that could come forward, therefore a mix of the uses are being sought for approval. Further details of the Proposed Development are provided in the Proposed Development and Planning Application Section of this Scoping Report.
5. The site is subject to an existing outline planning application with all matters reserved (ref: PA/11/025716/PO) which was permitted in June 2012 as amended by a section 73 permission dated 15 June 2015 (ref: PA/15/0002) (herein referred to as the 'OPP'). A new planning application would replace Phases 4-6 of the OPP to provide a new residential-led development. Further details on the OPP are provided in the Relevant Planning History section of this Scoping Report.
6. The site is currently in use and occupied. It is characterised by low rise development (up to four stories). Key uses within the site include 330 homes, a retail element consisting of two rows of shops along Aberfeldy Street and Aberfeldy (GP) Practice. The GP Practice has been provided within the phases 1-3 of the OPP. Further details on the site and the surrounding area are provided in the Existing Environmental Context section of this Scoping Report.

Figure 1 Indicative Redline boundary

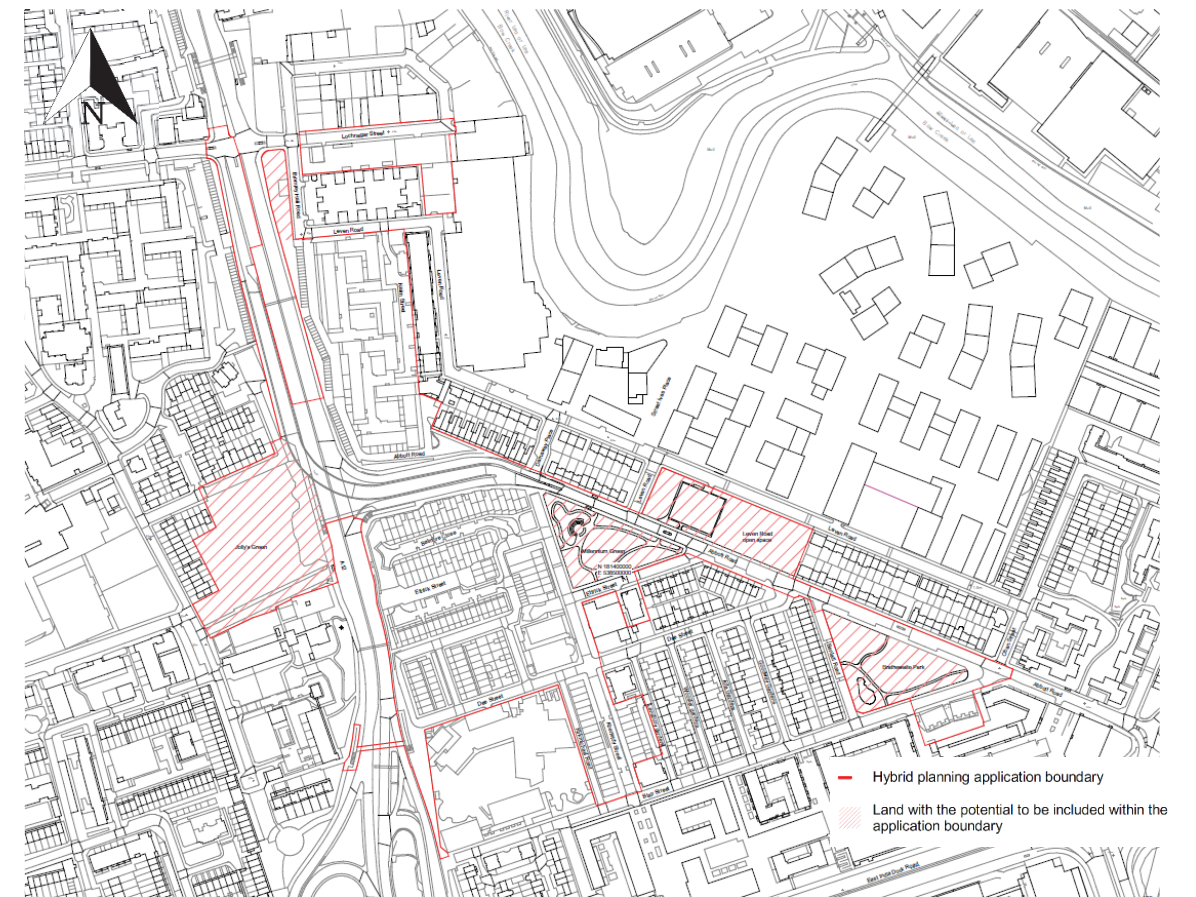
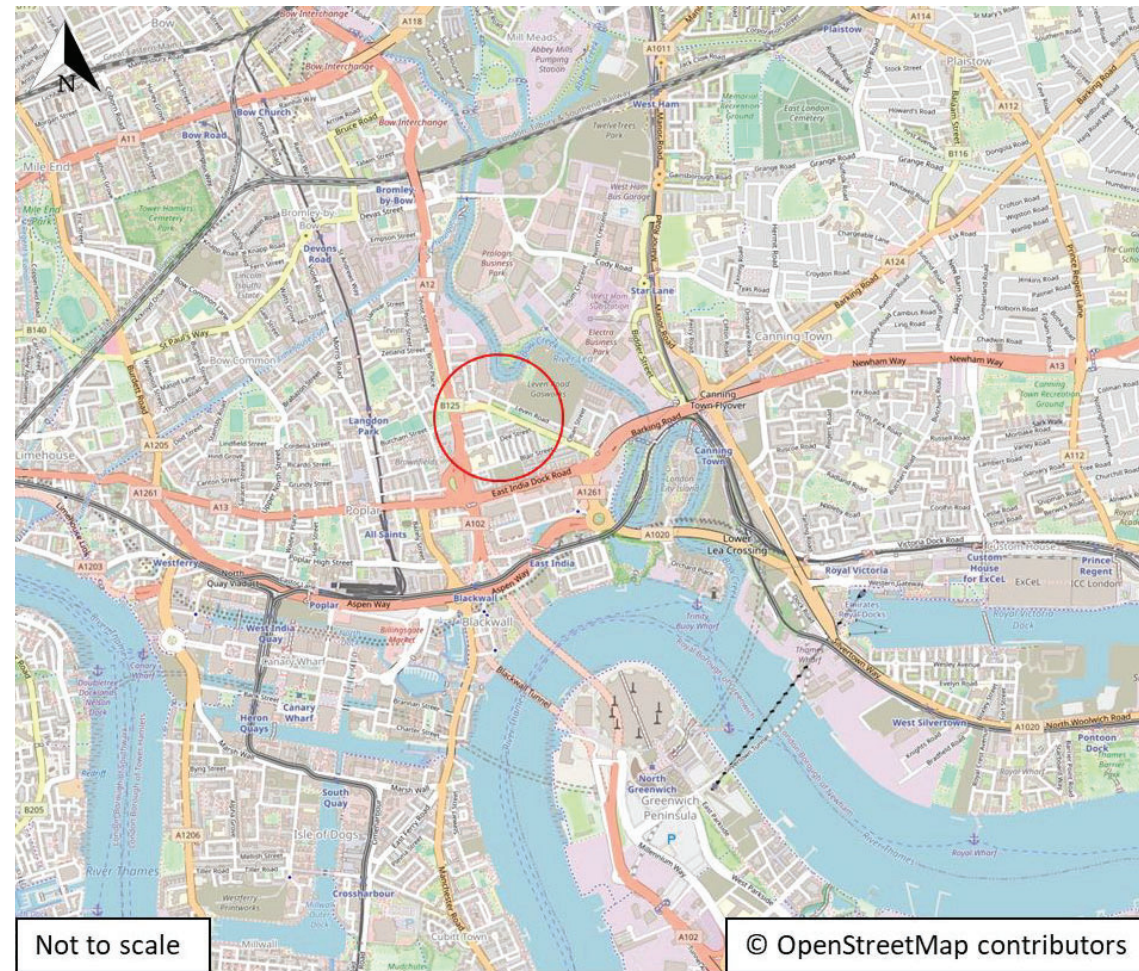


Figure 2 Site Location Plan



7. Given the size and nature of the scheme, the Proposed Development falls within the classification of Schedule 2, 10(b) (Infrastructure Projects – Urban Development Projects) of the EIA Regulations¹. Taking into account the scale of the Proposed Development and the nature of the site and surrounding area, it is considered that there is the potential for significant environmental effects to arise. The Proposed Development is therefore considered to constitute ‘EIA development’ under the EIA Regulations, and so an Environmental Statement (ES) will be prepared and submitted in support of the hybrid planning application.
8. Trium Environmental Consulting LLP (Trium) has been commissioned by the Applicant to prepare this EIA Scoping Report and are submitting it to the LBTH to seek a formal EIA Scoping Opinion in accordance with Regulation 15 of the EIA Regulations, to agree the approach and scope of the EIA to be reported in the ES that will be submitted to accompany the hybrid planning application.
9. A pre-application meeting was held on 17th November 2020 via Microsoft Teams with Clare Richmond and Nelupa Malik of the LBTH. The meeting was held to discuss the proposed general approach to the EIA Scoping Report. This discussion was supported by a technical note which outlined the proposed general approach to the EIA (including topics proposed to be scoped in and out of the EIA) issued to LBTH on the 10th November 2020. Following the meeting, pre-application advice was issued from LBTH on 17th

¹ Town and Country Planning (Environmental Impact Assessment) Regulations 2017 (as amended)

November 2020. The Proposed Development and the extent of the site has subsequently evolved however where it remains applicable, the content of the LBTH pre-application advice is reflected in the proposed scope set out herein.

10. The EIA Regulations require that in order to ensure the completeness and quality of the ES, ‘(a) the developer must ensure that the environmental statement is prepared by competent experts;’ and ‘(b) the environmental statement must be accompanied by a statement from the developer outlining the relevant expertise or qualifications of such experts.’ Trium consider that these requirements are equally important and relevant to the EIA scoping process in addition to the preparation of the ES. As such, in accordance with this requirement, the following statement is provided:

“Trium is an environmental consultancy specialising in urban regeneration and property development projects in the UK, with a specific focus in London. Trium’s Partners and Employees have extensive experience in managing the environmental issues and impacts surrounding large scale, high profile urban regeneration development projects. The Partners and Employees of Trium have, over the course of their careers to date (including with former employers), project directed, managed or contributed to over 400 EIAs within the retail, residential, leisure, commercial, cultural, infrastructure and industrial sectors.”

11. Information on Trium’s lead partner and project manager including information for each technical sub-consultant will be appended to the ES within **ES Volume 1, Chapter 2: EIA Methodology**.

Structure of the EIA Scoping Report

12. This Scoping Report is structured as follows and provides:

- A summary of the EIA purpose and process including EIA Scoping.
- Site description and environmental context.
- An overview of the Proposed Development;
- An outline of the potential environmental sensitivities and receptors;
- An outline of the planning context;
- A description of the EIA methodology;
- The approach to determining the significance of effects;
- A description of the environmental topic areas that are considered to potentially result in significant effects on the environment and an explanation of the proposed scope and assessment methodology that will be adopted to predict the magnitude of potential impacts and the resultant scale, nature, geographic extent and duration of potential effects, and the effect significance within the EIA;
- A description of the environmental topic areas that are considered unlikely to result in significant environmental effects and are therefore ‘scoped out’ of the EIA;
- Confirmation of the proposed structure of the ES; and
- The request for an EIA Scoping Opinion.

EIA AND THE SCOPING PROCESS

EIA Purpose and Process

13. EIA is a process carried out which examines available environmental information to ensure that the likely significant environmental effects of certain projects are identified and assessed before a decision is taken on whether a project is granted planning permission. This means environmental issues can be identified at an early stage and projects can then be designed to avoid or to minimise significant environmental effects, and appropriate mitigation and monitoring can be put in place.
14. Regulation 4 of the EIA Regulations sets out the EIA process. Specifically, Regulation 4(2) states that “the EIA must identify, describe and assess in an appropriate manner, in light of each individual case, the direct and indirect significant effects of the proposed development on the following factors:
- (a) population and human health;
 - (b) biodiversity;
 - (c) land, soil, water, air and climate;
 - (d) Material assets, cultural heritage and the landscape;
 - (e) The interaction between the factors referred to in sub-paragraphs (a) to (d).”
15. The potential for likely significant effects on the aforementioned factors, during both the demolition and construction works associated with the Proposed Development and once the Proposed Development is complete and operational, is considered within the following relevant environmental topics addressed within this Scoping Report:
- Air Quality;
 - Archaeology (Buried Heritage);
 - Climate Change and Greenhouse Gases;
 - Daylight, Sunlight, Overshadowing, Light Pollution and Solar Glare;
 - Ecology and Biodiversity;
 - Geoenvironmental (Ground Conditions, Groundwater and Land Take and Soils);
 - Health;
 - Noise and Vibration;
 - Project Vulnerability;
 - Socio Economics;
 - Health;
 - Townscape, Built Heritage and Visual;
 - Traffic and Transport;
 - Electronic Interference;
 - Waste;
 - Water Resources, Drainage and Flood Risk; and
 - Wind Microclimate.

16. The method behind the EIA process generally² takes into account the existing conditions of the area into which the development is being introduced (**the baseline**) and makes reasonable predictions of the likely change (**the impact** – in terms of magnitude) that may occur, during both its construction and when the development is completed and operating as proposed. The predicted impact is considered in terms of key environmental and social aspects (**receptor / resource**) found within the site and the surrounding area, and based on their sensitivity to change, the resulting change experienced by the receptor / resource (**the effect**) is then determined. Any mitigation measures required in order to reduce or eliminate adverse effects are then considered and assessed, with the resulting residual effect being determined as significant or not. The likely significant effects are then reported within an **ES** for consideration by the relevant planning authority when considering whether to grant planning permission for a proposed development.

The Scoping Process

17. EIA Scoping forms one of the first stages of the EIA process. Requesting an EIA Scoping Opinion Request from a local planning authority, under Regulation 15 of the EIA Regulations, involves the preparation of a Scoping Report and its submission to the local planning authority as a formal request for their opinion on the content or ‘scope’ and approach to the EIA.
18. The purpose of the scoping process is to identify:
- the important environmental issues and topics for consideration in the EIA;
 - the baseline conditions and assessment methodology to be used for assessment;
 - any potentially sensitive receptors that may be affected by the development being proposed;
 - the appropriate spatial context of the EIA;
 - the information necessary for decision-making; and
 - the potential significant effects which are likely to result from the development both during its demolition and construction and operation.
19. This Scoping Report constitutes a formal request for an EIA Scoping Opinion from the LBTH.
20. In accordance with the requirements of the Town and Country Planning (Development Management Procedure) Order 2015 (article 18, Schedule 4), this Scoping Report will need to be issued by the LBTH to the statutory consultees that are considered to have an interest in the EIA of the Proposed Development and should be consulted as part of the EIA Scoping process. It is expected that the LBTH will also issue the Scoping Report to non-statutory and key, local stakeholders and interest groups who are deemed to similarly have an interest in the EIA of the Proposed Development.
21. The process of consultation is a key requirement of the EIA process, and the views of statutory consultees and other stakeholders help to identify specific issues, as well as identifying additional information in their possession, or of which they have knowledge, which may be of assistance in progressing the EIA.
22. The Scoping Opinion will be appended to the ES which will include a summary of any other consultation undertaken as part of the EIA process.

² There may be exceptions to the general approach described. Where there are exceptions, this will be clearly described within the relevant methodology section, outlining both the departure from the general EIA methodology and the description of the alternative approach. This is discussed further within ‘EIA Process and Methodology’ section of this Scoping Report.

SITE CONTEXT

Site Location

23. The site is located in Poplar at National Grid Reference: Easting 538412, Northing 181392 and covers a total area of a total area of approximately 9.69 hectares (ha). It is broadly bordered by:
- Bromley Hall School and Lochnagar Street to the north;
 - B125 Abbott Road and Leven Road to the east;
 - Culloden Primary School and residential areas off Blair Street to the south; and
 - A12 and properties on Joshua Street and St. Leonards road to the west.
24. The site currently comprises a range of uses including a large area of residential dwellings up to four storeys in height. The site also comprises public realm, containing soft landscaping, Aberfeldy Millennium Green, Braithwaite Park and a hard standing Multi Use Games Area (MUGA). An area of the site to the north currently comprises an area of brownfield land, with both soft and hard landscaping. The site also incorporates a retail and commercial businesses (along Aberfeldy Street), Aberfeldy Cultural Centre and the Aberfeldy GP Practice. The site contains the Aberfeldy Neighbourhood Centre to the east of the site. The GP Practice has been provided within the phases 1-3 of the OPP.
25. The main vehicular access into the site is currently gained from the B125 Abbott Road in the north-east corner of the site which then bisects the site to the west. Blair Street and Lochnagar Street form secondary access points into the site.

Existing Environmental Context

Environmental Context of the Site and Surrounding Area

26. Figure 3 identifies the location of the site and its surrounding context, including conservation areas, listed buildings, Sites of Importance for Nature Conservation (SINC), Archaeological Priority Areas (APA), and local social infrastructure such as medical practices and schools.
27. The wider surrounding context of the local area is made up of a mixture of uses, comprising a mixture of low to medium rise residential areas and low-rise commercial uses. There are several taller existing and consented buildings to the north west of the site along the A12, and the east of the site within the former poplar bus depot and Leven Road developments, ranging up to 22 storeys in height.
28. The site does not lie within an environmentally sensitive area as defined by the EIA Regulations. The site itself does not contain any heritage assets however, the site is located within 700m of the site to 5 Conservation areas and 10 listed buildings. Namely, a 26 storey Grade II* Listed Building called Balfron Tower which is located approximately 60m west of the site.
29. There are several health facilities and schools within a 1km radius of the site located to the north and west, the closest being Langdon Park School (secondary) (approximately 10m west of the site), Woolmore Primary School (approximately 190m south-west of the site) and The Aberfeldy Practice (on-site) and Crisp Street Health Centre (approximately 250m west of the site).
30. The site has a variety of transport links available, however the Public Transport Accessibility Level (PTAL) rating for the site varies from 3 to 4 (where 0 is the worst and 6b is the best). Bromley-by-Bow Station is located 950m from the north of the site and is served by the London Underground (Hammersmith & City and District lines). Langdon Park Station is located approximately 260m from the west of the site and East India Station is located approximately 650m from the south of the site. Both stations provide access to Docklands Light Railway services. Bus service 309 routes through the site and a further three bus services (108, 115 and D8) can be accessed from the site within a 10-minute walk.
31. The key environmental features and designations on-site and in the surrounding area are listed in **Error!**

No bookmark name given.

Table 1 Existing Environmental Context

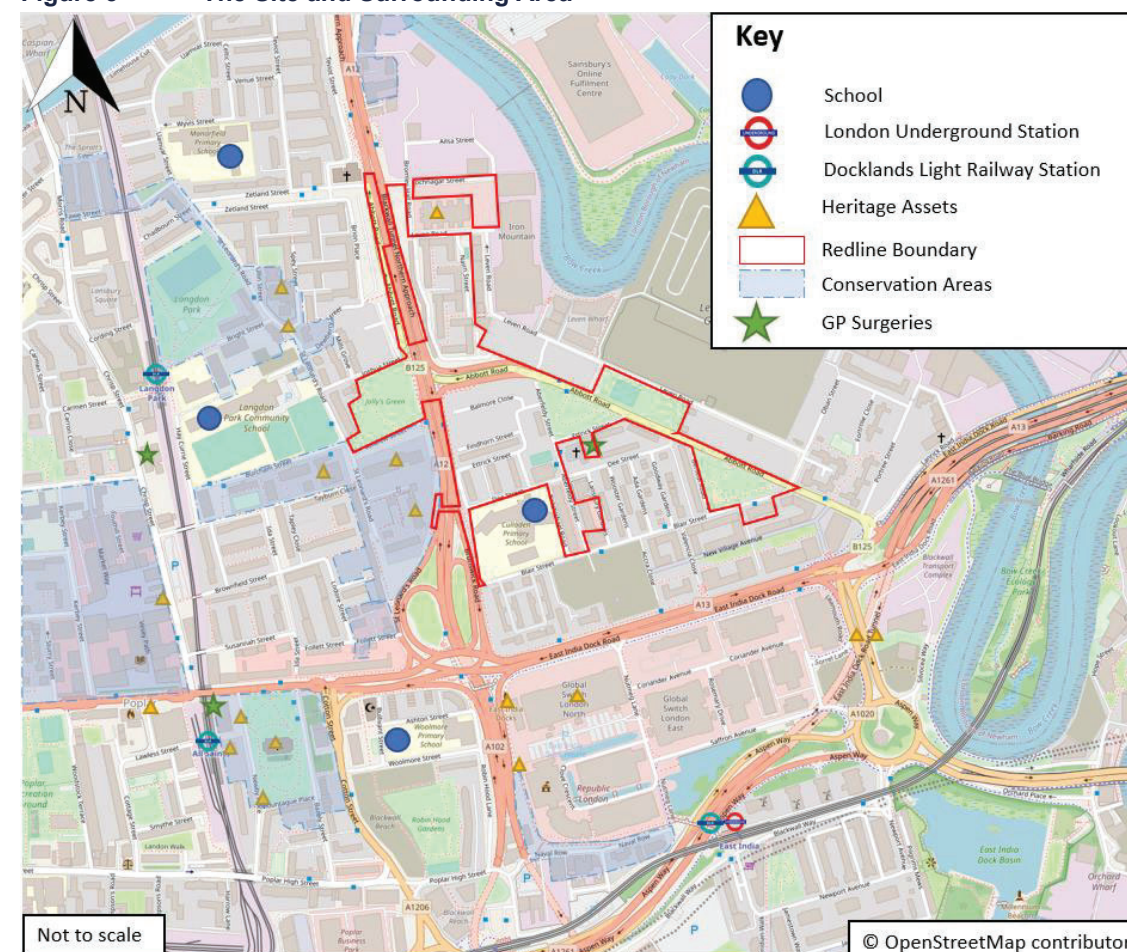
Environmental Topic	Key features and designations
Air Quality	<ul style="list-style-type: none"> • LBTH Air Quality Management Zone, pollutants declared for: NO₂ and PM₁₀. • The site is located adjacent to an AQMA which encompasses all main roads within the borough.
Archaeology	<ul style="list-style-type: none"> • The site is within the Lea Valley Archaeological Priority Area (Tier 3).
Daylight, Sunlight and Overshadowing	<ul style="list-style-type: none"> • Daylight and Sunlight receptors in proximity of the site include a number of residential receptors which are listed later in this scoping report, residential components of Phase 1- 3 of the 2012 OPP and the existing Culloden Primary School. • Areas of open amenity space (listed later within this scoping report) have been considered as overshadowing receptors.
Ecology and Biodiversity	<ul style="list-style-type: none"> • The site is not within a 'sensitive area' (as defined in Part 1 of the EIA Regulations) and does not fall within the boundaries of any statutory or non-statutory sites. • The site has the potential to support the following notable and/or protected species: <ul style="list-style-type: none"> ○ Low potential to support foraging and commuting bats; ○ Low potential to support roosting bats; ○ Moderate potential to support nesting birds; and ○ Confirmed presence of invasive/non-native species. • Epping Forest SAC lies approximately 6.4km north of the site. • Further detail is provided within the ecological baseline and Preliminary Ecological Assessment appended to this report.
Geoenvironmental	<ul style="list-style-type: none"> • The site has a bedrock geology of Lambeth Group – clay, silt and sand and superficial deposits of Alluvium – clay, silt, sand and peat. • The EA's Groundwater Source Protection Zone Map confirms that the site is not located within a Groundwater Source Protection Zone.
Noise and Vibration	<ul style="list-style-type: none"> • Noise receptors in the vicinity of the site include the existing and future residents of Phases 1- 3 of the 2012 OPP, Culloden School and residential receptors north, north-east and east of the site. • The main noise source in the area is road traffic from the A12 Blackwall Tunnel Approach to the west of the site and the A13 East India Dock Road to the south.
Townscape and Heritage	<ul style="list-style-type: none"> • The site is not located within a Conservation Area. • Part of Bromley Hall School (Grade II) lies within the site. The site does not contain any other statutory or non-statutory listed buildings. <p>Surrounding Conservation areas</p> <ul style="list-style-type: none"> • The Balfron Tower Conservation Area is located approx. 15m west of the site; • The St Frideswide's Conservation Area, approx. 130m to the west; • The Langdon Park Conservation Area, approx. 80m to the north west; • Naval Row Conservation Area, approx. 265m to the south; and • The All-Saints Conservation Area, approx. 270m to the south west; <p>Surrounding Listed Buildings</p> <ul style="list-style-type: none"> • The Balfron Tower, St Leonard's Road (Grade II* listed) approx. 15m to the west); • Carradale House, St Leonard's Road approx. 45m to the west; • Glenkerry House, Burcham Street approx. 20m to the west; • Former Bromley Hall School, Bromley Hall Road adjacent to the north of the site; • Poplar Public Library, Gillender Street approx. 120m to the north; • Bromley Hall, Gillender Street (Grade II*) approx. 140m to the north; • Former Fire Station, Gillender Street approx. 215m to the north; • Church of St Michael and All Angels, St Leonard's Road approx. 130m to the west; • Former Financial Times Print Works, East India Dock Road (Grade II*) approx. 145m to the south; and • Plaque on Modern Dock Wall Facing West, East India Dock Road approx. 167m to the south.

Environmental Topic	Key features and designations
Socio Economics	<ul style="list-style-type: none"> The nearest primary schools to the are Culloden Primary School located adjacent to the south of the site and Langdon Park School located approx. 10m to the west; Aberfeldy Practice GP is located within the site boundary; The nearest GP is being provided as part of Phase 3 of the OPP. In addition, Chrisp Street Health Centre is located approx. 265m to the west of the site; St Nicholas Church, Poplar is located adjacent to the east; There are a number of formal green spaces located within the site including Braithwaite Park, Aberfeldy Millennium Green, Jolly's Green and Leven Road Green (Multi-Use Games Area), there are a number of informal green spaces between buildings; and Nearby open spaces include Langdon Park (approx. 180m north west).
Traffic and Transport	<ul style="list-style-type: none"> The site has a Public Transport Accessibility Level (PTAL) rating of 3 to 4 (poor/moderate); Vehicular access to the site is achieved from: <ul style="list-style-type: none"> Lochnagar Street, which forms a signalised junction with the A12 at the north of the site. Abbott Road passes through the site and connects the A12 and A13. At its western end Abbott Road forms, a junction with the A12 via a grade separated right turn onto the northbound A12 in the form of a vehicle underpass and a left-in left-out southbound A12 traffic. Jolly's Green towards the west of the site can be accessed via Joshua Street, Andrews Street and St Leonards Road. At its eastern end Abbott Road forms, a signalised junction with the A13. The access operates as left-in, left-out with the right turn entry movement being restricted to bus only. Abbott Road forms junctions with Ettrick Street, Dee Street and Blair Street, which each provide access to the site. Bus service 309 routes through the site and has five services per hour. A further three bus services (108, 115 and D8); East India DLR Station (approx. 450m south), Langdon Park DLR Station (approx. 275m west); Bromley-By-Bow London Underground Station is located approximately 800m north of the site; Cycleway 3 forms the main strategic cycle route in the vicinity of the site and provides a connection into Central London. There are a number of cycle routes in the vicinity of the site including the Cycleway 3 which runs along the A13 East India Dock Road; and Furthermore, Aberfeldy Street Cycle Hire station is located on-site.
Water	<ul style="list-style-type: none"> The site is located within an area designated as 'Flood Zone 3, benefitting from flood defences³; Environment Agency (EA) information for the site indicates that there is mainly a very low (0.1% chance) risk of surface water flooding across site with a low (0.1% - 1% chance) to medium to high risk (<1% chance) focused along Blair Street, Abbott Road and Kirkmichael Road⁴; At the nearest point the River Lea (a designated Site of Importance for Nature Conservation (SINC)) is located 50m to the east of the site.

³ Land and property in this flood zone would have a high probability of flooding without the local flood defences. These protect the area against a river flood with a 1% chance of happening each year, or a flood from the sea with a 0.5% chance of happening each year.

⁴ Source: <https://flood-map-for-planning.service.gov.uk/>

Figure 3 The Site and Surrounding Area



RELEVANT PLANNING HISTORY

32. The 2012 outline planning permission (ref: PA/11/02716/P0) ("2012 OPP") was for the comprehensive regeneration of the Aberfeldy Estate, over 6 phases. It covers the area to the north of East India Dock Road (A13), east of the Blackwall Tunnel Northern Approach Road (A12) and to the south-west of Abbot Road (B125), overlain with the Proposed Development site boundary.

33. The 2012 OPP consented the following development:

'Outline planning application (all matters reserved) for the mixed-use redevelopment of the existing Aberfeldy estate comprising: Demolition of 297 existing residential units and 1,990 sq m of non-residential floorspace, including shops (use class A1), professional services (use class A2), food and drink (use class A3 and A5), residential institution (use class C2), storage (use class B8), community, education and cultural (use class D1); and Creation of 1,176 residential units (Use Class C3) in 15 new blocks between 2 and 10 storeys in height plus 1,743sqm retail space (Use Class A1), professional services (Use Class A2), food and drink (Use Classes A3 and A5) and 1,786 community and cultural uses (Use Class D1) together with a temporary marketing suite (407sqm), energy centre, new and improved public open space and public realm, semi-basement, ground and on-street vehicular and cycle parking and temporary works or structures and associated utilities/services.'

34. The 2012 OPP was amended by way of an application for minor material amendments under s.73 of the Town and Country Planning Act (Ref: PA/15/00002/S) resulting in the following amendments:

- Extending development contained within the consented Phase 3 to include sections of consented Phase 4, including Block J within the amended Phase 3;
 - Increasing the maximum parameter heights of the buildings in Phase 3 by 2.5m to allow for additional storeys to Blocks G, H and J thereby enabling an increase in the number of dwellings in Phase 3 whilst not impacting upon the consented total number of units or residential floorspace brought forward by the scheme across all 6 phases of the consented development, as this remains restricted by conditions 5 and 8 of the Outline Permission;
 - Clustering the retail uses to the intersection between Aberfeldy Street and Blair Street;
 - Expanding the floor area allocated to the community centre and health centre to respond to projections of increased demand for these facilities, by reducing quantum of retail floorspace provided within Phase 3 to release space within this phase to facilitate space for a larger quantum of health and community centre floor space set within the consented building footprint parameter plans. Overall floorspace increased by 686sqm (430sqm increase in D1 Community Centre and 256sqm increase in D1 Health Centre);
 - Resigning of the S106 Agreement; and
 - Phase 1 has delivered, 338 residential units (263 private sale, 67 social rent and 8 shared ownership), two retail units (subsequently approved as a change of use to a gym and concierge), and a marketing suite for the scheme. Phase 2 has delivered 219 residential units (194 private sale, 21 social rent and 4 shared ownership). Phase 3 will deliver once complete 344 new homes (262 private sale; 69 social rent; 13 shared), a community centre, a health centre, a range of new retail space and a new energy centre.
35. The 2012 OPP as amended by the July 2015 section 73 permission is collectively referred to as “the OPP” in this Scoping Report.
36. The current status of the development that falls under the OPP is as follows:
- Phases 1, 2 and 3a – fully built out and occupied (approximately 678 residential dwellings);
 - Phase 3b - currently under construction; and
 - Phases 4 to 6 – not yet started.

37. The site of the Proposed Development in part covers the areas of Phases 4 to 6 of the OPP.

THE PROPOSED DEVELOPMENT AND PLANNING APPLICATION

Overview of the Proposed Development

38. The Proposed Development is anticipated to comprise the construction of a residential mixed-use scheme, in plots up to 96m high, providing:
- The provision of approximately 1,600 residential units;
 - Approximately 7,500 m² gross internal area (GIA) non-residential uses;
 - New and improved access arrangements;
 - Associated servicing facilities and ancillary, plant space and associated landscaping; and
 - New vehicular access onto the site north of Blair Street and a new A12/ Abbott Road junction moved further north. The existing vehicular underpass is proposed to be converted into a pedestrian and cycle route connecting Jolly’s Green with the site.
39. The Proposed Development is likely to include the demolition of the existing structures on-site and the construction of several urban blocks that are partially defined by Phase 1, 2 and 3a of the OPP, and Phase 3b which is currently under construction.
40. A new significant public open space is proposed at the heart of the development between the A12 and

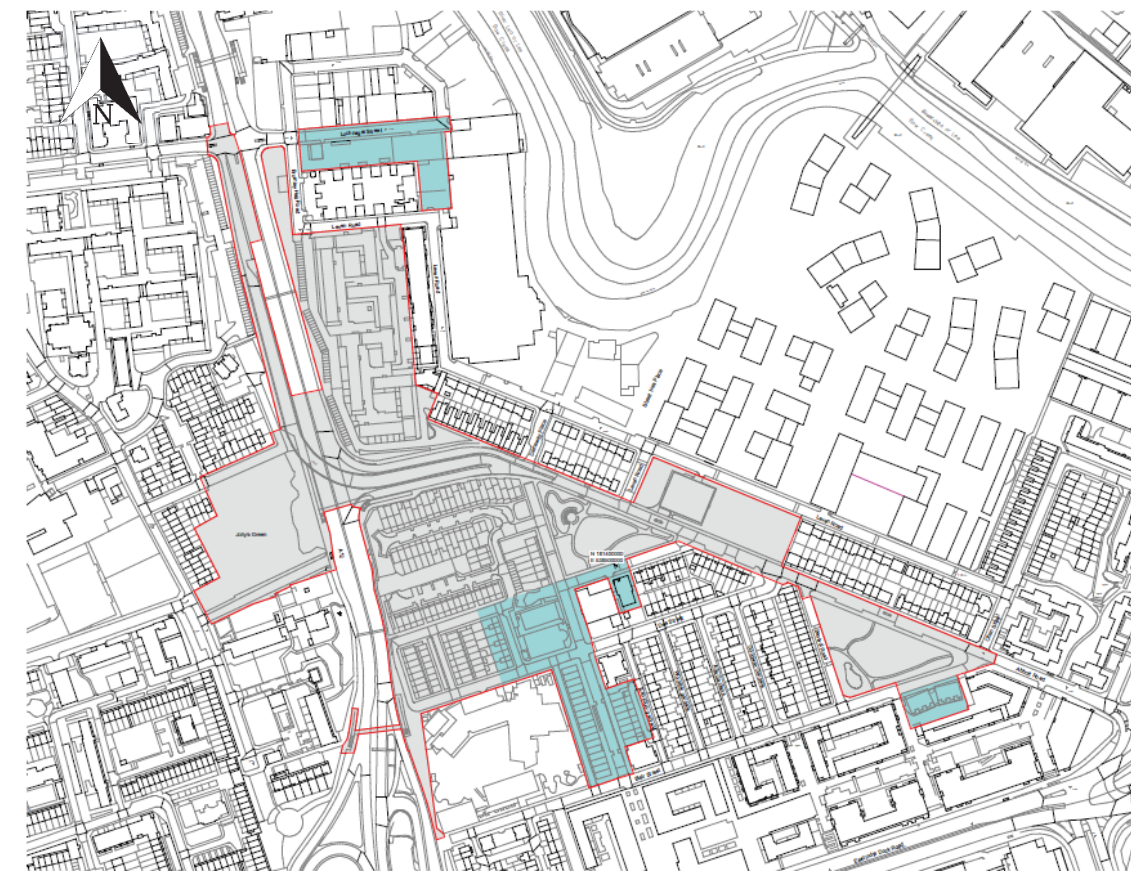
Abbott Road. A number of smaller open spaces are also proposed. A new public square in front of St Nicolas Church and a number of smaller open spaces for play and recreation. Car parking will be provided within podium car parks and on-street.

41. In terms of building heights, the Proposed Development is located within the London City Airport safeguarding zone. Discussions surrounding height are subject to ongoing conversations with LBTH.
42. The Proposed Development would facilitate the pedestrianisation of the Abbot Road vehicle underpass and the provision of a healthy street along Abbot Road.

Hybrid Planning Application

43. The ES will present a description of the Proposed Development, in terms of the design details sought for approval where relevant and the development ‘parameters’ and ‘guidelines’ sought for approval for those components of the Proposed Development where only outline approval is sought. The likely significant effects of the outline part will be based on a set of Parameter Plans and a Development Specification (to be read together) which will allow for a degree of flexibility for the detailed design to evolve and be submitted through the reserved matters applications. The Parameter Plans and Development Specification will provide enough information on the Proposed Development to allow an assessment of potential impacts and likely significant effects of the completed and operational development to be undertaken.
44. Any assumptions made will be clearly presented in the narrative.
45. The Proposed Development is a residential led mixed-use scheme. The following sections provide further detail of the proposals within the detailed and outline parts of the scheme. Figure 4 presents the detailed and outline parts of the scheme.

Figure 4 Indicative Detailed (blue) and Outline (Grey) parts of the scheme.



46. The Proposed Development is anticipated to provide:

- Outline part: -Demolition of existing buildings and the provision of:
 - Comprising approximately 1,330 units – Class C3.
 - Approximately 5,000m² GIA of non-residential uses including Restaurant / Retail / Office– Class E(a), E(b) and E(g);
 - Construction of new buildings up to 96m in height;
 - Cycle and pedestrian routes through the site;
 - Provision of an approximately 1,200m² Residents Hub; and
 - Provision of internal vehicle access routes.
- Detailed part: -Demolition of existing buildings and the provision of 4 residential areas comprising:
 - Comprising approximately 270 units– Class C3;
 - Building heights ranging between approximately 7m – 42m in height; and
 - Approximately 2,500 m² GIA of non-residential uses including Restaurant / Retail – Class E(a) and E(b).

47. A new access point is proposed, to facilitate access to the Proposed Development from the A12 onto Abbott Road. In addition, the development seeks to pedestrianise the Abbott Road vehicular underpass at the existing Abbott Road junction to create a new walking and cycling route under the A12 and new public open space.

48. The Proposed Development intends to provide car parking provision onsite. It is envisaged this will be provided on street and within three podium car parks. Where possible car parking shall be designed to allow repurposing in the event of modal shift away from car use. Provision for electrical car charging points will also be made.

49. Demolition and construction are anticipated to occur over 120 months. A summary demolition and construction programme, outlining the demolition and construction programme assessed is to be presented within Chapter 5 of the ES.

50. The landscape design intends to create a significant new public open space at the centre of the site with good connections to existing public open spaces to the east and west, with improvements to public open spaces within the redline boundary.

PLANNING CONTEXT

Planning Policy Context

51. The ES (within ES Volume 1, Chapter 1: Introduction and EIA Methodology), will define the relevant national, regional and local policy context. Specifically, the ES will list out the key relevant policy documents but will not discuss the policies within these in any detail.

52. Although relevant policies out of the key planning policy documents will, in some instances, inform the scope and the methodology of the technical assessments within the EIA, the Proposed Development's compliance with and performance against the relevant planning policies will be appraised within the Planning Statement which will be a standalone document that is submitted in support of the planning application. It is not the purpose of the ES to appraise the Proposed Development against relevant national, regional and local planning policy standards / targets.

53. Where planning policy informs the scope and the methodology of the technical assessments of the EIA, the policies will be presented in the ES (in the relevant technical topic chapters) and discussed as necessary. Any policy detail required to support the relevant impact assessment scope, methodology or assessment of effects, will either be provided within the technical topic chapter itself or within an appendix to the ES.

National Planning Policy and Guidance

54. The EIA will be undertaken having regard to the National Planning Policy Framework (NPPF). The NPPF sets out the Government's economic, environmental and social planning policies for England. The policies contained within the NPPF articulate the Government's vision of sustainable development, which are intended to be interpreted at a local level, to meet the requirements of local aspirations.

55. As relevant to the EIA, specifically to the scope, methodology and assessment of effects for the EIA technical topics, the NPPF shall be considered throughout the EIA process.

56. The EIA will also refer to, as relevant to the EIA technical topics, the Planning Practice Guidance (PPG), which is an online resource. The PPG aims to make planning guidance more accessible, and to ensure that the guidance is kept up to date.

Strategic Planning Policy and Guidance

57. As relevant to the EIA technical topic scope, methodology or assessment of effects, the ES will have regard to the following key strategic planning documents. Any additional strategic planning policy and guidance documents considered relevant to the technical assessments which are covered by the EIA will also be considered:

- The London Plan: The Spatial Development Strategy for Greater London 2021 – hereafter referred to as 'the London Plan';
- Supplementary Planning Guidance (SPG) (i.e., further guidance on policies in the London Plan that can't be addressed in sufficient detail in the plan itself).
- The GLA has designated Housing Zones as areas with substantial potential to unlock and accelerate housing delivery in London through targeted investment, engagement and planning. The site is included within the Poplar Riverside Housing Zone. The area was allocated Mayoral grant and loan funding to accelerate the delivery of new homes. The London Plan has designated Poplar Riverside as a new Opportunity Area.

Local Planning Policy and Guidance

58. As relevant to the EIA technical topic scope, methodology or assessment of effects, the ES will have regard to key local planning policy and guidance documents.

59. The LBTH's new Local Plan was adopted by the Council in January 2020. The 'Local Plan 2031: Managing Growth and Sharing Benefits' supersedes the previous Local Plan 2010, which consisted of the Core Strategy (2010) and Managing Development Document (2013).

60. The Local Plan 2031 is the principal document guiding development and growth within the LBTH, and provides spatial policies, development management policies and site allocations to guide development within the borough.

61. The site is partially located within the Ailsa Street Site Allocation, as designated under the new Local Plan 2031. The site allocation outlines a number of design principles and delivery considerations for new developments. The design principles include the provision of appropriate building heights, scale and massing and the avoidance of significant adverse environmental impacts. This includes the provision of an active and well-defined street frontage along Lochnagar Street and create a stronger east-west link between the River Lea and the Langdon Park DLR station and improve the quality of and create a positive sense of place in the form of an active square at the corner of the A12 and Lochnagar Street.

62. The site is located within the Draft Leaside Area Action Plan (2021) under Site: LS-A, which aims to improve the quality and connectivity of the area, encourage new employment, access to community facilities and policies relating to the type and quality of open spaces and homes in the area.

Other Guidance

63. In addition to any relevant planning policies that inform the scope, methodology or assessment of effects, as relevant, the technical topic chapters of the ES will present a summary of any pertinent recognised industry guidance documents.

EIA METHODOLOGY

EIA Methodology and Approach to Assessment of the Proposed Development

64. In addition to the EIA Regulations, there is also guidance available that has been referenced where appropriate, including but not limited to:
- at a European level, reference has been made to the European Commission's (EC) various EIA guidance documents available here: <http://ec.europa.eu/environment/eia/eia-support.htm>;
 - at a domestic level, reference has been made to the Ministry of Housing, Communities and Local Government (MHCLG) overarching PPG;
 - in addition, the Department for Transport 'Design Manual for Roads and Bridges Volume 11: Environmental Assessment' has been referred to as applicable;
 - in relation to publications from professional bodies, reference has been made to IEMA publications as these include best practice/suggested improvements to the EIA process. This includes:
 - IEMA's ES Review Criteria (COM3-6);
 - 'Guidelines for Environmental Impact Assessment' (2004);
 - 'Special Report into the State Environmental Impact Assessment Practice in the UK' (2011)⁵;
 - 'Shaping Quality Development' (2015)⁶;
 - 'Delivering Quality Development' (2016)⁷;
 - 'Delivering Proportionate EIA' (2017)⁸;
 - IEMA 'Guide to Materials & Waste in EIA' (2020)⁹;
 - IEMA 'Climate Change Resilience and Adaption' (2020)¹⁰;
 - IEMA 'Major Accidents and Disasters Guidelines' (2020)¹¹;
 - IEMA 'Assessing Greenhouse Gas Emissions and Evaluating their Significance' (2017)¹²; and
 - IEMA 'Environmental Assessment of Road Traffic' (1993)¹³.
 - Reference is also made to 'Tower Hamlets Council EIA Scoping Guidance', as it includes relevant / helpful information https://www.towerhamlets.gov.uk/Documents/Planning-and-building-control/Development-control/Revised_Scoping_Guidance_V2_Final.pdf; and
 - Applicable case law.
65. In accordance with the EIA Regulations and best practice guidance documents, the EIA will comprise an assessment for each of the relevant technical topics against an appropriate baseline condition of the site and surrounding area, using methods of prediction including established standards and industry

⁵ IEMA (2011) *Special Report – The State of Environmental Impact Assessment Practice in the UK*.

⁶ IEMA (2015) *Environmental Impact Assessment Guide to Shaping Quality Development*.

⁷ IEMA (2016) *Environmental Impact Assessment Guide to: Delivering Quality Development*.

⁸ IEMA (2017) *Delivering Proportionate EIA, A Collaborative Strategy for Enhancing UK Environmental Impact Assessment Practice*.

⁹ Institute of Environmental Management and Assessment, 2020; *Guide to Materials and Waste in Environmental Impact Assessment*

¹⁰ Institute of Environmental Management and Assessment, 2020; *Climate Change Resilience and Adaption'*

¹¹ Institute of Environmental Management and Assessment, 2020; *Major Accidents and Disasters Guidelines*

¹² Institute of Environmental Management and Assessment, 2017, *Assessing Greenhouse Gas Emissions and Evaluating their Significance'*

¹³ Institute of Environmental Management and Assessment, 1993 *'Environmental Assessment of Road Traffic'*

guidelines and techniques confirmed as part of the EIA Scoping process. In all cases, the source data and guidance used to establish the baseline conditions and assessment methodology will be clearly set out within the ES.

Baseline Conditions

66. Baseline assessments will utilise any existing and available information, as well as new information either collected through baseline surveys undertaken during the course of the EIA process or additional information provided as part of the EIA Scoping Opinion and consultation process. This information will be used to present within the ES (within the individual technical chapters) an up-to-date description of the current baseline conditions of the site and surrounding area.
67. Some assessments (such as transport and accessibility and air quality) when assessing the effects of the operation of the Proposed Development will include a projected environmental condition in the future (i.e., 'future baseline'), at the projected year of opening of the Proposed Development (if relevant a different future year appropriate/specific for the technical assessment may be used). Where using a future baseline is more appropriate, this will be detailed in the relevant methodology of the technical assessment and be made clear in the ES.
68. In addition, as per the requirements of the 2017 EIA Regulations, consideration as to how the current baseline conditions may evolve in the future in the absence of the Proposed Development will also be presented in the ES (within the individual technical chapters). This likely evolution of the baseline conditions will be quantified where possible and where not possible, a qualitative review will be presented.

Sensitive Receptors

69. When undertaking an EIA, it is important to identify potential environmental receptors which may be impacted by the Proposed Development and may need to be considered as part of the assessment.
70. The environmental receptors that may be sensitive to change are identified and discussed within the scope of each technical topic in this EIA Scoping Report (hereafter referred to as 'sensitive receptors'). The sensitive receptors outlined within this EIA Scoping Report have been identified at the time of writing as part of the EIA scoping process, however these will be reviewed during preparation of the ES and may be subject to change.

Demolition and Construction

71. The ES (within a non-technical chapter titled 'Demolition and Construction') will provide an outline of the anticipated demolition and construction programme and anticipated related activities and aspects (i.e., demolition and enabling works, substructure works, superstructure works etc., demolition waste volumes and construction material quantities, HGV movements and HGV routing). In addition, key environmental controls and management measures relevant to the Proposed Development (including relevant codes of construction practice) will be presented.
72. This information will inform the demolition and construction impact assessments. Throughout the demolition and construction impact assessments, the assumption will be made that the standard environmental controls required under legislation and best practice guidance are met as a matter of course.
73. The assessment of the potential for likely significant effects arising during the demolition and construction works will be addressed within each of the individual technical assessment chapters of the ES and will assess against the defined Baseline Condition (described earlier). The demolition and construction assessments presented within the technical chapters of the ES will identify the need for any additional or bespoke environmental management or mitigation measures in order to avoid, prevent, reduce or off-set any significant adverse effects identified.
74. Where required, a description of any proposed monitoring arrangements will also be presented and would

define (where appropriate) the procedures regarding the monitoring of the potential effects, the types of parameters to be monitored and the monitoring duration.

75. All the measures proposed within the technical chapters will be compiled and presented in a mitigation and monitoring schedule (to be presented as a separate chapter within the ES).
76. It is anticipated that any required demolition and construction related environmental management / mitigation and monitoring measures would be secured and controlled through an appropriate Construction Environmental Management Plan (CEMP) (or equivalent) and it is proposed that this would be secured via planning condition(s) if permission is granted. Key mitigation and management controls that would form part of a CEMP will be presented in the ES to help define the policies, procedures and management framework for the implementation of any identified specific environmental management and mitigation controls and monitoring.

Completed Development

77. The ES will present a description of the Proposed Development in order to provide suitable context to enable the assessment of potential and likely significant environmental effects. Enough information on the Proposed Development, in terms of the key aspects, will be presented to allow an understanding of the development being proposed, in order to enable the assessment of potential and likely significant environmental effects of the completed and operational development. Any assumptions made will be clearly presented in the narrative.

Approach to the Assessment of Detailed Part of the Proposed Development

78. The Proposed Development will be applied for under a hybrid planning application.
79. In respect of the part of the Proposed Development that will be applied for in detail, the assessments contained with the Environmental Statement will be based on detailed design information including but not limited to: fixed area schedules, floor plans, layouts, elevations and massing. Where this detailed information is available and provides the basis of technical assessments within the ES, this will be stated.

Approach to the Assessment of Outline Parts of the Proposed Development

80. The technical studies of the massing (layout and height) parameters of the Proposed Development (i.e. wind microclimate, townscape and visual impacts, built heritage and daylight, sunlight and overshadowing) will provide a quantitative assessment of the likely environmental effects of the maximum scale and layout parameters sought for approval, as per the Parameter Plans and taking into consideration any controls as presented in a 3D massing model.
81. In terms of the noise and air quality assessments (as they relate to changes in road traffic), ground conditions and archaeology the EIA will assess the maximum amount of development across the mix of uses sought for approval as a worst-case scenario. For these topics, the maximum parameters for the amount of development sought for approval represent the worst-case scenario, as a greater area of development means a greater disturbance and redevelopment of existing land on site.
82. In terms of traffic and transport related effects, the upper limits on the amount of development sought for approval represents the worst case, as a greater amount of floorspace or number of residential units for example leads to a higher trip generation (for all modes of transport). Although still to be confirmed at this stage of the project programme, a combination of retail, office and leisure facilities (Use Class E) are anticipated to be provided by the outline parts of the Proposed Development. The assessment of traffic from these uses will consider a mix of these uses, based on what is currently anticipated to be provided by the completed Proposed Development at this stage, and where possible taking into account a higher quantum of trip generating uses to present a realistic worst-case approach. Consideration will also be given to the net trips generated on site by the Proposed Development, accounting for the existing residents and businesses on site.

83. In terms of air quality and noise and vibration, the EIA will firstly use the worst-case scenario trip generation as identified in the traffic and transport modelled assessment data. Secondly the EIA will assess the maximum amount of floorspace as this presents the worst-case scenario for the Energy Strategy, as a greater floorspace will represent the highest energy demands and therefore the maximum plant strategy and maximum anticipated emissions. The Energy Strategy is still to be confirmed at this stage in the project programme. Should on site emitting plant not be required (i.e. because clean/ green energy sources will be used), the assessment of emissions will be scoped out of the air quality ES chapter.
84. In terms of socio-economics, the EIA will firstly assess the maximum amount of development across the mix of uses sought for approval. However, there are likely to be components of this assessment where a lower amount of floorspace presents the worst-case scenario, for example in terms of job generating floorspace. Where this is the case, a sensitivity test will be applied to demonstrate the likely socio-economic effects of a lesser amount of development coming forward. This approach will also be taken when assessing the quantum of development that falls under Use Class E, where confirmation of the exact nature of the end uses within this use class cannot be provided.
85. In terms of the residential component of the development, the socio-economics assessment will assess a unit mix which represents the maximum amount of residential development that is sought for approval. This will represent the worst case in terms of demand for social infrastructure, such as General Practitioners (GPs), primary and secondary schools, and open and play spaces.

Phasing of the Proposed Development

86. As appropriate to the topic in question, the technical chapters of the ES will address the phased delivery of the Proposed Development. The construction sequencing and phased occupation of the Proposed Development is evolving as the design progresses, and where appropriate, the assessments will take into account any temporary effects on sensitive receptors during this interim stage. The approach to this will be clearly set out in the ES.

The Format of the Planning Application

87. Recognising the nature of the planning application as being a hybrid planning application, with respect to the outline parts, the following 'reserved matters' will not be given in the application:
- **Access;**
 - **Scale.**
 - **Layout;**
 - **Appearance;** and
 - **Landscaping.**
88. In addition, the outline parts of the Proposed Development (like the detailed parts) will seek approval for an 'amount of development'. This is the quantum (amount) of floorspace proposed for each use class; in some cases, flexibility across a range of uses classes maybe sought.
89. In respect of the Applicant's planning application for the Proposed Development:
- An 'Amount of Development' across a range of uses classes is sought for approval. This represents either a fixed quantum of development for a land use or an 'up to' or 'maximum' amount of development that could come forward across a range of uses classes;
 - The detailed part (see above) – None of the above 'matters' are reserved for this phase, because detailed planning permission will be sought and will include full design details relating to scale, layout, appearance and landscaping; and
 - The outline part (see above) – Reserved matters relating to the access, scale, layout, appearance and landscaping for this phase are reserved for subsequent approval.

90. Following the grant of the outline (where relevant) planning permission, subsequent 'Reserved Matters Applications' will need to be made to the LBTH to agree the design details that have been 'reserved' for later approval by the Applicant and the LBTH under the outline planning permission. The 'Reserved Matters Applications' will constitute 'subsequent applications'.
91. The combination of the Parameter Plans and the design guidelines and development specifications will provide the upper (maximum) building limits and establish a 3-dimensional building envelope within which the detailed design of buildings can come forward through the submission of reserved matters applications.
92. The technical assessments will ensure that a realistic worst-case scenario, based on the parameters applied for, is assessed. This will be clearly set out in each chapter of the ES.
93. In relation to the scale and layout dependent studies of the EIA, the 3-dimensional envelope tested is the upper limit (maximum extent) of development in terms of scale and layout or in relation to a building-based parameter. The maximum permissible development (in terms of scale and layout or "massing") is generally considered to represent a reasonable worst-case scenario as a larger development massing leads to, for example, increased view obstruction, greater overshadowing or daylight / sunlight reductions.

Key Planning Application Documents

94. This ES, will be based on a number of key planning application documents that will define and describe the Proposed Development (in relation to the 'matters' set out above), as follows:
- Development Specification – which will define and describe the principal components of the Proposed Development. It will include information associated with the amount of development and the proposed use classes of the Proposed Development.
 - Detailed Plans, Sections and Elevations relating to the detailed part of the Proposed Development;
 - Parameter Plans – a set of plans which will provide outline parameters associated with the scale, layout, appearance and amount of development for the outline part of the Proposed Development;
 - Access and Circulation Plans – a set of plans which will define the hierarchy of routes into and across the site for different vehicles types as well as details associated with access arrangements;
 - Design Guide - guidelines associated with layout, scale, appearance and landscaping of the outline elements.
 - Design and Access Statement – this document will explain the design rationale, vision and objectives for the Proposed Development.
95. In addition, details relating to any proposed highway works and the anticipated phasing of the Proposed Development will be presented in a suite of appropriate plans / drawings.
96. The documents described above will present the details of the Proposed Development that are sought for planning permission and will explain and justify the design intent and principles of the outline and detailed parts of the Proposed Development that are submitted for the Hybrid planning application at this stage. For the outline parts they will also provide the parameters and guidelines that will dictate the final form of these components of the Proposed Development within which design details will be approved at a later date through applications for the approval of reserved matters.
97. Where proposed uses fall under Use Class E, consideration will be given as to whether any of these uses can be excluded from the assessment within the ES. Where certainty can be given over the end uses within this Use Class, the assessment will be completed on this basis. Where certainty cannot be given, a reasonable worst case scenario will be assumed and assessed within the ES.

Cumulative Effects and Effect Interactions

98. The EIA will identify the potential for (a) Cumulative Effects and (b) Effect Interactions which are described below.

Cumulative Effects

99. The cumulative assessment will be based on the information available on the Council's planning register. Generally, the schemes to be included within the cumulative effects assessment will either have:
- Full planning consent, or have a resolution to grant consent located within 1km of the site; and
 - Produce an uplift of more than 10,000 square meters GEA of mixed-use floorspace or, provide over 150 residential units located within 1km of the site; or
 - Is an office to residential conversions (granted under the General Permitted Development Order) giving rise to over 150 residential units located within 1km of the site.
100. By applying an initial screening exercise to the surrounding development schemes, the cumulative effects assessment of the EIA becomes more focused on the larger schemes (i.e. those with the potential to interact in a cumulative manner).
101. A preliminary list of cumulative schemes for consideration within the EIA has been identified and is presented in **Appendix C** of this EIA Scoping Report. As part of this EIA scoping process, the LBTH (and other consultees, as relevant) are invited to comment on the proposed cumulative schemes, so that the list of cumulative schemes can be agreed,
102. Each technical chapter of the ES will consider the potential for cumulative effects associated with the schemes identified for inclusion within the cumulative effects assessment. Each technical ES Chapter will be clear on the cumulative schemes that have been considered within the cumulative effects assessment.
103. Cumulative schemes that are under construction at the time of the EIA, where the construction works are significantly progressed or where early phases are occupied, will be included in the baseline of the massing-based technical assessments as completed schemes, rather than included in the cumulative assessment for these topics (e.g. daylight/sunlight, wind).

Effect Interactions

104. Effect interactions occur as interactions between effects associated with just one project, i.e. the combination of individual effects arising as a result of the Proposed Development, for example effects in relation to noise, airborne dust or traffic on a single receptor.
105. Effect Interactions from the Proposed Development itself on particular receptors at the site and within the surrounds will be considered during the demolition and construction works and also once the Proposed Development is completed and operational. Dependent on the relevant sensitive receptors, the assessment will focus either on key individual receptors or on groups considered to be most sensitive to potential effect interactions. Based on the definitions of what negligible effects comprise for each of the technical assessments, these do not warrant further consideration in relation to cumulative effects and therefore will not be pulled through into the assessment of effect interactions. Only residual effects described as minor and above will therefore be considered in the assessment of effect interactions.
106. There is no established methodology for assessing the impact of cumulative effects on a particular receptor. The interaction of a combination of individual effects would be determined to be either 'not significant' or 'significant', a scale of the combined effects (minor, moderate or major) would not be applied. If one of the individual effects is significant the combination of effects would be regarded as 'significant'. If none of the individual effects are significant, consideration will be given as to whether or not the combination of many not significant effects could result in a combined significant effect, based on professional opinion.

107. Consideration of effect interactions will be presented within the ES in a separate chapter (i.e. Effect Interactions (Volume 1)).

Reasonable Alternatives

108. In addition, the EIA Regulations require (Schedule 4) that the ES provides "a description of the reasonable alternatives [...] relevant to the proposed project and its specific characteristics" which have been considered by the Applicant and "an indication of the main reasons for selecting the chosen option, including comparison of environmental effects".
109. The ES will discuss any relevant and reasonable alternatives considered and if relevant, include a qualitative comparison of their environmental effects. The chapter will also describe the evolution of the Proposed Development, and key modifications made during the design process. Environmental considerations which have influenced this process will be discussed. Matters that will be considered in terms of design evolution include land uses, layout, building heights and massing. The preferred design alternative, culminating with the Proposed Development being sought for approval, will be discussed.
110. This information will be presented within a specific chapter titled, **ES Volume 1, Chapter 3: Reasonable Alternatives and Design Evolution**.
111. The summary of the design evolution will also consider the initial microclimate analysis undertaken on the evolving scheme, including daylight and sunlight analysis and initial wind design reviews, which are currently underway, (design modifications as a result of this upfront testing will be summarised in **ES Volume 1, Chapter 3: Reasonable Alternatives and Design Evolution**).

DETERMINING EFFECT SIGNIFICANCE – TERMINOLOGY AND APPROACH

Reference to 'Impact' and 'Effect'

112. It is noted that the terms 'impact' and 'effect' are distinctly different. Having gained an understanding of the likely impact it is then important to know whether the change in environmental or socio-economic conditions results in a significant environmental effect. The impacts of the Proposed Development may or may not result in significant effects on the environment, depending on the sensitivity of the receptor and possible other factors (such as duration). The assessment of the likely significant effects of the development is a requirement identified by Schedule 4 of the EIA Regulations.

Receptor Sensitivity and Magnitude of Impact

113. To achieve a consistent approach across the different technical disciplines addressed within the ES (Volume 1), assessments will broadly define the sensitivity of the receptors that could be affected by the Proposed Development and the magnitude of impact or change from the baseline conditions in order to derive the resultant effect. Technical specialists will use their own approach or amend the approach stated below based on what is appropriate for their assessments.
114. Terminology to describe the sensitivity of receptors and magnitude of impact or change from the baseline conditions is broadly as follows:
- High;
 - Medium;
 - Low; or
 - Negligible.
115. Where there is no impact/change, no assessment will be required due to there being no potential for significant effects.

116. Each of the technical assessment chapters of the ES (Volume 1) will provide further detail on the definition of each of the above terms specific to the topic in question and will also provide the criteria, including sources and justifications, for quantifying the different levels of receptor sensitivity and 'impact magnitude'. Where possible, this will be based upon quantitative and accepted criteria (for example, national standards for air quality and noise), together with the use of value judgement and expert interpretation.

Identification of a Resultant Effect

117. The basis for determining the resultant effect generally takes into account the sensitivity of the receptor and magnitude of impact or change from the baseline conditions. A generic matrix that combines the sensitivity of the receptor and the magnitude of impact to identify the resultant effect is provided within Table 2.

Table 2 Resultant Effects

Receptor Sensitivity	Magnitude of Impact			
	High	Medium	Low	Negligible
High	Major	Major	Moderate	Minor
Medium	Major	Moderate	Minor	Negligible
Low	Moderate	Minor	Negligible	Negligible
Negligible	Minor	Negligible	Negligible	Negligible

Effect Scale

118. The categories and definitions of the 'scale' of the resultant effect (i.e. definitions of Major, Moderate, Minor and Negligible effects) will be set out in each technical chapter of the ES and adjusted to suit the technical topic in question, where relevant; where this is the case revised definitions of effect scale will be presented in the technical assessment chapters of the ES (Volume 1) and in ES Volume 2.

119. Where there is no impact to a receptor and therefore no effect, this will be stated.

Effect Nature

120. Table 3 provides definitions of the 'nature' of the resultant effect i.e. definitions of Adverse and Beneficial.

Table 3 Definition of the Nature of the Resultant Effect

Type of Effect	Description
Adverse	Detrimental or negative effects to an environmental / socio-economic resource or receptor. The quality of the environment is diminished or harmed.
Neutral	The quality of the environment is preserved or sustained or there is an equal balance of adverse and beneficial effects.
Beneficial	Advantageous or positive effect to an environmental / socio-economic resource or receptor. The quality of the environment is enhanced.

Geographic Extent of Effect

121. The ES (Volumes 1 and 2) will identify the geographic extent of the identified effects. At a spatial level, 'site' or 'local' effects are those affecting the site and neighbouring receptors, while effects upon receptors in LBTH beyond the vicinity of the site and its neighbours are considered to be at a 'district / borough' level. Effects affecting Greater London are considered to be at a 'regional' level, whilst those which affect different parts of the country, or England as a whole, are considered being at a 'national' level.

Effect Duration

122. For the purposes of the ES, effects that are generated as a result of the demolition and construction works (i.e. those that last for this set period of time) will be classed as 'temporary'; these maybe further

classified as either 'short term' or 'medium-term' effects depending on the duration of the demolition and construction works that generate the effect in question. Effects that result from the completed and operational phases of the Proposed Development will be classed as 'permanent' or 'long-term' effects.

Direct and Indirect Effects

123. The ES will identify whether the effect is 'direct' (i.e. resulting without any intervening factors) or 'indirect' or 'secondary' (i.e. not directly caused or resulting from something else).

Effect Significance

124. Following identification of an effect, the effect scale, nature, geographic extent and duration using the above summarised terminology, a clear statement will then be made within the ES as to whether the effect is significant or not significant. As a general rule, the following applies:

- 'Moderate' or 'major' effects are deemed to be 'significant'.
- 'Minor' effects are considered to be 'not significant', although they may be a matter of local concern; and
- 'Negligible' effects are considered to be 'not significant' and not a matter of local concern.

125. Where mitigation measures are identified to either eliminate or reduce likely significant adverse effects, these will be incorporated into the Proposed Development, for example either through the design, or will be translated into demolition and construction commitments; or operational or managerial standards / procedures.

126. The ES will then highlight the 'residual' likely significant effects (those effects which remain following the implementation of suitable mitigation measures) and classifies these in accordance with the terminology defined above.

TOPICS TO BE SCOPED IN

Air Quality

Introduction

127. Entran Ltd will undertake an air quality assessment, to determine the potential effects of the Proposed Development.
128. This chapter will consider the impact of the Proposed Development on air quality, in terms of impact on existing and new receptors. The proposed development will generate additional traffic on the local road network, which could impact on air quality at existing properties. There is also the potential for dust generated during construction works to impact upon nearby sensitive receptors.
129. An air quality assessment is therefore **SCOPED IN** to the EIA.

Baseline

130. The London Borough of Tower Hamlets declared a Borough wide Air Quality Management Area (AQMA) in 2000, due to exceedances of the air quality objectives for nitrogen dioxide (NO₂) and particulate matter (as PM₁₀). Consequently, the Proposed Development site falls within the designated AQMA.
131. The site is located in an area where air quality is mainly influenced by road transport using the A12/A102 Blackwell Tunnel Northern Approach and the A13 East India Dock Road, which border the site to the west and south.
132. There are no industrial pollution sources in the immediate vicinity of the site that will influence the local air quality.

Potential Effects

133. The potential for significant effects as a result of the demolition and construction as well as the operation of the Proposed Development will be addressed in the assessment by considering the following:
- Potential temporary increase in dust generated by on-site activities during the construction phase of the Proposed Development;
 - Potential increase in PM₁₀ concentrations generated by on-site activities during the site preparation, demolition, earthworks and construction phase of the Proposed Development;
 - Potential increase in air pollutants (NO₂ and PM₁₀) generated from construction plant and vehicle exhaust emissions during the site preparation, earthworks and construction phase of the Proposed Development; and
 - Potential change in pollutant concentrations (notably NO₂, PM₁₀ and PM_{2.5}) due to exhaust emissions from road traffic and an energy centre / CHP (where one is proposed) generated during the operational phase of the Proposed Development.

Potentially Sensitive Receptors

134. Human receptors have the potential to be affected by dust and PM₁₀ generated during the construction phase as well as from emissions from construction traffic. During the operational phase, existing human receptors have the potential to be affected by emissions from road traffic generated by the Proposed Development. Additionally, exposure of future occupants to the existing pollutant concentrations and the suitability of the site for its proposed end use will be considered.
135. There are no ecological designated sites within the vicinity of the Proposed Development or on the roads leading away from the site. As such, impacts on ecological receptors are unlikely to be considered significant and will not be considered further within the EIA or reported in the ES.

Demolition and Construction

136. Demolition and construction related impacts will be examined. This will involve a review of the proposed works and related traffic data during the various phases of the development to identify any potentially adverse effects at nearby sensitive receptors. The construction assessment will be carried out in-line with the Institute for Air Quality Management (IAQM) Guidance.

Completed Development

137. The air quality assessment will be undertaken using detailed dispersion modelling (ADMS Roads) for road traffic emissions. The assessment will take account of all relevant national and local policies and relevant Defra technical guidance relating to air quality.
138. The road traffic assessment will focus on NO₂, PM₁₀ and PM_{2.5} and a comparison of predicted concentrations with the statutory air quality standards and objectives. The significance of predicted impacts will be determined in accordance with the Environmental Protection UK (EPUK) and IAQM Planning Guidance.
139. The extent of the assessment of the traffic related air quality impacts will be determined by the extent of the Transport Assessment as agreed with the relevant bodies. It is anticipated that this will cover the local road network and any roads predicted to experience significant changes in flow.
140. The ADMS Roads modelling will be verified against existing monitoring data for the area. In addition, air quality monitoring for nitrogen dioxide (using diffusion tubes) will be undertaken at the site in order to provide further confidence in the modelled predictions. This monitoring will be carried out over a minimum period of three months.
141. An Air Quality Neutral Assessment will be undertaken in accordance with guidance provided in support of the Mayor's policy on Air Quality Neutral developments, prepared by Air Quality Consultants Ltd.
142. Detailed air quality dispersion modelling of any energy centre / CHP plant will be undertaken, if required.
143. The assessment will also take account of the New London Plan and will consider how local air quality can be improved across the area of the proposal as part of an air quality positive approach.

Cumulative Effects

144. The potential cumulative effects of the Proposed Development when considered in combination with the Cumulative Schemes (**Appendix C**) with planning permission, will be assessed in accordance with the methodologies set out above. Cumulative schemes will also be considered as future receptors within the assessment.

Climate Change

145. Greengage will undertake a climate change resilience assessment and greenhouse gas (GHG) assessment, to determine the potential effects of the Proposed Development.
146. A climate change resilience assessment and greenhouse gas (GHG) assessment are therefore **SCOPED IN** to the EIA.
147. This chapter will consider:
- The climate change resilience of the Proposed Development;
 - Any in-combination climate impacts associated with the Proposed Development whereby climate change events alter the significance of environmental effects identified in other technical areas; and
 - The impact of the Proposed Development on climate change.

Baseline

148. The United Kingdom’s Climate Impact Programme (UKCIP) highlights the key climate projections over the next 60+ years and summarises these as follows:

- Summers will become hotter and drier;
- Winters will become milder and wetter;
- Soils will become drier on average;
- Snowfall and the number of very cold days will decrease;
- Sea levels will rise; and
- Storms, heavy and extreme rainfall, and extreme winds will become more frequent.

149. Future climate projections under UKCP18 for the 25 km Grid Cell (537500, 187500) are in Table 4 for 2040, 2070 and 2099. This Grid Cell covers the area in which the site is located. The high emission scenario RCP8.5 was used and projections for the 50th percentile is displayed. The wider range shows the range of projections for RCP8.5 5th percentile to 95th percentile under each climate variable. These projections within Table 4 indicate the changes in temperature and precipitation for the projected years.

Table 4 UKCP18 Future Climate Change Projections Relative to the 1981-2000 Baseline Period under RCP8.5

Climate Variable	Predicted Change from Baseline Period 1981-2000					
	2040		2070		2099	
	RCP8.5 (50 th Percentile)	Wider Range (5 th to 95 th Percentile)	RCP8.5 (50 th Percentile)	Wider Range (5 th to 95 th Percentile)	RCP8.5 (50 th Percentile)	Wider Range (5 th to 95 th Percentile)
Mean Air Temperature Anomaly at 1.5m (°C)						
Annual Average	+1.4 °C	-0.3 – +2.9 °C	+3 °C	0.2 – +5.4 °C	+5.0 °C	0.7 – +8.1 °C
Winter Average	+1.4 °C	-1.1 – +3.7 °C	+2.5 °C	-0.7 – +5.4 °C	+4.2 °C	-0.2 – +7.8 °C
Spring Average	+0.9 °C	-1.0 – +2.7 °C	+2.1 °C	-0.7 – +4.5 °C	+3.5 °C	-0.2 – +6.4 °C
Summer Average	+1.5 °C	-1.4 – +4.2 °C	+4.1 °C	-0.6 – +8.1 °C	+6.8 °C	0.5 – +11.7 °C
Autumn Average	+1.5 °C	-0.9 – +3.7 °C	+3.2 °C	-0.2 – +6.2 °C	+5.1 °C	0.1 – +9.0 °C
Maximum Air Temperature Anomaly at 1.5m (°C)						
Annual Average	+1.5 °C	-0.5 – +3.3 °C	+3.3 °C	-0.1 – +5.9 °C	+5.3 °C	0.5 – +8.8 °C
Winter Average	+1.4 °C	-1 – +3.7 °C	+2.5 °C	-0.6 – +5.1 °C	+3.9 °C	-0.3 – +7.2 °C
Spring Average	+1.2 °C	-1.2 – +3.4 °C	+2.5 °C	-0.9 – +5.3 °C	+4.0 °C	-0.4 – +7.6 °C
Summer Average	+1.7 °C	-2.1 – +5.3 °C	+4.7 °C	-1.2 – +9.8 °C	+7.8 °C	-0.1 – +14.2 °C
Autumn Average	+1.7 °C	-1.1 – +4.4 °C	+3.4 °C	-0.8 – +7.2 °C	+5.3 °C	-0.7 – +10.3 °C
Minimum Air Temperature Anomaly at 1.5m (°C)						
Annual Average	+1.3 °C	-0.4 – +2.9 °C	+2.9 °C	0.0 – +5.4 °C	+4.9 °C	+0.5 – +8.4 °C
Winter Average	+1.3 °C	-1.2 – +3.9 °C	+2.6 °C	-0.8 – +5.8 °C	+4.3 °C	-0.3 – +8.5 °C
Spring Average	+1.1 °C	-1.0 – +3.1 °C	+2.2 °C	-0.7 – +4.8 °C	+3.7 °C	-0.3 – +7.0 °C
Summer Average	+1.5 °C	-0.7 – +3.5 °C	+3.7 °C	-0.1 – +7.0 °C	+6.3 °C	+0.7 – +10.6 °C
Autumn Average	+1.4 °C	-1.0 – +3.7 °C	+3.2 °C	-0.4 – +6.4 °C	+5.2 °C	-0.2 – +9.7 °C
Precipitation Rate Anomaly (%)						
Annual Average	+0%	-20 – +27%	-3%	-26 – +29%	-6%	-25 – +25%

Climate Variable	Predicted Change from Baseline Period 1981-2000					
	2040		2070		2099	
	RCP8.5 (50 th Percentile)	Wider Range (5 th to 95 th Percentile)	RCP8.5 (50 th Percentile)	Wider Range (5 th to 95 th Percentile)	RCP8.5 (50 th Percentile)	Wider Range (5 th to 95 th Percentile)
Winter Average	+12%	-32 – +58%	+20%	-32 – +72%	+27%	-34 – +91%
Spring Average	-4%	-44 – +45%	-3%	-45 – +48%	-9%	-52 – +42%
Summer Average	-13%	-70 – +62%	-40%	-87 – +44%	-48%	-82 – +28%
Autumn Average	-1%	-44 – +46%	0%	-41 – +51%	+4%	-42 – +59%

Potential Effects

150. The potential for significant effects as a result of the operation of the Proposed Development will be addressed in the climate change resilience assessment by considering:

- Overheating (due to increased average temperatures, heatwaves and the urban heat island effect);
- Increased flood risk;
- Water shortage and drought; and
- Extreme weather events.

151. In addition, the climate change resilience assessment will include a qualitative assessment of all likely significant potential in-combination climate impacts.

152. During the construction and operation of the Proposed Development, potentially significant sources of greenhouse gases could include:

- Embodied carbon emissions from construction materials and activities;
- Operational energy emissions; and
- Operational transport emissions.

Potential Sensitive Receptors

153. For the climate change resilience assessment the following potentially sensitive receptors will be considered:

- The human health of future occupants as a result of overheating;
- Infrastructure receptors; and
- Landscaping receptors.

154. For the assessment of in-combination climate impacts, receptors will be identified based on those assessed in other technical areas.

155. For the GHG assessment, there is no specific sensitive receptor as such given that all GHG emissions have an infinitesimal but significant impact on the climate change system as a whole.

Scope of Assessment

156. The assessment will follow guidance within the:

- Institute of Environmental Management and Assessment (IEMA) Environmental Impact Assessment (EIA) Guide to Climate Change Resilience and Adaptation (2020);
- IEMA EIA Guide to Assessing Greenhouse Gas Emissions and Evaluating their Significance (2017);
- BREEAM 2018 assessment criteria Waste 05 Adaptation to Climate Change; and

- RICS Whole Life Cycle Carbon Assessment for the Built Environment Guidance (2017).

Demolition and Construction

157. The GHG assessment will consider the GHG emissions arising from the Proposed Development during the demolition and construction phase relating to construction activities and materials.
158. The assessment of construction materials will be informed by the Whole Life-Cycle Carbon Assessment which will be prepared in accordance with the RICS Whole Life Cycle Carbon Assessment for the Built Environment Guidance (2017).

Completed Development

159. The scope of climate change resilience assessment will include:
- Overheating (due to increased average temperatures, heatwaves and the urban heat island effect);
 - Increased flood risk;
 - Water shortage and drought;
 - Extreme weather events; and
 - All relevant in combination climate impacts.
160. For the climate change resilience assessment, the methodology will include a risk-based assessment that considers the resilience of the proposed development to future climate change risks. For the purpose of this assessment, the study area will be the redline boundary.
161. The climate change resilience assessment applied to the proposed development will cover the following stages:
- Defining the future climate baseline;
 - Identifying and determining the sensitivity of receptors to climate change;
 - Reviewing and determining the magnitude of effect;
 - Determination of significance; and
 - Developing additional adaptation including adaptive management for significant risks.

162. The assessment will establish the climatic data surrounding current seasonal temperatures and precipitation for the operational lifespan of the proposed development. This data will be used to analyse the current climate and compare these findings, in relation to the Proposed Development, to the high emission (RCP 8.5) climate change projections identified in the UK Climate Change Projections 2018 (UKCP18).

163. The assessment will consider the risk posed by these hazards on relevant receptors. The risk evaluation stage will consider the sensitivity of these receptors along with the magnitude and likelihood of climate change effects in order to evaluate the significance of climate change impacts.

164. The GHG assessment will consider the GHG emissions arising from the Proposed Development during operation relating to operational energy emissions and operational transport emissions. Operational transport emissions will be approximated based on relevant BEIS emission factors.

Cumulative Effects

165. For Climate Change, it is not considered proportionate to provide a detailed assessment accounting for all proposed developments in the area that may have a cumulative effect with the proposed development due to the global nature of climate change and the fact that the effects will not occur within a defined boundary. The emissions that each scheme makes will have some effect on climate change, but it will be

a proportionally very small amount.

Daylight, Sunlight, Overshadowing, Light Pollution and Solar Glare

166. GIA will undertake a daylight, sunlight, overshadowing and solar glare assessment, to determine the potential effects of the Proposed Development.
167. A daylight, sunlight, overshadowing and solar glare assessment is therefore **SCOPED IN** to the EIA.
168. This chapter will consider the potential for likely significant effects as a result of the Proposed Development on daylight, sunlight and overshadowing to existing, neighbouring residential properties, as well as existing open space and public amenity areas. Given the proximity of sensitive viewpoints to the site, a solar glare assessment will be undertaken.
169. Given the residential nature of the Proposed Development, it is not likely to comprise highly glazed areas emitting artificial light at night which would cause significant light pollution effects and therefore this topic **SCOPED OUT** of the EIA.

Baseline

Daylight / Sunlight

170. For the baseline, the daylight and sunlight conditions within each of the relevant surrounding sensitive receptors will be defined firstly under the existing site conditions by reference to the Vertical Sky Component (VSC), No-Sky Line (NSL) and Annual Probable Sunlight Hours (APSH) methods. Any emerging sensitive developments under construction will be assessed using the Average Daylight Factor (ADF) method.

Overshadowing

171. With regards to the relevant existing surrounding outdoor amenity areas and the baseline level of overshadowing, the transient overshadowing (TOS) methods will be used. Where significant effects are considered likely, the Sun Hours on Ground method will be adopted.

172. The daylight, sunlight and overshadowing effects of the Proposed Development will then be assessed against this baseline condition.

Solar glare

173. Solar glare is not a comparative assessment; the fact it may occur in the baseline does not necessarily justify its occurrence as a result of the Proposed Development. Consequently, the assessment will consider the effect of the Proposed Development in absolute terms using professional judgement.

Potential Effects

174. The potential daylight, sunlight, overshadowing, solar glare and light pollution effects associated with the Proposed Development are considered to be as follows (and as relevant to the scope of the assessment in terms of receptors identified above):

- Changes to the daylight and sunlight amenity within surrounding residential properties and other properties identified which have a reasonable expectation to natural light because of the demolition and construction works;
- Changes to overshadowing of surrounding outdoor amenity spaces because of the demolition and construction works;
- The potential for solar glare effects on sensitive viewpoints surrounding road users because of the Proposed Development during construction works;

- Changes to the daylight and sunlight amenity to surrounding residential properties and other properties identified which have a reasonable expectation to natural light as a result of the Proposed Development once complete;
- Changes to overshadowing of surrounding outdoor amenity spaces as a result of the Proposed Development once complete; and
- The potential for solar glare effects on sensitive viewpoints surrounding road users because of the Proposed Development once complete.

Potential Sensitive Receptors

Daylight and Sunlight Receptors

175. Residential receptors identified on nearby roads/streets that are considered sensitive in relation to daylight and sunlight and will therefore be included within the assessments. Educational facilities may also be considered sensitive to changes in daylight and sunlight and therefore will be included in the assessment. Therefore, the following sensitive receptors include but are not limited to:

- Existing residential properties along Abbott's Road;
- Existing residential properties along Darnaway Place;
- Existing residential properties along Leven Road;
- Existing residential properties along Kirkmichael Road;
- Existing residential properties along Aberfeldy Road;
- Existing residential properties along Joshua Street;
- Existing residential properties along Mills Grove;
- Existing residential properties along St Leonards Road;
- Carndale House;
- Balfroon Tower;
- Residential Components of Phases 1-3 of Aberfeldy Masterplan (Aberfeldy Village); and
- Existing Culloden Primary School.

Overshadowing Receptors

176. Areas of amenity space are considered most sensitive to overshadowing effects resulting from the Proposed Development. Owing to the southerly location of the sun path, only open space areas located from north west through to north east of the site require consideration in relation to overshadowing. Therefore, the following sensitive receptors include but are not limited to public and private open amenity spaces surrounding the site.

Solar Glare Receptors

177. Solar glare assessments consider potentially sensitive viewpoints for road users and train drivers surrounding the site. The viewpoints will generally be located at the minimum stopping distance and at the driver's eye level with the focal point being a relevant traffic element, such as signals or incoming traffic.

178. Solar glare assessments are undertaken where the façade detailing is known and the potential for reflections occur on areas of glazed materials. Only the south eastern blocks are proposed in detail, however, at this stage the façade detailing is unknown. Viewpoints within approximately 500m of the site, where the Proposed Development is visible within the drivers field of view will be assessed. At distances greater than 500m from the Proposed Development, instances of solar glare would be unlikely to occur. Given the close proximity of the railway line from Kentish Town station in relation to the Proposed

Development, viewpoints along this railway line may need be assessed.

Scope of Assessment

179. The assessments will be carried out in accordance with the Building Research Establishment (BRE) Guidelines: Site Layout Planning for Daylight and Sunlight 2011, A Guide to Good Practice, Second Edition 2011¹⁴. The analysis will be undertaken with a 3D computer model constructed using specialist software.

Demolition and Construction

180. Owing to the evolving and changing nature of demolition and construction activities, the assessment of potential effects during demolition and construction of the Proposed Development on daylight, sunlight and overshadowing to surrounding properties will not be modelled. Instead, a qualitative assessment will be undertaken using professional judgement, with the worst-case scenario in terms of the effects quantitatively modelled and analysed through the assessment of the completed Proposed Development (see below for further details).

Completed Development

Daylight / Sunlight

181. In line with the BRE Guidelines, both the VSC and NSL assessments will be undertaken for the Proposed Development for the relevant sensitive receptors identified above. ADF will be applied to emerging sensitive developments either under construction or consented and the internal layouts are known.

182. The sunlight amenity to the surrounding relevant receptors will be considered by reference to the APSH method of assessment. Due to the southerly rotation of the sun, this assessment will consider those windows which face the site and are located within 90 degrees of due south.

183. The nature (beneficial or adverse), scale (negligible, minor, moderate or major) and ultimately the significance of daylight and sunlight amenity effects will be determined using professional judgement and by reference to Appendix I of the BRE Guidelines.

Overshadowing

184. The overshadowing analysis on the surrounding areas of amenity space will be undertaken by reference to the TOS and Sun Hours on Ground method of assessment.

185. For the TOS assessment, the path of shadow will be mapped for the Proposed Development on the following dates as suggested by the BRE Guidelines:

- 21st March (Spring Equinox);
- 21st June (Summer Solstice); and
- 21st December (Winter Solstice).

186. The nature (beneficial or adverse), scale (negligible, minor, moderate or major) and ultimately the significance of overshadowing effects will be determined using professional judgement.

187. Additionally, owing to the proximity of private rear gardens surrounding the site and the potential significant impacts arising from the Proposed Development, a Sun Hours on Ground assessment will be undertaken to confirm and quantify any effect on 21st March, as recommended by the BRE Guidelines. The Sun Hours on Ground assessment will consider the proportion of a designated amenity space which receives 2 hours of direct sunlight on 21st March.

¹⁴ British Research Establishment, 2011. Guidelines: Site Layout Planning for Daylight and Sunlight, A Guide to Good Practice, Second Edition.

188. Considering the above, the nature, scale and ultimate significance of overshadowing effects will be determined using professional judgement and by reference to the BRE Guidelines.

Solar Glare

189. The BRE guidelines provide that '*glare or solar dazzle can occur when sunlight is reflected from a façade or area of metal cladding*'. This is considered an issue in relation to road users whereby an instance of reflection can obscure the view of traffic signals and thus have the potential to cause an accident.

190. Owing to the proximity of sensitive viewpoints and reflection portions of the façade design of the Proposed Development, a solar glare assessment will be undertaken.

191. Road junctions and the railway line are sensitive in relation to solar glare as instances of reflection may obscure the view of traffic signals or temporarily blind drivers and thus result in accidents.

192. The assessment of solar glare identifies the time of the day and year that solar reflections will be visible from the assessed viewpoints, as well as their relationship to a driver's line of sight. The assessment does not however, measure the intensity of the reflection, but merely the occurrence and duration.

193. The nature (adverse), scale (negligible, minor, moderate or major) and ultimately the significance of solar glare effects will be determined using professional judgement and taking into consideration the duration of solar reflections, location of these in relation to a driver's line of sight and the probability of these occurring.

Cumulative Effects

194. The potential cumulative effects of the Proposed Development when considered in combination with the Cumulative Schemes (**Appendix C**) with planning permission, will be assessed depending on their distance from the site, scale and planning status.

Internal Daylight, Sunlight and Overshadowing

195. Daylight and sunlight availability within the newly proposed residential units and within the newly created public realm within the site is dependent on the design of the Proposed Development, and is a design consideration, rather than an EIA issue. As there is no baseline scenario to assess or compare with, the assessment of internal daylight and sunlight condition within the proposed residential units and the quality of the onsite amenity areas (from overshadowing) within the site will not form part of the EIA. These matters will be presented as a separate standalone report which will be prepared and submitted in support of the planning application.

Noise and Vibration

Introduction

196. Entran will undertake a noise and vibration assessment to determine the potential effects of the Proposed Development on existing and proposed receptors, with the noise effects assessed against the most appropriate available national standards and guidelines. Consideration will be given to any relevant local authority guidance, standards or policies.

197. A noise and vibration assessment is **SCOPED IN** to the EIA.

Baseline

198. The current ambient noise environment is dominated by road traffic on the A12 and East India Dock Road, which bound the site to the west and south, respectively.

199. Baseline noise levels will be obtained by unattended noise surveys, which will be undertaken during daytime and night-time periods and in accordance with the principles of BS 7445:2003.

Potential Effects

200. Potential impacts from the construction and operational phases of the Proposed Development will be addressed.

201. The following key impacts will be addressed:

- changes in noise levels at existing sensitive receptors as a result of traffic and plant noise generated by the Proposed Development during demolition/construction and operation; and
- suitability of the proposed site uses in relation to the noise environment.

Potential Sensitive Receptors

202. Existing residential receptors on the surrounding road links may be subject to impacts from construction noise levels, likely increase in road traffic flows, and proposed commercial plant noise.

203. Noise impacts at the future residential occupants of the Proposed Development, from road traffic and proposed commercial plant, will be assessed to ensure suitable noise levels can be attained.

Scope of Assessment

204. Existing background noise levels will need to be established by measurement in order to assess the effects of the Proposed Development. This will be carried out in locations representative of the nearby residential dwellings, over both the day and night time periods.

205. Ambient noise conditions will be considered using a combination of unattended measurements and computer noise modelling. Noise parameters, such as $L_{Aeq,T}$, $L_{A90,T}$, $L_{A10,T}$ and $L_{Amax,F}$ will be monitored and the relevant values obtained for the standard measurement periods.

206. The results from the noise monitoring will be used as a basis to assess the likely impact from the Proposed Development.

207. Legislation and guidance documents to be used in the assessment will include:

- BS 8233:2014: Sound Insulation and Noise Reduction for Buildings - Code of Practice;
- BS 5288-1:2009+A1:2014, Code of Practice for noise & vibration control on construction & open sites;
- World Health Organisation - Guidelines for Community Noise 2000, and subsequent WHO guidance;
- The Calculation of Road Traffic Noise (CRTN) and the Design Manual for Roads and Bridges (DMRB);
- BS 4142:2014+A1:2019: Methods for rating and assessing industrial and commercial sound; and
- The Institute of Environmental Management and Assessment (IEMA) Guidelines for Environmental Noise Impact Assessment (2014).

Demolition and Construction

208. Likely impacts from the construction phase will be calculated based on noise levels pertaining to typical construction activities and the likely distances between these activities and the nearby existing residential receptors. Construction noise levels will be considered against the target construction noise criterion of 75 dB $L_{Aeq,16hr}$, provided within BS 5228.

209. The likelihood of impacts from construction vibration will be considered against typical distances at which vibration from construction activities may be perceptible.

Completed Development

210. The existing ambient environment will be calculated across the existing site by use of a computer noise

model, which will be calibrated against the obtained ambient noise data. The Proposed Development will be modelled in order to understand the propagation across the proposed residential dwellings.

211. The calculated ambient noise levels will be assessed in accordance with the guidance provided by BS 8233 and other relevant standards. Maximum noise levels overlooking road sources will be considered using the measured noise data, and assessed against the guideline value provided by the WHO Guidelines for Community Noise.
212. The change in road traffic noise levels on the surrounding road network will be assessed based on the baseline and proposed 18-hour AAWT road traffic data. The noise change, in dB, will be calculated using the procedure set out in CRTN and the magnitude of impact assessed using the methodology provided in Volume 11 of the DMRB.

Cumulative Effects

213. The potential cumulative effects of the Proposed Development when considered in combination with the Cumulative Schemes (**Appendix C**), will be assessed.

Health

214. The potential health impacts of a new development are largely determined by the way newly proposed buildings and spaces are used, as well as lifestyle factors which cannot be accurately quantified at the planning stage. However, appropriate design and planning can play a role within the wider determinants of health and well-being, including provision of good quality work space, employment, amenity and leisure infrastructure, ease of access to different forms of transport, etc.
215. The EIA Regulations requires that the EIA must *'[...] identify, describe and assess in an appropriate manner [...] the significant effects of the proposed development [in terms of] - human health, [...]'* (Regulation 4(2) and Schedule 4(4)).
216. The effects of the Proposed Development on human health (both direct and indirect) will be considered to an extent through a number of individual assessments that comprise the ES, including the following:
- **Socio Economics** – This shall consider the provision of public realm, open space and place space to benefit both future users and visitors to the site, as well as the wider community.
 - **Traffic and Transport** – This shall consider the impact of the Proposed Development on existing and future road users, in terms of driver delay, and delays to cyclists and their amenity. The assessment also takes account of pedestrians along the surrounding road network, in terms of delays, their amenity, fear and intimidation; their potential for severance from places and other people; and with regard to the risk for accidents and their safety. The assessment will also include the impacts and resultant effects as a result of the creation of any new footpaths, roads and increased connectivity to the surrounding transport networks.
 - **Air Quality** – This shall directly consider the potential impact on human health (both receptors external to the site, and for future occupants) in terms of air quality, in the form of dust generated during the enabling and construction works, and from introduced sources associated with the Proposed Development, including transport emissions when operational.
 - **Noise and Vibration** – This shall indirectly consider the impact of the Proposed Development on human health from noise and vibration - particularly the effect of change in noise and vibration levels at high sensitive receptor locations (i.e. residential) within the surrounding local area and to users of the Proposed Development and proposed new outdoor amenity areas.
 - **Geoenvironmental** – A Geoenvironmental Desk Study is included in **Appendix F**. This has been prepared to identify potential land quality (and associated human health and environmental) risks and constraints associated with the Proposed Development. In particular, the report assesses the potential risk of contaminated land on human health based on a 'source-pathway-receptor' analysis - for a risk to be present, there must be a viable contaminant

linkage; i.e., a mechanism whereby a source impacts on a sensitive receptor via a pathway. Receptors considered include – human health (future site users); site neighbours; and construction workers.

- **Flood Risk Assessment** – Shall be prepared to identify the susceptibility of the land being redeveloped to flooding and the risk to future occupants of the site and ensuring the safe development and secure future occupancy of the site. It is a requirement for development to address the threat of flooding and manage accordingly to ensure that the development is and remains safe throughout its lifetime (i.e. it has an appropriate degree of protection) and does not increase flood risk elsewhere (i.e. to other vulnerable uses).
217. In addition, it is proposed that for the period of demolition and construction works, a Construction Environmental Management Plan (CEMP) would be prepared in advance of works commencing on-site to manage the potential impacts from the works and subsequent construction of the Proposed Development. The CEMP would include key matters relating to health impact including public safety, and amenity and site security.
218. HUDU¹⁵ has a published healthy urban planning checklist which is a desktop assessment tool aimed to 'mainstream' health into the planning process. A Health Impact Assessment (HIA) will be undertaken and submitted with the planning application, to demonstrate that health and wellbeing considerations have been adequately addressed within the Proposed Development. Given the scale and nature of the scheme, it is considered that a detailed assessment would be appropriate. The HIA will be undertaken in line with LBTH's policy D.SG3, the LBTH HIA Assessment Guidance (October 2020) as well as the Rapid Health Impact Assessment Toolkit published by the Healthy Urban Development Unit (HUDU) and will be proportionate to the Proposed Development that is being considered.
219. The HIA will cover a wide range of health determinants and will largely be a qualitative assessment, rather than quantitative but where possible, the HIA will draw on the assessments of effects presented within the technical chapters ES of relevance including the Socio-economics ES Chapter.
220. The HUDU tool is the most widely accepted methodology for considering impacts of proposed schemes on health and the output does not conform to an EIA assessment format which concludes on the significance of potential effects. The HIA will therefore be submitted as a standalone report with the planning application and will provide sufficient information on the potential health impacts of the Proposed Development for LBTH to determine the planning application.
221. A discussion on the scope of the HIA has been undertaken with the LBTH HIA Officer in May 2021. The HIA submitted will be undertaken in accordance with this discussion.
222. Human Health is therefore considered within each of the aforementioned ES chapters intrinsically as part of the technical assessments and therefore it is not considered necessary to include a separate ES Chapter on human health is listed above, the topic of health is scoped out of the EIA.

Socio Economics

Introduction

223. The socio-economic ES assessment will be undertaken, and the chapter will be prepared, by Hatch Associated Ltd.
224. This ES chapter will include an assessment of the likely socio-economic effects, (including employment, housing and aspects of human health including social infrastructure, crime, deprivation and social cohesion of the Proposed Development associated with both the demolition/construction phase and completed Proposed Development (i.e. operational phase).

¹⁵ <https://www.healthyrbandevelopment.nhs.uk/our-services/delivering-healthy-urban-development/hudu-model/>

225. This topic is to be **SCOPED IN** to the EIA.

Baseline Conditions

226. The baseline socio-economic assessment will address the baseline conditions at the following geographical scales:

- The site;
- A Local Impact Area (LIA) area - which encompasses the Poplar Riverside Housing Zone (PRHZ) as identified in the London Plan (local) (see Figure 5 below);
- The London Borough of Tower Hamlets (LBTH) (borough); and
- Greater London (regional).

Figure 5 Local Impact Area (LIA)



227. In addition, the baseline analysis for education and healthcare facilities will be based on appropriately defined catchment areas for primary and secondary schools and primary healthcare facilities. These include:

- Primary Healthcare Facilities – GP surgeries located within one-mile of the Proposed Development based on advice from the Healthy Urban Development Unit (HUDU)¹⁶;
- Early-Years Facilities – located within the ‘mini cluster’ in which the Proposed Development is located based on LBTH’s Childcare Sufficiency Assessment;

¹⁶ 1 mile has been applied as a proxy catchment area for GP surgeries based on consultation with the CCG and NHS London HUDU. In practice each surgery will operate its own catchment distance depending on the size of the local population.

- Primary Schools – located within two-miles¹⁷ of the Proposed Development and Tower Hamlet’s Primary School Catchment Area 3 as defined by LBTH¹⁸;
- Secondary Schools – located within Tower Hamlets;
- Open Spaces – based on London Plan guidance:
 - < 400m small open spaces, pocket parks and local parks;
 - < 1.2km district parks;
 - < 3.2km metropolitan parks; and
 - Between 3.2km to 8km for regional parks.
- Children’s Play Spaces – based on London Plan guidance available in Play and Informal Recreation SPG:
 - <100m walking distance (or 60m buffer) for local areas for play (LAPs) to be used by under five-year olds;
 - <400m walking distance (or 240m buffer) for local equipped area for play (LEAPs) to be used by five- to 11-year-olds; and
 - <1km walking distance (or 600m buffer) for neighbourhood equipped areas for play (NEAPs) to be used by children aged 12-years and over.

228. The relevant detailed socio-economic baseline conditions will be assessed using established statistical sources such as the Office for National Statistics (ONS), Business Register and Employment Survey (BRES), Annual Business Inquiry (ABI) and Annual Population Survey (APS)¹⁹. This will be supplemented with any relevant data held by LBTH Council, the Greater London Authority (GLA) and the client team. Where necessary, consultation will be undertaken with Tower Hamlets Council (LBTH), the Education Department and Clinical Care Commissioning Group to test the findings in relation to the baseline position.

229. Full details of the methodology including all sources and references will be provided as part of the ES chapter itself. In addition, the ES chapter will detail which geographical scales will be relevant for which indicator and why.

230. Key baseline indicators will include:

- Population: The existing population in the LIA and borough including the age structure, ethnicity and proportion of working age population. There are currently 324,745²⁰ residents in the LBTH, of which 73% are of working age. This is above the London average (67%). The LIA has a relatively high proportion of the population who classify as Asian British.
- Employment: Current employment sustained on the site itself, in the LIA and at borough level, including detail on the type of employment by sector and occupation where available. Data for the LIA (local) geography shows that there were currently around 9,000 jobs in 2019, the most recent employment data available from BRES²¹. There were 309,000 jobs in LBTH (2019), although this does not include all self-employment.
- Gross Value Added (GVA): This is a measure of the value of goods and services produced in an area, by an industry or individual business. It will be estimated for the site in its current use based on benchmark GVA per full time equivalent (FTE) jobs using ONS Gross Value-Added

¹⁷ Section 444(5) of the Education Act 1996 suggests a maximum walking distance of 2 miles (3.2 km) for a child who is under the age of eight. This is used as the upper bound for determining eligibility for free school transport. As this guidance applies to children under the age of eight, the distance of 2 miles (3.2 km) is used to assess primary provision

¹⁸ Planning for School Places 2018/19 Review, LBTH

¹⁹ These sources are available via www.nomis.web.uk

²⁰ ONS midyear population estimates

²¹ Business Register and Employment Survey, 2019, www.nomis.web.uk, accessed November 2020

statistics²² and from the same sources for the LIA, LBTH and London. Current GVA in the LBTH is recorded at £33 billion in 2018, the latest year for which the data is available. These GVA statistics will provide the baseline against which additional GVA generated by the Proposed Development would be assessed.

- Education: Existing capacity of early years (within ward), primary (within 2 miles and Primary School Catchment Area 3) and secondary school places (borough) based on analysis of data from the Department for Education as well as a review of evidence from the LBTH local education department. This will provide the baseline against which the additional demand for education facilities will be assessed.
- Healthcare: Existing capacity of GP facilities within 1m of the site based on a review of data on from the NHS and Clinical Commissioning Group (CCG). This will provide the baseline against which additional demand for GP facilities generated by the Proposed Development would be assessed.
- Deprivation: The LIA's ranking in terms of overall Index of Multiple Deprivation (IMD) will be considered, alongside relevant domain such as crime, access to housing and environmental barriers. Recent IMD data (2019) suggests the majority of the LIA is amongst the 20% most deprived neighbourhoods in the UK.
- Crime: Analysis of overall crime rates per head of population for the LIA based on data from the Metropolitan Policer Service data dashboard. Tower Hamlets has a current crime rate of 216 per 1,000 population.
- Open space and children's play space: Existing provision of open space and children's play space based on appropriate spatial catchments from the site according to GLA and LBTH standards.

Potential Sensitive Receptors

231. The Proposed Development will deliver housing, new commercial floorspace including office, workspace, retail and community and leisure uses, and will include provision open space and children's play space. It will generate population and new jobs within the LBTH, additional GVA, impacts on the demand for education, healthcare and open space provisions as well as changing and increasing the stock of commercial floorspace including smaller and flexible workspaces.
232. The selection of receptors that could be subject to effects has been informed by the initial baseline analysis presented above, as well as consideration of evidence on socio-economic effects associated with the demolition, construction and operation of similar developments; these include:
- Existing population and labour market characteristics including proportion of working age population;
 - Residents seeking new housing (including private and affordable housing) within the borough;
 - Existing total employment and employment within the construction sector;
 - The size, diversity and prosperity of the local economy as measured by direct, indirect and induced employment, economic output (i.e. gross value added (GVA)) and household expenditure;
 - Existing provision of commercial floorspace;
 - Residents using or seeking educational facilities including Early Years, Primary and Secondary facilities;
 - Residents using or seeking primary healthcare facilities;
 - Residents experiencing crime, deprivation or issues related to social cohesion; and

²² <https://www.ons.gov.uk/economy/grossvalueaddedgva>

- Residents using open space provisions (children's play space and private and communal open space).

Potential Effects

233. The potential for significant effects as a result of the demolition and construction as well as the operation of the Proposed Development will be addressed in the assessment by considering the following:

Temporary:

- Loss of existing employment and residential accommodation; and
- The generation of temporary employment opportunities during the demolition and construction phase.

Permanent:

- The creation of any net additional long-term employment opportunities from the proposed commercial uses of the Proposed Development;
- The economic effect of additional GVA and expenditure in the surrounding area resulting from additional employees and residents;
- The provision of new commercial floorspace;
- The provision of new homes and the contribution of the new homes, including affordable homes, to local policy housing targets;
- Implications of the site's new residential population for early years, primary and secondary school places;
- Implications of the site's new residential population upon primary healthcare facilities;
- Implications of the site's new residential population on crime, deprivation and social cohesion; and
- Implications of the site's new residential population upon open space provisions including children's play space.

Scope of Assessment

234. In the absence of statutory guidance and formal methodologies for assessing socio-economic effects, the assessment of the Proposed Development will be based on widely recognised methods for quantifying the impacts of mixed-use developments. As far as possible, the likely significant socio-economic effects will be quantified, but where this is not feasible a qualitative assessment will be provided based on professional judgement and experience.
235. There is no statutory technical guidance for the assessment of the scale and nature of socio-economic effects; the likely significant effects of the Proposed Development on the sensitive receptors identified will therefore be based on professional judgement and consider the following factors:
- The sensitivity of each receptor affected (as discussed above and in **Table 1** below); and
 - The magnitude of change to the receptor brought about by impacts of the Proposed Development (see **Table 2** below).
236. The sensitivity of each receptor will be evaluated as being high, medium, low or negligible based on a review of the baseline position and its performance against benchmark areas, together with consideration of the importance of the receptor in policy terms (**Table 1**).

Table 1: Socio-Economics – Definition of Receptor Sensitivity

Sensitivity of Receptor	Description
High	Evidence of direct and significant socio-economic challenges relating to the receptor.

Sensitivity of Receptor	Description
	May be given high priority in local, regional and/ or national economic and regeneration policy.
Medium	Some evidence of socio-economic challenges linked to the receptor, some of which may be indirect. Change relating to receptor has medium priority in local, regional and national economic and regeneration policy.
Low	There is little evidence of socio-economic challenges related to the receptor. Receptor is given low priority in local, regional and national economic and regeneration policy.
Negligible	Very low importance and rarity, with little or no priority identified for the receptor at the local, regional and national scales.

237. The magnitude of change (or 'impact') to a receptor will be determined by considering the estimated deviation from baseline conditions once measures aimed at mitigating the Proposed Development's adverse impacts are considered. The criteria used for the assessment of the magnitude of socio-economic impacts (i.e. both beneficial and adverse) are set out in **Table 2**.

Table 2: Socio-Economics – Definition of Magnitude of Impact

Magnitude of Impact	Description
High	Proposed Development would cause a large change – judged as beneficial or adverse – to baseline socio-economic conditions in terms of absolute and/ or percentage change.
Medium	Proposed Development would cause a moderate change – judged as beneficial or adverse – to the existing socio-economic conditions in terms of absolute and/ or percentage change.
Low	Proposed Development would cause a slight change – judged as beneficial or adverse – to existing socio-economic conditions in terms of absolute and/ or percentage change.
Negligible	No discernible change, either way, in baseline socio-economic conditions.

238. In reporting the likely scale of the effects of the Proposed Development, with respect to both construction (i.e. demolition of current uses and construction) and operation, the assessment will contextualise both the sensitivity of the receptor and magnitude of impacts / change identified above, using a combination of data and a review of relevant policies relating to the specific issues (for example, job creation or commercial development) and the area (for example, Poplar Riverside Housing Zone).

239. The matrix used to determine the scale of the socio-economic effects on a receptor is presented in **Table 3**. The nature of the effects will be defined as:

- Beneficial (i.e. an advantageous effect on the impact area); or
- Adverse (i.e. detrimental effect on the impact area).

Table 3: Matrix used to Determine Scale of Effect

Receptor Sensitivity	Magnitude of Impact			
	High	Medium	Low	Negligible
High	Major	Major	Moderate	Minor
Medium	Major	Moderate	Minor	Negligible
Low	Moderate	Minor	Minor	Negligible
Negligible	Minor	Minor	Negligible	Negligible

Those effects assessed as “moderate” and “major” are considered to be significant, and those assessed as “minor” and “negligible” are considered to be not significant.

240. The overall proposed methodology will include:

- Review of local, regional, national policy, plans and development constraints in so far as they influence the baseline conditions; judgements about the sensitivity of receptors; the

assessment methodology or justification of a specific socio-economic effect described in the socio-economic assessment; and

- A full review of baseline conditions for areas described in the baseline section above. This will be assessed using recognised data sources principally from the ONS but drawing where appropriate on evidence from the LBTH and GLA.

Demolition and Construction

- Quantification of any existing on-site Full Time Equivalent (FTE) jobs lost as a result of the Proposed Development. These will be based on information provided by the Applicant if available. In the absence of information, existing employment will be estimated using existing floorspace schedules and relevant employment densities based on the Homes and Communities Agency's (HCA) Employment Density Guide²³; and
- An estimation of the FTE jobs generated during the demolition/construction phase. This will use data on construction spend estimates and use Communities and Local Government (CLG) / Offpat Labour co-efficient ratios to derive estimates of the likely number of temporary construction workers per annum during the construction phase.

Complete and Operational

- An estimation and quantification of the FTE jobs created by the completed and operational Proposed Development. On-site jobs will be estimated using established employment density ratios. Off-site jobs will be estimated using standard HCA Additionality Guide multipliers²⁴;
- An estimation of the new residential site population will be made based on the proposed mix of units applied to existing average household sizes within the local area. The child yield arising from the Proposed Development will be calculated based on the Greater London Authority's (GLA) Population Yield Calculator²⁵;
- An estimation of the additional expenditure created by the completed and operational Proposed Development. This will be based on data from the Family Expenditure Survey (FES);
- An appraisal of the likely effects of the Proposed Development's additional population on the capacity of existing early years provision and local primary and secondary schools, as well as the capacity of primary healthcare facilities, open space provision and children's play space. Where relevant, established standards for provision (e.g. per head of population) set out within local and GLA policy will be referred to;
- An appraisal of the likely effects of the Proposed Development's additional population on crime, deprivation and social-cohesion; and
- Identification of appropriate mitigation measures should any significant adverse effects be identified.

Cumulative Effects

An overall assessment of the potential cumulative effects of the Proposed Development when considered in combination with the Cumulative Schemes (**Appendix C**) with planning permission, will be quantitatively assessed based on available information across all of the impacts set out above

Townscape and Visual Impact Assessment

Introduction

241. The Townscape and Visual Impact Assessment ('TVIA') identifies the likely effects of the Proposed Development on townscape and visual amenity.

²³ Homes and Community Agency, Employment Density Guide, 3rd Edition, November 2015

²⁴ Homes and Community Agency, Additionality Guide, 4th Edition, 2014

²⁵ GLA Population Yield Calculator, October 2019, V3.2

242. This topic is to be **SCOPED IN** to the EIA.

Baseline Conditions

243. The site is located in an area known as Poplar Riverside, in LB Tower Hamlets. The irregular shaped masterplan area fronts Blackwall tunnel Northern Approach (A12) to the west; Nairn Street, Leven Road and Abbott Road to the east; Lochnagar Street and Leven Road to the north; and Blair Street and Dee Street to the south. East India Dock Road (A13) lies a short distance to the south of the site. The River Lea is also located nearby, lying less than 100m to the north-east of the site at its closest point.

The Site

244. The site is occupied by buildings that form part of the late-20th century Aberfeldy Estate, comprising low and medium rise housing blocks and terraces (2-4 floors), occupying the south-west corner of the site. The final component of the site is an outlier, lying just to the north of the main site, comprising a rectangular strip of vacant land and the playground of the former Bromley Hall School at Lochnagar Street. The site includes a Neighbourhood Centre, the focus of which is Aberfeldy Street, which provides local shops and services.

245. The site is urban in character, although those parts developed at lowest density are more suburban in nature. In terms of architectural quality, the built form is typical of its period and unexceptional in design terms. The various housing developments feel self-contained and inward-looking, which is partly a product of the oppressive local environment, defined by urban motorways. Away from these, the green spaces offer valuable respite. However, the high level of disconnectedness from the surrounding area, including the riverside, is to the detriment of the estate.

The Site's surroundings

246. The surrounding area is severed by transport corridors - both the A12 and A13, and also the River Lea, which is a barrier to east-west movement. The townscape is fragmented and as a whole undergoing wide scale regeneration. There are areas of industrial land, large areas of post-war housing estates, and areas of recently developed land, as well as pockets of historic or earlier development. The site's immediate heritage context includes the Balfron Tower (grade II*) and associated listed housing blocks that lie within the Balfron Conservation Area to the west, beyond the A12; as well as the grade II listed former Bromley Hall School, and Bromley Hall (grade II*) to the north. The recent and emerging context in the surrounding area comprises predominantly residential led schemes, many of which include at least one tall building.

Potentially Sensitive Receptors

Townscape

247. An assessment will be made of the site and surrounding townscape in their existing states. This will be based on a study of the historic development of the area with reference to relevant publications, and a study of the present-day condition of the area based on site visits, study of maps and aerial photographs, and relevant publications.

248. This analysis will inform the division of the study area into townscape character areas (TCAs) as receptors i.e. geographical areas which have readily identifiable characteristics in common. The impact of the Proposed Development on these TCAs will then be assessed, based on conclusions drawn from the views analysis. Above-ground heritage assets located within these TCAs are identified and also inform the sensitivity of these receptors.

Views

249. A study has been undertaken to establish a set of potential viewpoint locations from which 'before and after' views will be provided. The study area is centred on the site and limited to locations from which the site can be seen, or from which new buildings on the site would be seen at the maximum height proposed. The study area for local and medium range views extends to approximately 1km from the centre of the

site. The study area for long range views extends to approximately 4 km from the centre of the site, the approximate distance to Greenwich Park (LVMF 5A.1). This is considered an appropriate spatial extent in relation to the scale of development envisaged and the built-up nature of the surrounding context.

250. Within this study area, four principal types of viewing location are identified:

- Views that have been identified as significant, by the GLA, LBTH or others, e.g. in planning policy and guidance documents or conservation area appraisals;
- Other locations or views of particular sensitivity, including those viewpoints in which the Proposed Development may significantly affect the townscape settings of Heritage Assets (HAs) including listed buildings, conservation areas and World Heritage Sites;
- Representative townscape locations from which the Proposed Development will be visible; and
- Locations where there is extensive open space between the viewer and the Proposed Development so that it will be prominent rather than obscured by foreground buildings. This includes areas of open space that are important in a local context, e.g. for leisure purposes, such as the riverside paths.

251. The set of viewpoints has been chosen so that it covers:

- A representative range of viewpoints from different directions from which the Proposed Development will be visible;
- A range of distances from the site; and
- Different types of TCA.

252. Possible locations in these categories within the study area have been identified based on an examination of maps and aerial photographs; relevant documents (such as Conservation Area Appraisals); maps of conservation areas; maps and lists of listed buildings; and good prior knowledge of the area.

253. See **Appendix G** for the proposed set of viewpoints.

254. The study area and the possible locations were tested using VuCity²⁶ to verify candidate viewpoints.

255. The sensitivity of the receptor (as existing) will be assessed as high, medium or low, depending on the importance, value and quality of the view or TCA, and its susceptibility to change, taking into account the quality of the receptor, and the nature and expectation of the viewer.

256. The assessment of sensitivity will also take into account the presence of any designated HAs (listed buildings, conservation areas, registered parks and gardens of special historic interest) and non-designated HAs (locally listed buildings), and the amenity value of the viewing location and area in which it is located. The assessment of the sensitivity of the receptor under consideration will be moderated to take into account a judgement about its overall quality.

Potential Effects

Townscape and Visual

257. The magnitude of the impact resulting from the Proposed Development will be assessed as high, medium, low and very low according to the change.

258. The sensitivity of the receptor (view or TCA) and the magnitude of the impact is combined to provide a measure of the significance - major, moderate, minor, or negligible - of the effect on the receptor which will result from the Proposed Development, the most significant effects being effects of high magnitude

²⁶ VuCity is an interactive 3D digital model of London that enables users to test the visibility of proposals from chosen viewpoints around a given site.

on receptors of high sensitivity.

- 259.** The nature of the effects is also assessed qualitatively as beneficial, adverse, or neutral in respect of their effect on the view or townscape under consideration.
- 260.** The demolition of the existing buildings on the site, and the provision of new buildings as part of the Proposed Development would have the potential to alter the existing townscape character and quality of the site and the surrounding townscape study area. In addition, views to, from and through the site would also potentially be altered as a result of the Proposed Development. As such, the EIA will address the following potential townscape and visual impacts and likely effects:
- Temporary change in townscape character and visual effects during demolition and construction works;
 - Permanent changes to the character, context and quality of the site and the local townscape; and
 - Permanent changes to selected views.

Scope of Assessment

Townscape and Views

- 261.** Assessment of the impact of the Proposed Development on a receptor is made on the basis of professional judgment which takes into account relevant planning policies and guidance. It is based on the methodology set out in the 'Guidelines for Landscape and Visual Impact Assessment Third Edition' (GLVIA) (2013) supplemented by advice contained in the LVMF; and Historic England Advice Note 4: Tall Buildings (GPA4) (2015).
- 262.** The assessment considers how potential impacts would vary with seasonal change and changes in atmospheric conditions where applicable.
- 263.** For each of the identified views in the assessment to be produced, there are images of the view 'as existing' and 'as proposed'. 'As proposed' images are provided as 'Accurate Visual Representations' ('AVRs'). AVRs are provided either as rendered (photorealistic) images ('AVR3') or as 'wirelines' (diagrammatic representations showing the outline of the proposed development, 'AVR1').
- 264.** For each of the identified views, a description of the view as existing is given, identifying its visual quality, sensitivity to change and reason for that sensitivity. A description of the view as proposed is then given with an assessment, based on the method set out above, of the significance of the effect that the Proposed Development will have on the view.
- 265.** Effects during the demolition and construction programme are assessed in accordance with the methodology set out above. The townscape and visual effects of the demolition and construction process will vary in intensity across the programme, as is normal in any construction project. The assessment takes into account the temporary nature of the maximum effect with regard to each receptor.

Cumulative Effects

- 266.** An overall assessment of cumulative effects (i.e. the effect of the Proposed Development taking into account other committed developments) is also provided. The approach to cumulative assessment is to focus on the impact of the Proposed Development on top of the cumulative 'future baseline' formed by other committed developments (i.e. as if the committed developments were in place).
- 267.** As for the Proposed Development scenario, a description of the cumulative impact on the identified views will be provided, based on AVRs for this scenario.

Traffic and Transport

- 268.** Velocity Transport Planning will undertake a traffic and transport assessment, to determine the potential

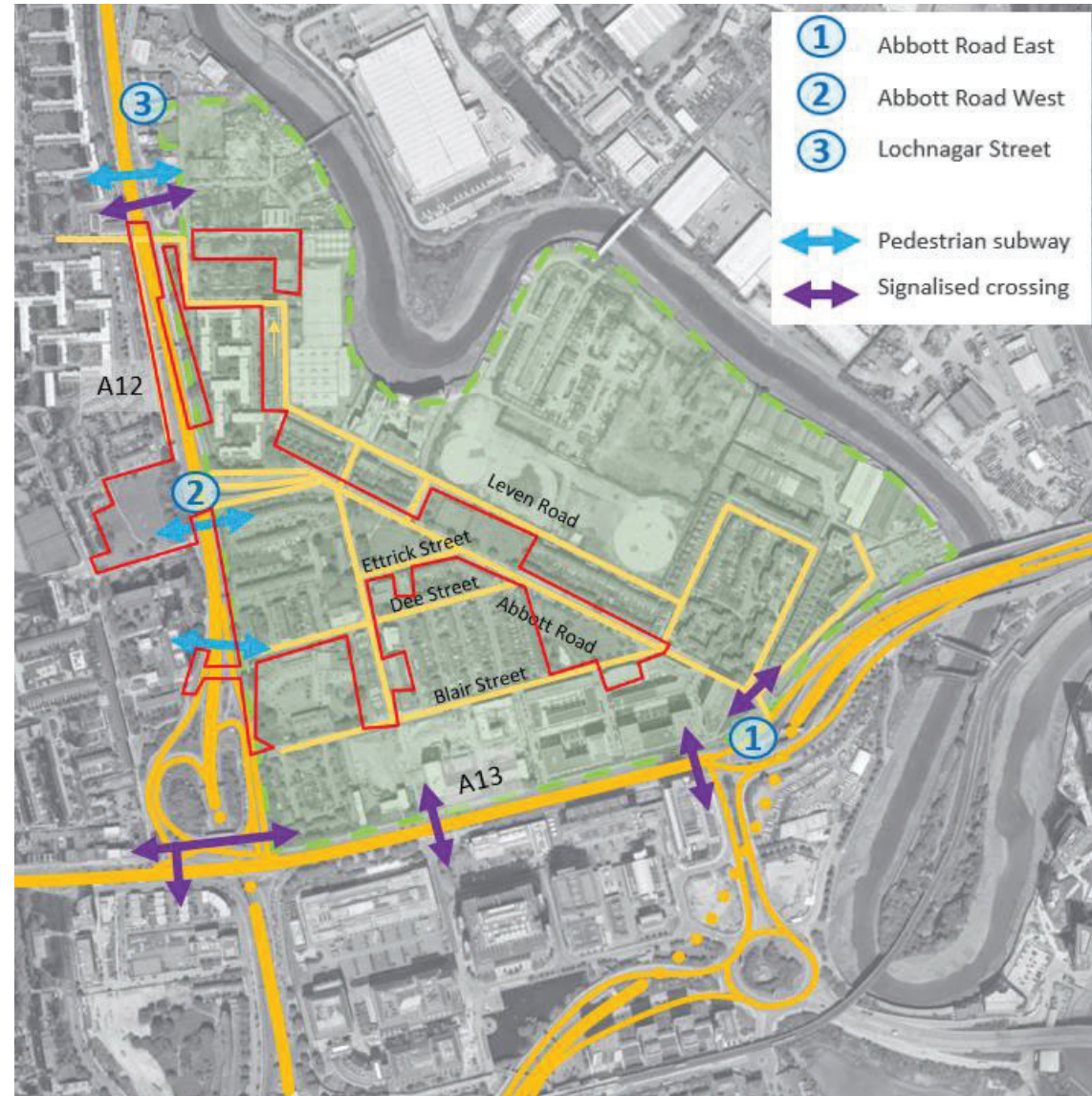
effects of the Proposed Development on the local road network, transport infrastructure and facilities, and access.

- 269.** Traffic and transport could potentially have significant effects as a result of the Proposed Development, and therefore will be scoped into the EIA.
- 270.** A separate Transport Assessment (TA) will be prepared by Velocity Transport Planning and submitted as a standalone document as part of the Planning Application. A Transport Assessment Scoping Report (TASR) and Strategic Modelling Scoping Report (SMSR) has been prepared and issued to LBTH and TfL and pre-application meetings have taken place. This has informed the scope of the EIA highways and transport assessment.

Baseline

- 271.** The site is located within the London Borough of Tower Hamlets (LBTH), which is the highways authority. Transport for London (TfL) is the highways authority responsible for the strategic road network, including the A12, which borders the site to the west.
- 272.** With the River Lea to the northeast, the site is located within a contained area (for ease this is referred to as the Aberfeldy Island) with three points of access, shown within Figure 6:
- Lochnagar Street, which forms a signalised junction with the A12 at the north of the site.
 - Abbott Road passes through the site and connects the A12 and A13. At its western end Abbott Road forms a junction with the A12 via a grade separated right turn onto the northbound A12 in the form of a vehicle underpass and a left-in left-out southbound A12 traffic.
 - At its eastern end Abbott Road forms a signalised junction with the A13. The access operates as left-in, left-out with the right turn entry movement being restricted to bus only.

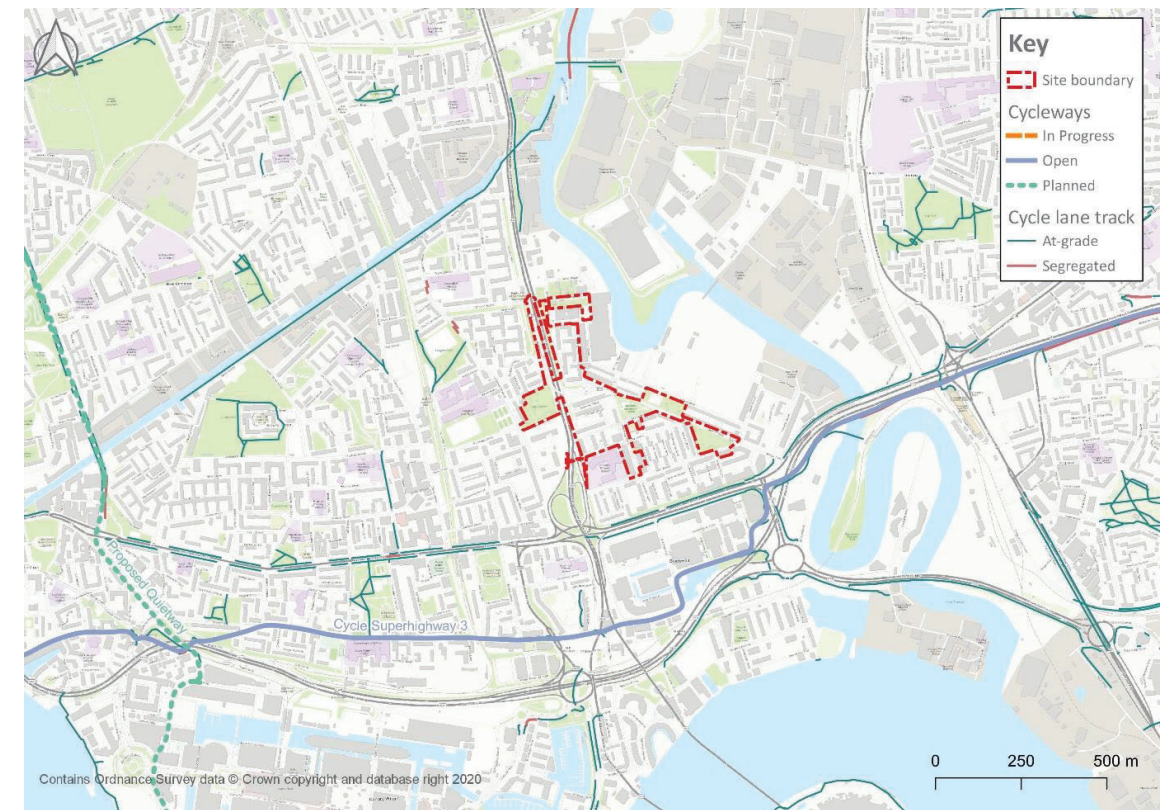
Figure 6 Existing Street Network and Key Accesses



- 273. Abbott Road forms junctions with Ettrick Street, Dee Street and Blair Street, which each provide access to the site.
- 274. The site comprises various private streets including Nairn Street, Balmore Close, Findhorn Street and part of Abbott Road (in front of Poplar Works).
- 275. The local street network within the site has an established network of footways typical of an urban environment that provide access to the nearby facilities, amenities and local bus stops. The A12 and A13 are strategic roads that carry high levels of vehicular traffic and form a barrier to walking and cycling movements. There are a number of subways and signalised crossings including:
 - A pedestrian subway underneath the A12 adjacent to the Abbott Road underpass.
 - A pedestrian subway underneath the A12 which connects to Dee Street.
 - A pedestrian subway underneath the A12 and a signalised crossing to the north of Lochnagar Street.
- 276. The existing cycle network is shown in Figure 7. Cycleway 3 forms the main strategic cycle route in the

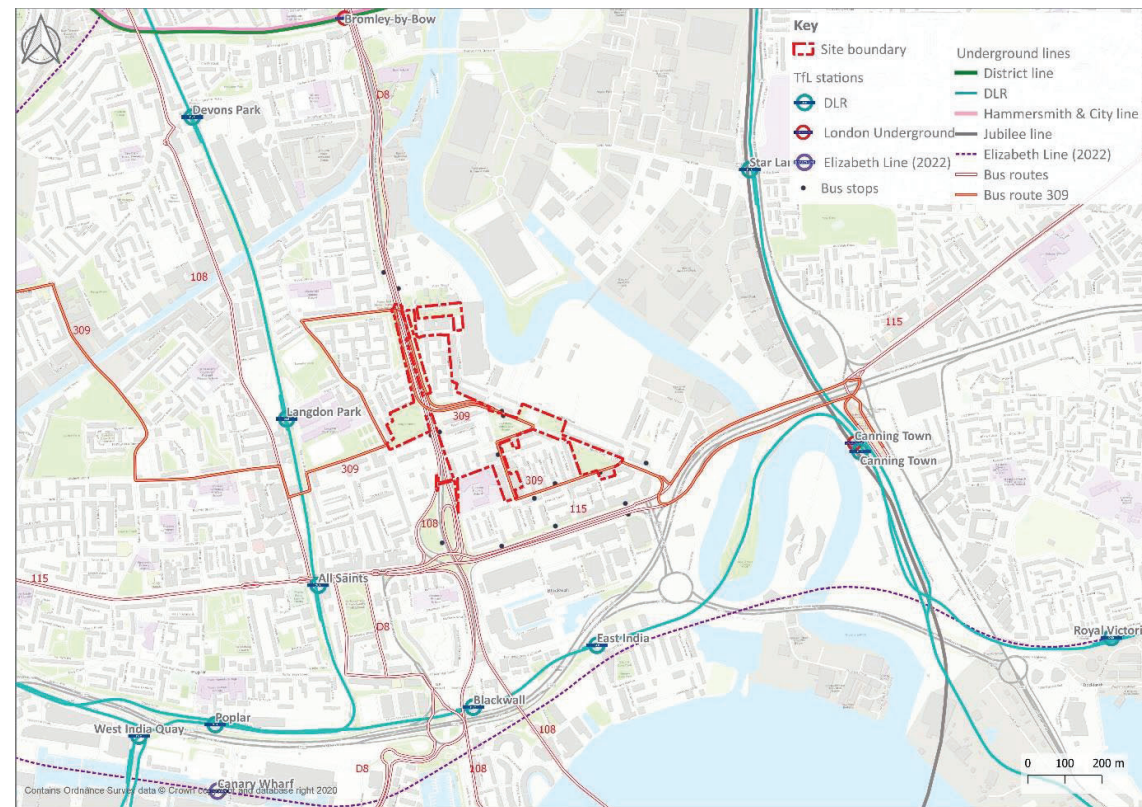
vicinity of the site and provides a connection into Central London.

Figure 7 Local Cycling Routes



- 277. The existing site PTAL rating ranges between 3 and 4 (moderate to good). The local public transport network is shown on Figure 8.
- 278. Bromley-by-Bow Station is located c.950m from the north of the site and is served by the London Underground (Hammersmith & City and District lines).
- 279. Langdon Park Station is located c.640m from the west of the site and East India Station is located 650m from the south of the site. Both stations provide access to Docklands Light Railway services.
- 280. Bus service 309 routes through the site and has five services per hour. A further three bus services (108, 115 and D8) can be accessed from the site within a 10 minute walk.

Figure 8 Public Transport Network



Potential Effects

281. The 'Guidelines for the Environmental Assessment of Road Traffic, IEMA,1993' set out a number of potential environmental effects which may require assessment. Those which relate to the Traffic and Transport chapter are summarised below.

- Severance;
- Delay;
- Amenity;
- Fear and Intimidation;
- Accidents and Safety; and
- Hazardous Loads.

282. Amenity and Fear and Intimidation can be considered together as they are strongly interrelated.

Potential Sensitive Receptors

283. The receptors which are considered within the assessment are those people making journeys within the study area and include:

- Pedestrians;
- Cyclists;
- Bus passengers;
- Rail / Underground / DLR passengers; and
- Car drivers.

Scope of Assessment

Baseline / Future Baseline Scenario

284. The scope of the assessment has been agreed with TfL. The agreement includes confirmation that the existing Baseline will not require assessment. Strategic modelling will be undertaken on the Future Baseline Scenario (Do Minimum). The results of the strategic modelling will inform the scope of local modelling. TfL will provide access to the London Highway Assignment Model (LoHAM) and a local Vissim model which provides the Future Baseline Scenario for 2031.

285. The Future Baseline Scenario (Do Minimum) includes any changes which are committed to take place to existing conditions by the future design year, described as the Evolution of the Baseline. In determining this scenario, the 'IEMA Guidelines for Environmental Impact Assessment, 2004' guidance sets out some context in section 10.3 as follows:

- "It is often assumed that the environmental baseline for a proposed development is necessarily the status quo... and use this as the baseline for assessment without any apparent consideration of whether this is wholly correct."
- "...The environmental baseline is constantly changing, irrespective of the development under consideration."
- "...It is because of these complications that it is important to establish a 'do nothing', future scenario as the environmental baseline. The 'do nothing' scenario comprises the predicted environmental conditions that would exist, in the absence of the particular development under consideration."
- "Establishing the 'do nothing' scenario raises the issue of making a choice as to what changes should be included or excluded from the future baseline..."
- "The determination of a future 'do nothing' scenario will rarely be an entirely objective, straightforward process. There may be uncertainty as to what future conditions, in the absence of the development, would be. Inevitably, judgements may have to be made based on certain assumptions..."

286. The nearby developments and changes which will be included in the baseline scenario will be agreed separately through the TA scoping discussions but are expected to include those near-by developments which have planning permission (or committee resolution to grant consent) and which the local planning authority and local highway authority reasonably expects will be constructed by the assessment year. TfL has confirmed that the Silvertown Tunnel scheme will form part of the future baseline scenario.

287. The changes to existing conditions arising as a result of committed developments (which will define the baseline scenario) will be taken from either the Transport Assessments supporting those schemes, data held and provided by the relevant highway authorities, by a first principles review or by any other methodology as may be agreed with the relevant highway authorities.

Proposed Development Scenario

288. The Development Assessment Scenario (Do Something) will assess the Proposed Development against the Future Baseline Scenario. The potential environmental effects during both construction and operation of the Proposed Development has been reviewed.

289. The potential environmental effects of the Proposed Development will be assessed through quantitative and qualitative assessment. Qualitative assessment will be undertaken through applying professional judgment to consider anticipated changes as a result of development in the context of prevailing baseline conditions. For each potential effect considered qualitatively, a judgement will be made as to the Sensitivity of each Receptor and the Magnitude of Change arising. This will then define the magnitude of Significance. Broadly, the magnitude of change for transport effects will be defined as follows:

- Negligible – changes which are unlikely to be perceptible;
- Small – changes which are likely to be perceptible but not the extent that it would materially change conditions which would otherwise prevail;
- Medium – changes which are likely to be perceptible and which would materially change conditions which would otherwise prevail to the extent that it may affect travel behaviour to a measurable degree; and
- Large – changes which are likely to be perceptible and which would significantly change conditions which would otherwise prevail to the extent that it would significantly affect travel behaviour.

290. A key aspiration of the scheme is to overcome severance created by the A12 and create new walking and cycling connectivity by re-purposing the Abbott Road vehicular underpass. This proposal would close the underpass to vehicles and make it an attractive walking and cycling connection that is integrated into new public realm. The left-in, left-out Abbott Road / A12 junction would be relocated to the north by extending Abbott Road along its historic alignment. This would allow the removal of the existing vehicle dominated environment on Abbott Road to be replaced by a new public realm and green space, which is proposed to be named Highland Place. The closure of the underpass to vehicles would result in traffic displacing. Traffic departing from the Aberfeldy Island would no longer be able to use the underpass and would use alternative routes.

291. The transport network (underpass) changes are being discussed with LBTH and TfL during transport scoping / pre-application meetings. A methodology for assessment is being agreed with TfL and the detailed traffic assessments which will be provided in the TA will inform the analysis set out within the ES transport chapter.

292. The technical scope for each of the potential environmental effects is discussed individually below setting out whether the effects are scoped in or scoped out and the basis for that judgement.

Severance

293. The usual threshold for a non-negligible severance effect is a 30% change in vehicle flow or HGV flow on a link. This can be used as a benchmark when considering whether or not severance should be scoped in or scoped out. This can also be used to inform the extent of any assessment.

294. During demolition and construction, the Proposed Development is expected to generate less than 100 vehicles per day at the peak of construction activity, which is not expected to result in changes which would affect perceptions of severance. In line with planning requirements a Construction Logistics Plan (CLP) would be secured to manage routing and arrival profile of construction vehicles to minimise disruption to the surrounding area.

295. Construction vehicles are expected to arrive at the site using the A12 and A13, part of the Strategic Road Network which is already carrying high volumes of HGVs. Therefore, the Proposed Development is not expected to exceed the 30% threshold for vehicle or HGV flow along the A12 or A13. Construction vehicles will also use local streets for access, primarily Lochnagar Street, Abbott Road and Blair Street. These roads have lower levels of existing traffic, and the construction traffic may have a perceptible effect in terms of severance. Severance is therefore scoped in for the construction phase assessment for Abbott Road, Lochnagar Street and Blair Street.

296. While the traffic generation associated with the operational Proposed Development would not generate a perceptible change to severance, the proposed re-purposing of the underpass has the potential to change existing traffic flows by a perceptible amount (>30%). Severance is therefore scoped in for the operational phase assessment.

Delay

297. The 'IEMA, 1993' guidance makes reference to potential delays to drivers and to pedestrians. Users of other modes can also experience delays, such as cyclists and those travelling by public transport.

Pedestrian and Cyclist Delay

298. Pedestrian and cyclist delay may change as a result of layout changes including new and modified streets; changes to volumes; or where new facilities such as crossings are provided. Pedestrian and cyclist delay will be assessed based on professional judgment.

299. During demolition and construction, the Proposed Development is not expected to result in changes which could affect perceptions of pedestrian and cyclist delay. If off-site construction works are required, the CLP will manage the implementation of these to maintain pedestrian and cycle routes where possible and mitigate delay if a diversion is required. On this basis the assessment of impacts on pedestrian and cyclist delay is scoped out for demolition and construction.

300. The Proposed Development would result in some perceptible beneficial effects in terms of pedestrian and cyclist delay during operation. The proposed re-purposing of the underpass for walking and cycling would reduce journey times. These benefits may be significant, and the assessment of operational impacts on pedestrian and cyclist delay is therefore scoped in. A qualitative assessment of delay will be undertaken through applying professional judgment.

Vehicle and Bus Delay

301. Vehicle and bus delay may change as a result of street layout changes, modifications to junctions, changes to traffic volumes and speeds and the introduction of pedestrian/cyclist crossings. Vehicle and bus delay will be assessed using traffic and junction modelling which will forecast delays that may be experienced by vehicles. The scope of strategic modelling has been agreed with TfL through transport scoping discussions. The scope of the local modelling is being agreed with TfL and LBTH through scoping discussions.

302. During demolition and construction, the Proposed Development is not expected to result in changes which would significantly affect perceptions of driver/bus delay. The volume of vehicular construction trips is expected to be low relative to existing flows and would be managed as part of the CLP. On this basis the assessment of impacts on vehicle and bus delay is scoped out for demolition and construction.

303. The Proposed Development may result in changes which would significantly affect perceptions of vehicle/bus delay during operation. While the vehicle trips generated by the Proposed Development in operation are expected to be imperceptible on the road network, the closure of the underpass to vehicles will change local traffic flows and journey routing choices. A route change to the existing bus route 309 is anticipated as a direct result of the Proposed Development. Therefore, assessments of operational vehicle and bus delay have been scoped in. The change in delay to vehicles and buses will be among the outputs of both strategic and local modelling, along corridors and individual junctions. A qualitative assessment of delay will be undertaken through applying professional judgment.

Rail Delay

304. Rail delay, as experienced by passengers of the Underground, National Rail and DLR networks, could change as a result of changes to station or rail service capacity or changes to volumes, for instance if a station or rail service becomes congested.

305. During demolition and construction, the Proposed Development is not expected to result in changes which would significantly affect perceptions of rail delay and the assessment of impacts on rail delay during demolition and construction is therefore scoped out of the assessment.

306. During operation, the Proposed Development is not expected to result in changes which would significantly affect perceptions of rail delay. Rail based trips that are generated by the proposed

development will disperse across the Underground and DLR networks which provide frequent and high-capacity services. The assessment of impacts on rail delay during operation is therefore scoped out of the assessment.

Amenity, Fear and Intimidation

- 307. As set out within 'IEMA, 1993' guidance, Amenity, Fear and Intimidation broadly relate to the pleasantness of a journey and is generally affected by the availability of pedestrian/cyclist provisions and the flow of vehicle and HGV traffic. The IEMA Guidelines suggested criteria for assessing fear and intimidation are roads where the average traffic flow over an 18-hour day is 600vph.
- 308. During demolition and construction, the Proposed Development could result in changes which could affect perceptions of amenity, fear and intimidation. The A12 and A13 already experience very high levels of traffic which is the primary condition for causing fear and intimidation, however the demolition and construction phase of the Proposed Development will not change this perception. On local streets, there is potential for the construction phase to change perceptions of amenity, fear and intimidation. The assessment of impacts on amenity, fear and intimidation is therefore scoped in for the construction stage assessment.
- 309. The proposed development could result in changes which could significantly benefit affect perceptions of amenity, fear and intimidation during operation. The design of the site would create new pedestrian spaces and streets creating an attractive and secure environment. On this basis the assessment of operational Amenity, Fear and Intimidation is scoped in.

Accidents and Safety

- 310. The potential for changes to Accidents and Safety can relate to the increased use of the transport network, however the greatest potential for change relates to more fundamental street and junction layout changes such as a new access or pedestrian/cyclist crossing.
- 311. During construction, the Proposed Development is not expected to result in changes which could affect accidents and safety. Traffic changes arising from the construction of the development will be low and unlikely to be perceptible relative to baseline conditions. Road safety would also be further managed and mitigated through the CLP and measures requiring contractors that use the safest construction vehicles. The assessment of impacts on accidents and safety is therefore scoped out for the construction stage assessment.
- 312. The Proposed Development would change the existing highway network by removing the Abbott Road / A12 underpass and relocating the left-in / left-out part of the junction to the north. These changes have potential to affect accidents and safety during operation and therefore, the assessment of accidents and safety is scoped into the operational stage assessment.

Hazardous Loads

- 313. Hazardous Loads are specialist loads such as explosives or highly flammable materials.
- 314. During demolition and construction, the Proposed Development is not expected to generate or attract hazardous loads. The assessment of impacts on Hazardous Loads is therefore scoped out of the assessment.
- 315. Transport Network Scenario 1 and 2. The operational Proposed Development is not expected to generate or attract hazardous loads. The assessment of impacts on Hazardous Loads is therefore scoped out of the assessment.

Mitigation

- 316. Mitigation measures integral to the development proposals (embedded mitigation) will form part of the transport strategy. The embedded mitigation measures are typical of development of this nature and

includes management plans required by planning policy secured by planning condition, expected to include a Construction Logistics Plan, Travel Plan and Delivery & Servicing Plan. These will be included within or appended to the TA.

- 317. There may be significant effects arising from Highways and Transport issues that require mitigation.

Summary of Scope of Assessment

- 318. A review of the potential effects of the Proposed Development has been undertaken for the construction and operational phases. Embedded mitigation measures will be in place to manage potential adverse effects and secured through planning condition.

Table 5 Highways and Transport Scope of Assessment

Effect	Receptor	Demolition and Construction of the Proposed Development	Completed and Operational Development
Severance	Pedestrians, cyclists	Scoped in (local streets only)	Scoped in
Pedestrian and Cyclist Delay	Pedestrians, cyclists	Scoped out	Scoped in
Vehicle and Bus Delay	Car drivers and passengers, bus passengers	Scoped out	Scoped in
Rail Delay	Rail passengers	Scoped out	Scoped out
Amenity, Fear and Intimidation	Pedestrians, cyclists	Scoped in (local streets only)	Scoped in
Accidents and Safety	All modes	Scoped out	Scoped in
Hazardous Loads	All modes	Scoped out	Scoped out

Cumulative Effects

- 319. These cumulative effects assessment will consider the Proposed Development in combination with the cumulative schemes that have planning applications but are yet to be determined (i.e. the cumulative schemes that have not been assessed in the baseline scenario). The same potential effects assessed for the Proposed Development scenario will be assessed cumulatively.

Wind Microclimate

- 320. The wind assessment will include wind tunnel testing undertaken for the Proposed Development and the results will be presented within the ES.
- 321. A wind assessment is therefore **SCOPED IN** to the EIA.

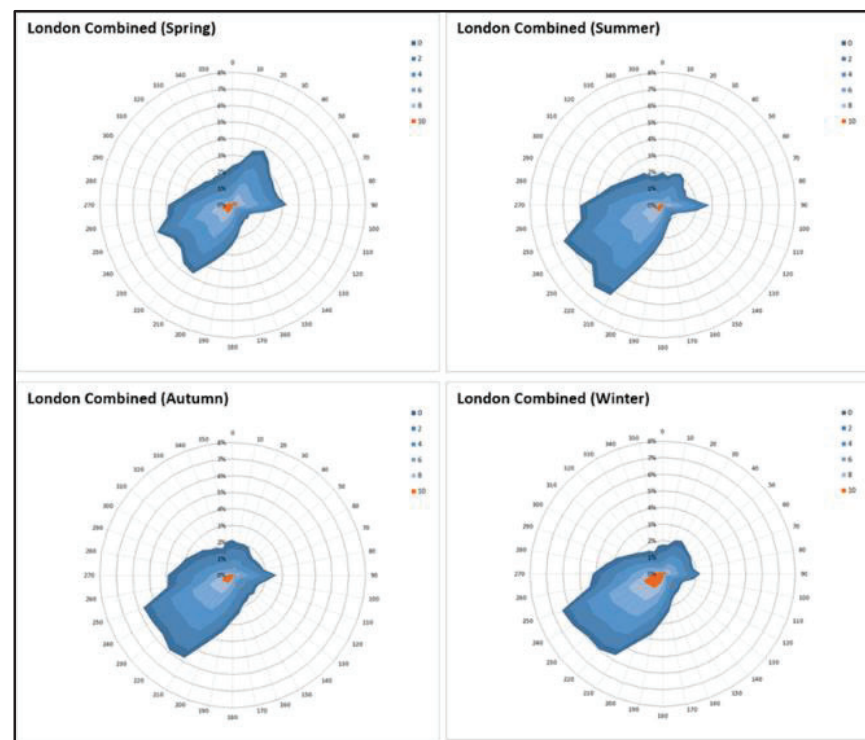
Baseline

- 322. The Baseline Conditions across the site and the immediate surrounding area will be quantified as part of the assessment.
- 323. Winds for the London area are predominantly from the south west, with a secondary peak from the north east during spring. Winds are typically stronger in the winter season, and lighter throughout the summer. Wind roses for the London area per season, combined data obtained from Heathrow and London City airports over a period of 30 years are shown in Figure 9.
- 324. The site is located approximately 700m north of the Thames at its nearest point, and therefore benefits from some shelter that may be provided by a build-up of urban context rather than being open and exposed to oncoming winds that would otherwise be the case south of Aspen Way (A1261). As such, when compared to an open and exposed site the oncoming winds would be expected to have the characteristic of relatively lower mean wind speeds, but higher turbulence levels.
- 325. The majority of the surrounding context in the immediate area is low to mid-rise buildings. The 26 storey

Balfour Tower to the west of the site is the tallest structure in the vicinity, and the site is somewhat exposed to prevailing winds from the southwest due to the open expanse of highways infrastructure associated with the A102/A12 and East India Dock Road (A13).

- 326. The 'physical' baseline conditions of the surrounding area will be considered as they are likely to evolve in the future, such that they may have an influence on the local wind environment of the site and surrounding area. For example, when determining the baseline of the site, other surrounding redevelopment schemes and the likelihood of these being constructed and occupied prior to the completion and operation of the Proposed Development will be taken into consideration. Any buildings already under construction would be deemed to be existing.
- 327. The wind tunnel test will allow the mean and peak wind speeds to be measured (for both the windiest season – typically winter and summer seasons) at locations across the existing site and at the entrances to and around other surrounding buildings, footpaths, roads, and areas of open space, within an appropriate proximity and for all wind directions.
- 328. The baseline results from the wind tunnel will be combined with long-term meteorological climate data for the London area, corrected to the site to understand the baseline conditions specific to the site having regard to its location within London. Testing in the wind tunnel will be conducted in the absence of any hard or soft landscaping in the first instance, in order to provide a least sheltered conservative result.

Figure 9 Seasonal wind roses from London Combined (in m/s) (Radial axis indicates the percentage of time for which the stated threshold is exceeded)



Potential Effects

- 329. Undesirable wind speeds can make spaces uncomfortable or unsafe for pedestrian use. The potential effects associated with the interaction of the local wind microclimate conditions with the Proposed Development are considered to be as follows:
- 330. During demolition and construction works, there is the potential for undesirable wind speeds at:
 - Ground level in publicly accessible areas bordering the demolition / construction compounds,

specifically pedestrian thoroughfares and any areas of public open / amenity space; and

- Buildings in proximity to the demolition / construction compounds, with specific reference to building entrances and pedestrian routes around buildings.
331. Once the Proposed Development is complete and operational, there is the potential for undesirable wind speeds at locations:
- Within the site, specifically:
 - Ground level - pedestrian thoroughfares and public realm / amenity space;
 - Accessible elevated levels i.e. roof terraces and balconies.
 - External to the site, specifically:
 - Ground level pedestrian thoroughfares, and
 - Culloden School (playspace); and
 - Surrounding buildings - with specific reference to building entrances and pedestrian routes around buildings.

Potential Sensitive Receptors

332. The assessment will consider all areas both within, and immediately surrounding the site that the general population and users of the site would be reasonably expected to utilise. This includes, but is not limited to:
- St Nicholas Church, Aberfeldy Street;
 - Aberfeldy Practice (medical facility), Etrick Street;
 - Thoroughfares;
 - Entrances;
 - Amenity Spaces;
 - Culloden School;
 - Podium/Roof Top Terraces;
 - Pick-up/Drop-Off Points;
 - Bus Stop/Other Public Transport Infrastructure;
 - Cycle Lanes/Roadways; and
 - Pedestrian Crossings.

333. As a Hybrid planning application, a range of conditions associated with the target use of the site will be considered where specific on-site uses are yet to be determined. These are anticipated to be residential, commercial, leisure and retail.

Scope of Assessment

Design Guidance

334. Design guidance will be provided to the Design Team through a review of expected wind conditions, informed by the use of Desk Based Design Review as the design develops.

Demolition and Construction

335. Generally, as demolition and construction works progress, the conditions on and around a redevelopment site would be expected to gradually transition between those of the baseline and the completed and operational scheme. As this will also apply to the demolition and construction of the

Proposed Development, a qualitative approach will be taken (based on professional judgement) to the assessment of the potential effects of the demolition of the existing buildings and construction of the Proposed Development on the wind microclimate.

Completed Development

336. Given the size and geometry of the Proposed Development, in addition to the site's location in relation to surrounding buildings and nearby areas of open space, it is important to avoid undesirable wind speeds being generated at ground and accessible elevated levels. Undesirable wind speeds could make some spaces within and around the Proposed Development uncomfortable or unsafe for pedestrian use.
337. The following model scenarios will be tested within the wind tunnel (for both the windiest (typically winter) and summer seasons):
- Baseline (Existing Site + Existing Surrounding Context);
 - Proposed development (detailed only)+ Existing Surrounding Context;
 - Proposed development (detailed & outline elements)+ Existing Surrounding Context;
 - Proposed Development (detailed & outline elements) + Future Surrounding Context (Cumulative Schemes);
 - Future Baseline (Existing Site + Future Surrounding Context).
338. Scaled models of the Proposed Development and nearby cumulative schemes will be manufactured and tested in a boundary layer wind tunnel test facility – Likely at 1:300 scale, with a real world radius of 450m from the centre of each model. The models will be arranged such that the site in its entirety will be considered with an appropriate margin of surrounding context towards the outer extents. Mean and peak wind speeds will be measured at sensitive receptor locations, for all wind directions. These results will be combined with long-term meteorological climate data for the London area and then benchmarked against the Lawson Comfort Criteria (# variant - both in terms of comfort and safety to include strong winds), to determine the suitability of different areas within and surrounding the site.

Mitigation

339. Should mitigation measures be required to ensure wind conditions within a particular area / space are suitable for their intended use, or mitigate against predicted strong winds, such mitigation will be developed in consultation with the Applicant and the Design Team. As a hybrid application, broad mitigation strategies will be specified in the ES and where applicable referred to in the Design Codes and would need to be developed further at RMA stages for the outline part. A planning condition should be imposed to ensure that no development takes places prior to ensuring a safe and comfortable wind environment can be achieved on a detailed scheme.
340. For the detailed part where necessary due to the presence of any strong winds that represent a safety concern, mitigation measures will be tested through additional rounds of wind tunnel studies. Minor exceedances comfort criterion would be expected to be addressed by way of qualitative recommendation.

Cumulative Effects

341. The cumulative assessment is undertaken to the same methodology as for the scheme when completed and operational. A list of cumulative schemes to be considered is included within **Appendix C** of this Scoping Report.
342. Cumulative schemes within the extent of the physical models will be included, assuming a 1:300 model. Schemes beyond the model radius are considered to be too far from the site to result in any cumulative impacts and are therefore excluded from the assessment.

Archaeology (Buried Heritage)

Introduction

343. An archaeological technical desk-based assessment (DBA) will be presented in ES. The assessment will consider the potential enabling and construction stage impacts of the Proposed Development.
344. The assessment and ES Chapter will be undertaken by TVAS.
345. An Archaeology (Buried Heritage) assessment is therefore **SCOPED IN** to the EIA

Baseline Conditions

346. Information has been obtained from the Greater London Historic Environment Records (GLHER) database on a 750m search radius, historic and modern maps, geological maps and relevant publications or reports.
347. The GLHER data indicates that the site is located in a Tier 3 Archaeological Priority Area (DLO37841).
348. In terms of nationally designated heritage assets, no World Heritage Sites, Scheduled Monuments, Registered Parks and Gardens, Historic Battlefield, or Historic Wreck Sites occur within or in close proximity to the site according to the received GLHER data. It is considered that the development would not have any negative impact on the settings of several nearby listed buildings.

Potentially Sensitive Receptors

349. The Summary and Definition of the Lea Valley Archaeological Priority Area indicates that the APA; “runs along the western banks of the River Lea and its various channels from the borough border with Hackney almost to its mouth at the Thames. Extensive excavations that took place in advance of the Olympic Park construction demonstrated that the Lower Lea Valley had potential for prehistoric finds, features and deposits. In later periods the area saw the establishment of numerous industries which required water for power and used the rivers to transport their produce.”
350. The Lea Valley Archaeological Priority Area has been classified as Tier 3 because it is an extensive area “containing palaeoenvironmental evidence for past wetland and riverine environments and potential for new discoveries of well-preserved prehistoric sites. It was also an extensive area of historic industry in the medieval and post medieval periods.”
351. Within the immediate environs of the site, there is significant evidence of Neolithic and Bronze Age occupation. The size of the area increases the chances of archaeological remains of some period being present simply by chance.
352. The area has been repeatedly redeveloped since the late 19th century, which will probably have removed most, if not all, shallow archaeological remains. Previous work in the area has demonstrated the presence of often quite deep alluvial deposits, which may have protected archaeologically relevant levels below or within them. The development of the area may also have involved raising the ground rather than cutting down in some instances, further protecting deeply buried levels.

Potential Effects

353. The assessment will consider the effects of the Proposed Development using the methodology set out below within the context of the policy framework and baseline conditions. The assessment will consider the following potential impacts and associated likely effects:
- Site set-up works, including contractors compound set-up and associated temporary services levelling work and other preparatory groundworks including remediation for UXO and chemical contaminants;
 - Construction, including foundation excavation or pile installation, service installation, road construction;

- Landscaping, including ground reduction or levelling and creation of attenuation tanks and ponds;
- Compression of buried remains from vehicle movement, construction of spoil tips, bunds or raised landscape areas; and
- De-watering of waterlogged or organic archaeological remains through alterations to the level of groundwater across the site.

354. It is considered that due to the nature of the Proposed Development, it would not give rise to any significant effects during the Completed Development stage and therefore effects of the Completed Development will not be assessed as part of the ES Chapter.

355. This is because once the Proposed Development has been completed, no further ground disturbance would occur and consequently there would be no additional impacts or resulting environmental effects upon buried heritage assets.

Scope of Assessment

356. The suite of assessments will conform entirely to requirements of the NPPF, and to standards specified by the Chartered Institute for Archaeologists and Historic England.

357. In order to set the site into its full archaeological and historical context, a search of the GLHER has been undertaken to a 750m radius study area from the Proposed Development.

Demolition and Construction

358. An Archaeology DBA has been produced, to professional standard and guidance, in support of the ES Chapter for the Proposed Development, to be included as a Technical Appendix in the ES. The DBA will put the Proposed Development into its full archaeological and historical context.

359. The ES Chapter will provide an assessment of the significance of known and potential buried heritage assets within and beyond the site, which may be affected by the Proposed Development. The DBA includes assessments of factors which will have compromised the survival of archaeological remains.

360. The assessment of enabling and construction effects within the ES Chapter will focus on physical impacts on buried heritage assets within the site. These will include any activity which would entail ground disturbance, for example site set up works, the construction of new foundations and basements, remediation, landscaping, new drainage and services.

361. Physical effects upon buried archaeological remains would all be permanent, whether or not the proposed works are temporary in nature (e.g. ground excavation for temporary services, lighting and hoardings).

362. The archaeological specialist will liaise closely with other topic specialists (e.g. contamination) to ensure that there is no overlap in the assessment of effects, along with the design team. Where possible there will be an attempt to mitigate, by design, any impacts on particularly sensitive assets.

363. A site visit would be carried out to confirm topography, any evidence of past ground disturbances and possible archaeological potential.

Completed Development

364. Operational activities are not expected to have an effect on buried archaeological assets.

Cumulative Effects

365. An assessment will be given of cumulative effects, if any. The approach to cumulative assessment for Archaeology will be to focus on the additional effects of the proposed development on top of the cumulative baseline.

Built Heritage

366. This chapter will consider the impact of the Proposed Development on above-ground built designated and non-designated heritage assets in terms of the effect of the proposed development on their heritage significance and the contribution made to that significance by their setting.

367. Listed buildings and conservation areas are 'designated heritage assets', as defined by the National Planning Policy Framework (the NPPF). Other buildings and structures identified as having heritage significance can be considered as 'non-designated heritage assets', and this includes the locally listed buildings. Heritage 'significance' is defined in the NPPF as 'the value of a heritage asset to this and future generations because of its heritage interest. That interest may be archaeological, architectural, artistic or historic'. The Historic England 'Historic Environment Good Practice Advice in Planning Note 2' puts it slightly differently – as 'the sum of its architectural, historic, artistic or archaeological interest'. 'Conservation Principles, Policies and Guidance for the sustainable management of the historic environment' (English Heritage, 2008) describes a number of 'heritage values' that may be present in a 'significant place'. These are evidential, historical, aesthetic and communal value.

Baseline

368. The location of heritage assets in relation to the site is illustrated in Figure 3. They are principally located to the north, west and south of the site. The part of Newham nearest the site does not contain any heritage assets that have a significant relationship to the site.

369. The heritage assets identified below are considered to be those whose significance is most likely to be directly affected by the proposed development in its current iteration. Other heritage assets, both designated and non-designated, are located further afield, and the number and location of heritage assets to be assessed remains to be agreed with the London Borough of Tower Hamlets. The selection identified here seeks to strike a balance regarding a correct and credible extent of effect from a development that involves tall buildings,

370. The site itself contains a portion of the Grade II listed Bromley Hall School site. No other heritage assets are contained within the wider development site boundary.

Conservation areas

371. The conservation areas most directly affected by the emerging proposals are:

- The Balfron Tower Conservation Area, to the west;
- The St Frideswide's Conservation Area, to the south west;
- The All Saints Conservation Area, to the south west;
- The Langdon Park Conservation Area, to the north west; and
- Naval Row Conservation Area, to the south.

Listed buildings

372. The listed buildings (Grade II unless otherwise indicated) most directly affected by the emerging proposals are:

- Balfron Tower, St Leonard's Road (Grade II*);
- Carradale House, St Leonard's Road;
- Glenkerry House, Burcham Street;
- Former Bromley Hall School, Bromley Hall Road;
- Poplar Public Library, Gillender Street;

- Bromley Hall, Gillender Street (Grade II*);
- Former Fire Station, Gillender Street;
- Church of St Michael And All Angels, St Leonard's Road;
- Former Financial Times Print Works, East India Dock Road (Grade II*); and
- Plaque on Modern Dock Wall Facing West, East India Dock Road.

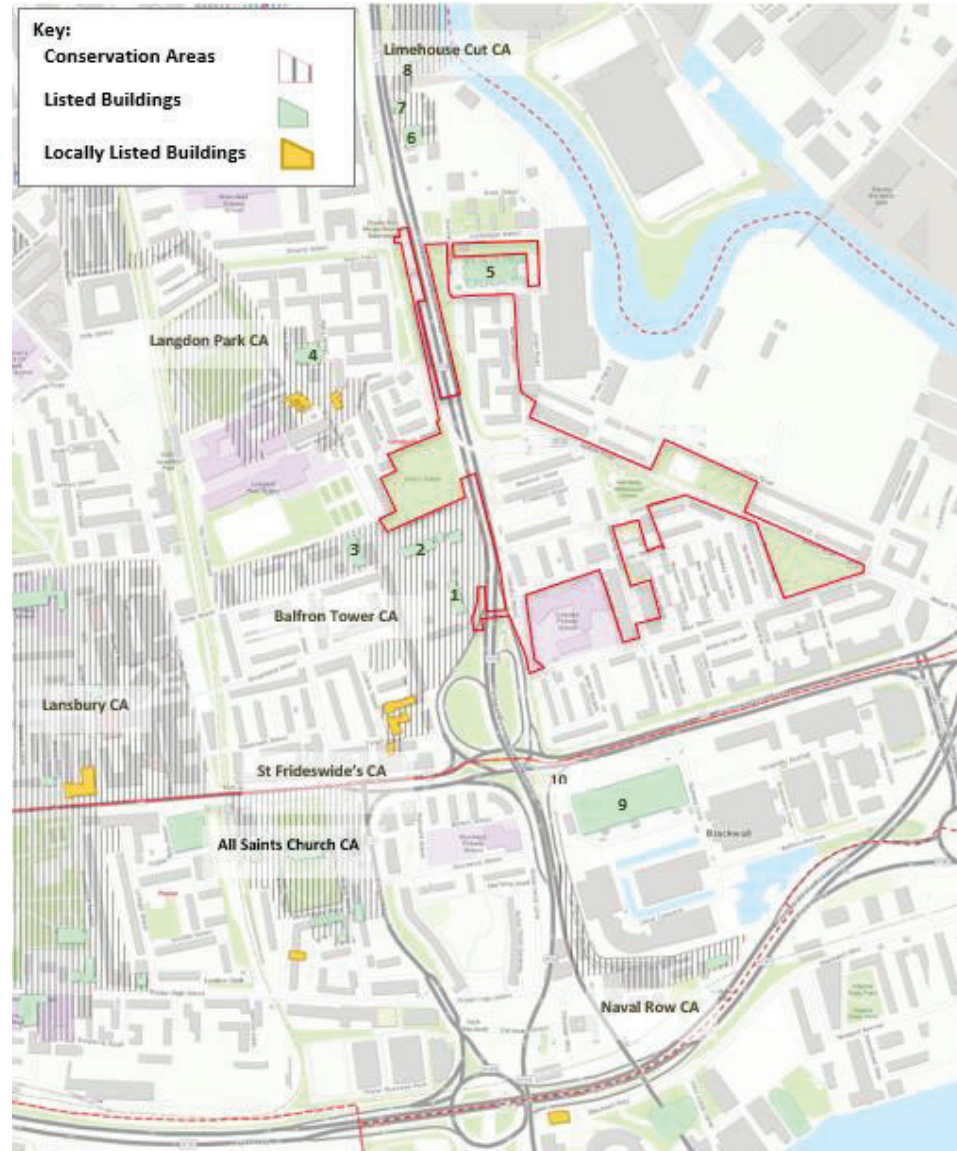


Figure 10 Location of heritage assets in relation to the site (red line)

Potential Effects

373. The potential for significant effects as a result of the demolition and construction as well as the operation of the Proposed Development will be addressed in the assessment by considering how the location, scale, bulk, massing and architectural expression of the proposed development will affect the setting of the heritage assets identified and thus the contribution made to that significance by their setting.

Potential Sensitive Receptors

374. The scale of development that is proposed at the site – the height and location of the tall buildings proposed – and its effect on the setting of the Grade II* Balfron Tower, the Grade II Carradale House and the Balfron Tower Conservation Area has the potential to significantly affect these assets. In addition, the effect on the setting of Bromley Hall School (Grade II), located at the northern end of the site, also has the potential to be significant.

Scope of Assessment

375. The effects of the Proposed Development on each of the identified heritage will be assessed and a judgment formed as to the duration, extent and magnitude of impact. This will be undertaken for Demolition and Construction and Completed Development phases of the proposed development.

376. The principal approach to assessing the effects of the Proposed Development upon the built heritage assets is to measure those effects identified against criteria contained in legislation and national and local policy and guidance relating to the historic built environment.

377. The methodology for the assessment will take account of the relevant legislation, policy, and standards and guidance documents concerning urban design and heritage protection, at national, regional and local level.

378. The assessment of the effects as a result of the Proposed Development on heritage receptors is made on the basis of professional judgement which takes into account relevant planning policies and guidance. It is based on the methodology set out in Historic England guidance concerning the setting of heritage assets.

379. The assessment will be undertaken with reference to the following policy and guidance documents:

- National Planning Policy Framework (NPPF) (2012 and subsequent revisions);
- National Planning Practice Guidance (NPPG) (March 2014 and subsequent revisions);
- The London Plan 2021;
- The London Borough of Tower Hamlets Local Plan;
- Relevant conservation area appraisals;
- Conservation Principles: Sustainable Management of the Historic Environment, English Heritage (now Historic England) (2008);
- Seeing the History in the View, English Heritage (now Historic England) (2011); and
- Historic Environment Good Practice Advice in Planning Note 3: The Setting of Heritage Assets (2015).

380. The assessment will take into account the contribution to the setting of heritage assets area in which it is located. The assessment of the sensitivity of the receptor under consideration is moderated to take into account a judgement about its quality in the round.

381. The magnitude of the change to the composition and character of the view, as a result of the Proposed Development, takes account of factors including the proximity, scale and the contribution of the Proposed Development to the setting of heritage assets. The magnitude of the change resulting from the Proposed Development will be assessed as major, moderate, minor or negligible.

382. The final assessment of the significance of effect is based on an assessment of the nature of the existing setting and its sensitivity to change, combined with an assessment of the nature and magnitude of proposed change, made through relevant guidance and policy and based on professional judgement and experience.

383. For effects judged to be minor, moderate or major, the effect will be further categorised as beneficial,

neutral or adverse. Adverse effects are those that detract from the heritage significance of the heritage asset. This may be through a removal of valuable characterising elements or addition of new intrusive or discordant features. Beneficial effects are those that contribute to the heritage significance of the heritage asset. This may be through the introduction of new, positive attributes; for example, through improved legibility or setting. A neutral effect would be one where the setting of heritage asset may change but its overall quality does not, or where the balance of positive and negative effects is finely balanced; effects can be significant and neutral in quality terms i.e. noticeably different but not better or worse in terms of quality.

384. Where the effect is minor, moderate or major, good design can reduce or remove potential harm or provide enhancement, and design quality may be the main consideration in determining the balance of harm and benefit.

Cumulative Effects

385. The potential cumulative effects of the Proposed Development when considered in combination with the Cumulative Schemes (**Appendix C**) with planning permission, will be assessed.

TOPICS TO BE SCOPED OUT

386. The Proposed Development is not anticipated to cause any likely significant effects in relation to the following technical topics and are therefore **SCOPED OUT** of the ES.

Ecology and Biodiversity

387. A Preliminary Ecological Appraisal (PEA) has been prepared for the site by Greengage Environmental and is presented in **Appendix E**. The following presents a summary of the key findings and conclusions drawn in respect of the likelihood for significant ecological effects as a result of the Proposed Development.
388. It is proposed that this topic is to be **SCOPED OUT** of the EIA.

Baseline

Desk Study

389. Consultation with the local biological record centre (Greenspace Information for Greater London (GiGL)) and the Multi-Agency Geographic Information for the Countryside (MAGiC) dataset have confirmed that there are no statutory designations of national or international importance within the boundary of the site. There are also no non-statutory designated sites within the boundary of the site.
390. There are two Local Nature Reserves (LNRs) and 24 non-statutory designated sites within 2km of the site. Additionally, a wider search was undertaken for European designated sites which recorded the presence of Epping Forest Special Area of Conservation (EFSAC) within approximately 6.4km of the site.

Phase 1 Habitat Survey

391. During the site survey the following habitats were recorded on site:

- Scattered scrub;
- Amenity grassland with scattered trees;
- Introduced shrub;
- Wall (brick built);
- Buildings and hard standing with street trees; and
- Bare ground.

392. All the habitats on-site are common and widespread urban habitats with limited ecological value. The

dominant habitat on-site was building and hard standing followed by heavily managed amenity grassland.

393. Given the limited ecological value of the habitats on-site, the potential for the site to support protected species was limited to the following:

- Low potential to support foraging and commuting bats;
- Low potential to support roosting bats;
- Moderate potential to support nesting birds; and
- Confirmed presence of invasive/non-native species (Virginia creeper and Buddleia).

394. A specific assessment of the potential for the site to support black redstart was also undertaken. However, no suitable foraging or nesting habitat for this species of bird was present on site.

395. Given the site's location, setting and the habitats present, it is considered to have negligible potential to support great crested newt, reptiles, dormouse, water vole and otter or any Local Biodiversity Action Plan (LBAP) species not previously mentioned above.

Ecological Management, Mitigation and Enhancement Measures

Designated Sites within 2km of the site

396. The proposed development is not expected to have an impact on statutory and non-statutory designated sites within 2km of the site during the construction stage due to the distance from the site and presence of significant geographical barriers. Whilst construction phase impacts are considered to be unlikely, given the River Lea lies approximately 70m from the closest part of the site and more than 100m from the majority of the site, a CEMP will be produced to detail how pollution/runoff from the site during site preparation/construction will be avoided and minimised.

397. The proposed development is also not expected to have an impact on statutory and non-statutory designated sites within 2km of the site during the operational stage of the development because:

- The statutory and non-statutory designated sites within 2km of the site are managed already with public access in mind or are not easily accessible to the general public e.g., due to barriers such as dense industrial and commercial development and/or reasons such as heavily canalised sides to waterways;
- There are multiple open spaces within and immediately adjacent to the site that existing and future residents will have access to and be able to access quicker and more easily; and
- The proposals include the creation of new amenity and recreational space as part of the proposals, which seek to improve the existing biodiversity on the site.

Designated Sites – Epping Forest SAC

398. Epping Forest SAC lies approximately 6.4km north of the site, which is within the 10km Screening radius. Based on information currently available, there are no likely significant effects anticipated from the Aberfeldy scheme on European designated sites. This is because the proposed development lies outside the 6.2km Zone of Influence buffer detailed within the EFSAC Interim Mitigation Strategy²⁷ and the net increase in vehicle trips as a result of the proposed development are considered to be negligible beyond the local road network (see Transport Scoping Report for the proposed development).

399. To confirm the above, a stand-alone Habitat Regulation Assessment Screening exercise would be conducted under the Habitat Regulations²⁸ and will be presented within an stand-alone Habitat Regulation Assessment Screening.

²⁷ Epping Forest District Council (2018) Interim Mitigation Strategy for Epping Forest Special Area of Conservation <https://eppingforest.moderngov.co.uk/mqConvert2PDF.aspx?ID=87389>

²⁸ Conservation of Habitats and Species Regulations 2017 www.legislation.gov.uk/uk/si/2017/1012/regulation/1/made

Foraging and Commuting Bats

400. Site clearance has the potential to result in the loss of poor foraging/commuting habitat for bats. To avoid impacts associated with site clearance, site layout will avoid installation of hard surfaces in the parks/green spaces within the site. Additionally, retention of all existing mature street trees will be sought, where possible.
401. Compensatory soft landscaping should seek to provide foraging and commuting habitat for bats. The proposals include the creation of such soft landscaping as well as areas of biodiverse roof and rain gardens.

Roosting Bats

402. To confirm the presence/likely absence of roosting bats, bat emergence/re-entry surveys will be undertaken focusing upon the buildings and trees identified as having low potential roosting features. In line with best practice guidelines, buildings with low potential to support roosting bats will be subject to a single emergence or return survey between May and August. Trees with low potential do not require any further survey, instead, if they are to be lost, they will be section felled, with limbs lowered gently to the ground and left on the ground for 24hrs before being disposed of.
403. Results from these surveys will be used to identify a suitable approach to mitigation for roosting bats, should it be required.
404. Given the habitats present on site, the type of access and egress points noted and the species records within 2km, if a roost is found to be present on site it is likely to be for a relatively common species and be of low conservation value e.g. a pipistrelle summer transitory roost for a low number of individuals. The likely mitigation in this case would involve the provision of temporary roosting space in the form of bat boxes on site, timing works to damage/destroy any roosting place at a time of year when the bats are least likely to be present, the removal of the features by hand under the supervision of a licensed bat worker and the installation of modified tiles and/or integrated bat boxes on the completed building so suitable roosting features are replaced. This would all be undertaken under a European Protected Species Mitigation (EPSM) license from Natural England. The mitigation and approach will be confirmed through further survey.
405. This assessment will be presented as a stand-alone report and submitted to the LPA.

Nesting Birds

406. No further survey works are recommended. However, to minimise the impact of the proposed development on nesting birds the following measures will be implemented:
- Clearance of suitable nesting bird habitat will be undertaken outside of the nesting bird season (taken to run from March to August inclusive) or only be undertaken after an ecologist has conducted a nesting bird check and confirms the likely absence of nesting birds;
 - A selection of nest boxes will be installed within the completed development; and
 - The proposals include the creation of extensive landscaping as well as areas of biodiverse roofs which will provide suitable habitat for nesting and foraging birds.

Invasive Species

407. No further survey works are recommended. However, the invasive species, as listed on the London Invasive Species Initiative (LISI), will be removed from site and disposed of responsibly.

Enhancement Measures

408. As mentioned above, the proposed development includes the following ecological enhancements:
- Extensive, substrate-based biodiverse roofs on suitable areas of flat roof;

- Wildlife friendly landscaping including rain gardens; and
- A range of bird and bat boxes installed across the development area.

409. The enhancement recommendations have been made with the intention of improving the ecological value of the site for notable species listed in the London and London Borough of Tower Hamlets LBAP, in addition to supporting relevant local Habitat Action Plans (HAPs).

410. To evidence an improvement in biodiversity on site as a result of the development a Biodiversity Impact Assessment will be prepared which will present the results of a Biodiversity Net Gain Assessment using The DEFRA Metric 2.0.

Conclusion

411. The site is dominated by common and widespread habitats with limited ecological value. The site has potential to support a number of protected species, however, through further survey and the implementation of standard mitigation measures any impacts from the development on these protected species can be eliminated or reduced so to be not significant. There are no likely significant effects anticipated from the Aberfeldy scheme on European designated sites, including the EFSAC, for the reasons provided earlier. This will be confirmed within a stand-alone Habitat Regulation Assessment Screening document.

Daylight, Sunlight and Overshadowing – Internal, new receptors within the Proposed Development

412. The potential for daylight and sunlight availability within the newly proposed residential units and within the newly created public realm is dependent on the design of the Proposed Development, and is a design consideration, rather than an EIA issue. Therefore, the assessment of daylight and sunlight availability (including overshadowing) within the Proposed Development itself will not form part of the ES but will be presented as a separate standalone report submitted in support of the planning application.

Geoenvironmental (Ground Conditions, Groundwater and Land Take and Soils)*Introduction*

413. A Phase 1 Preliminary Geo-environmental and Geotechnical Risk Assessment (also referred to as the 'Phase 1') has been undertaken for the site, based on a walkover of the site (17th March 2021) and drawing on several sources, including an Envirocheck report (providing survey records, historic maps and technical information from a variety of databases).

414. The Phase 1 intends to identify the likely source-pathway-receptor pollutant linkages and provides a qualitative indication of the level of risk posed by potential ground contamination at the site. From this assessment, recommendations for further surveys and reporting are identified.

415. Additional site investigations have been undertaken within different parts of the site or adjacent to the site boundary. These reports are listed below, and are summarised within the Phase 1:

- Aberfeldy Estate - Site N Blair Street London E3, AP Geotechnics (2001). This assessment covered the Braithwaite Park area of the site;
- Site Investigation - Culloden Primary School, Mayer Environmental (2004);
- Aberfeldy New Village, London, E14 Land Quality Statement, Campbell Reith (2011). Phases 4 to 6 identified within the report, partially lies within the current site boundary;
- Aberfeldy New Village Phase 3, Land Quality Statement, Campbell Reith (2015). This assessment covers an area directly south of the current site boundary;

- Aberfeldy New Village Phase 3, Additional Ground Investigation, Campbell Reith (2016). This assessment covers an area directly south of the current site boundary;
- Aberfeldy New Village Phase 3a, Verification Report, Campbell Reith (2020). This assessment covers an area directly south of the current site boundary; and
- Ground Investigation Report at Leven Road, South Bromley, London, E14 Structural Soils (2007). This investigation was undertaken adjacent to the eastern site boundary.

416. The Phase 1 has been prepared by RPS and is presented in **Annex Ground Conditions** to support the summary presented below.

Baseline Description

417. The geology at the site has been identified from publicly available British Geological Society (BGS) mapping and the Environment Agency (EA) Groundwater Vulnerability mapping. The site's geology is likely to comprise Made Ground underlain by deposits of Alluvium, Kempton Park Gravel Member (Secondary A Aquifer), London Clay Formation, Lambeth Group (Secondary A Aquifer), Thanet Formation (Secondary A Aquifer), and the White Chalk Subgroup (Principal Aquifer).

418. Ground conditions at the site, encountered during the 2011 site investigation, comprised strata in the following order from ground level, and estimated thickness, in metres (m): Made Ground (between 0.75 and 3.1m); Alluvium (between 1.2 and 2.3m); Kempton Park Gravel Member (between 2.4 and 5.1m); London Clay Formation (between 11.3 and 16.4m); and the Lambeth Group (to depths of up to 30m below ground level).

419. Three types of groundwater are likely to be present beneath the site. **Perched groundwater** is likely to be present within granular Made Ground and shallow Alluvium deposits. A continuous **shallow groundwater** body is likely to be present within the Kempton Park Gravel Member. A continuous **deep groundwater** body is likely to be present within the more permeable lower layers of the Lambeth Group, the Thanet Formation and White Chalk Subgroup. There is potential for the deep groundwater body to be under artesian type conditions, where being confined by the more cohesive upper layers of the Lambeth Group.

420. A review of the historical uses of the site and surrounding area has identified the following:

- the majority of the site historically comprised of undeveloped open land known as Bromley Marsh, with some building's associated with Macintosh's Farm (south-eastern portion of the site) and some other buildings of unknown uses (centre of the site) and residential housing along the south western boundary of the site between 1869 and 1896;
- Between 1896 and 1916, the site has been developed and comprises mostly of residential terraced housing;
- Educational facilities were developed between 1916 and 1946, with a school developed in the south west of the site, with additional buildings for the Bromley Hall School present in the far northern portion of the site;
- Between 1946 and 1954, the south west, central and south eastern portions of the site are in ruin / undeveloped;
- Between 1954 and 1975, Culloden Primary School had been developed in the south west of the site, with an electricity substation present in the central portion of the site. Braithwaite House had been construction in the south eastern portion the site, with St Nicholas Church present in the centre of the site;

- From 1975 to 1990, the northern and eastern portions of the site are vacant. By 1990, the central and eastern portions of the site comprise vacant land, with the north and far south east of the site redeveloped with residential housing. The area of land in the far north of the site remains undeveloped; and
- By 2006, Braithwaite House had been demolished, with this portion of the site now comprising vacant land. The central portion of the site had been developed to resemble the present layout.

421. Potential historical sources from contamination identified by the review include the electricity substation located in the centre of the site between 1954 and 1975.

422. No visual evidence of contamination was noted during the site walkover.

423. A number of existing potential sources of contaminants of concern have been identified within the site, which include the following:

- A dry cleaners located in the west of 25 to 55 Aberfeldy Street area;
- Domestic garages located in the south east of the Ettrick Street to Abbot Road area;
- Electricity substations located within the Braithwaite Park and Culloden Primary School areas;
- Flammable liquid store in the south east of the Ettrick Street to Abbot Road area as identified in the 2011 Campbell Reith report; and
- Petroleum storage indicated at the base of residential blocks in the area between Abbot Road and Nairn Street.

424. Additionally, there may also be potential for plant rooms (including oil storage tanks) to be present within properties within the site that were not accessible at the time of the site walkover.

425. The Phase 1 noted that the organic rich natural superficial Alluvium deposits may also represent a potential source of ground gas generation.

426. A detailed unexploded ordnance (UXO) assessment was undertaken for the site in February 2021, which identified that the site has a high risk of UXO potential. This assessment recommended that a UXO Emergency Response Plan, UXO safety awareness briefing and intrusive magnetometer survey are undertaken for 'blind' intrusive works (such as borehole drilling). Additionally, non-intrusive surveys and a UXO Watching brief should be undertaken for 'open' intrusive works (such as excavations and trenching).

427. Within the area surrounding the site, the Phase 1 identified several contaminative sources or historical incidents. A full list is provided within the Phase 1; however this does include the Poplar Gas Works (approximately 10m to the east of the site), Ailsa Wharf (approximately 50m north east of the site); Devon Wharf (approximately 50m east); Islay Wharf (adjacent to the site), and others, including a rifle range, sawmill, hospital, bus depot and more docks / depots.

428. Overall, the Phase 1 concludes that the general risk of contamination of receptors (i.e. construction workers, future on-site users, neighbours) and resources (i.e. groundwater) is considered to be mostly low to moderate, with a moderate risk identified for volatile inhalation from groundwater.

The Proposed Development

429. The Proposed Development will involve works in the ground are expected as part of construction, including sub-structure / foundation works and piling.

430. Taking into account the nature of the site and its historical use, and the Proposed Development being proposed, the following matters are to be considered in terms of design and mitigation:

- Undertaking an intrusive Site Investigation (i.e. involving laboratory testing) subsequent to planning determination/consent, followed by further stages of investigation and site remediation

agreed through planning conditions. The Phase 1 provides further detail on what the scope of this investigation should include, to further assess the presence of soil and groundwater contamination and ground gas. Following agreement on the written programme, an investigation shall be carried out in accordance with the approved programme and the results. If necessary, a written scheme of remediation measures shall be submitted to and approved by the LBTH.

- The ground investigations will be undertaken prior to the commencement of works on-site and will further inform the geotechnical design / foundation / piling works, which will confirm the appropriate piling methods and foundation design to mitigate geotechnical risk.
 - The Intrusive Investigation will include a risk assessment of the contamination at the site, which would be undertaken by comparing measured levels of soil contamination with generic assessment criteria established through industry guidance and best practice.
 - Should significant areas of contamination be identified during the further site survey / investigation work, a Remedial Strategy (including options appraisal) will be undertaken. Remediation strategies for soil include:
 - The remediation of soils on site;
 - A strategy for ensuring separation between source and receptors via structural slabs, membranes and soil capping layers (as appropriate);
 - Off-site treatment (where practicable); and/or
 - The disposal of soil off-site.
 - The appropriate Remedial Strategy will be agreed as appropriate in advance of any remediation work. The remediation framework will identify remediation requirements for protection of human health and controlled waters as well as identifying any areas that require remediation to be undertaken.
 - Should a Remedial Strategy be implemented, a verification process (verification plans and reporting to the local authority) will be undertaken to confirm that the strategy has remediated the soils to a level acceptable for the intended end use of the site (based on site specific criteria).
 - Off-site disposal of soils will include segregation of soil types (contaminated or otherwise) into stockpiles and removed via an approved waste contractor and in accordance with the regulatory requirements, including the Hazardous Waste Regulations and Landfill Regulations (i.e. any contaminated soil would be disposed of off-site at a location appropriate to the level of contamination present and the waste classification determined from chemical analysis).
 - An assessment for the potential for ground gas will be completed during further intrusive site investigation work.
- 431.** Overall, the proposed ground works across the site, associated with the preparatory ground works and foundation excavations during the construction of the Proposed Development, will result in the appropriate treatment of the identified areas of contamination (i.e. soils and materials) This will result in residual beneficial effects to the local environment, through reducing the net contaminant loading at the site and surrounding area.
- 432.** Health and safety procedures appropriate to the contamination status of the site will also be implemented during construction in order to avoid or reduce potential effects to human health (i.e. construction workers and to neighbours / general public) and the wider environment.
- 433.** Recommended mitigation measures will be managed through a Construction Environmental Management Plan (CEMP); Site Waste Management Plan (SWMP); Emergency Response Plan (ERP); and Health and Safety Plans (H&SP). These plans will all be completed by the Principal Contractor/s and

sub-contractors prior to demolition and construction activities and agreed in advance with the LBTH. The mitigation measures implemented will be reviewed regularly to best suit the practices being undertaken across the site.

- 434.** It is anticipated that the proposed mitigation / management and monitoring measures will be secured by the LBTH through appropriately worded pre-commencement planning conditions, which will be attached to the planning permission.

Land Take

- 435.** With regards to 'Land Take', the site represents an opportunity to develop brownfield land in London in a bespoke and sustainable manner. Regeneration of this nature will lead to a range of economic benefits, as well as providing a number of enhancements over the existing situation. The site is not a 'greenfield site' or is a soil resource used for example as a resource for agricultural use / farming; it is not natural or semi-natural land that is being 'taken up' by urban development. While the site does include some areas of green space (such as the Aberfeldy Millennium Green and Braithwaite Park), the Proposed Development is proposing a significant new public open space, alongside a number of smaller open space areas. As a result, no likely significant adverse effects associated with 'Land Take' are anticipated because of the development of the land for the scheme proposed.

Conclusion

- 436.** In conclusion, based on the findings of the study undertaken to date and the proposed mitigation and management measures, it is considered that the Proposed Development is unlikely to give rise to significant residual adverse effects in respect of geo-environmental matters (Land Contamination, Ground Conditions, Groundwater and Land Take). On this basis, a ground conditions impact assessment is scoped out of the EIA.
- 437.** The Phase 1 has been appended to this EIA Scoping Report in **Appendix F**.

Water Resources, Drainage and Flood Risk

Introduction

- 438.** Surface water features are present within the local area surrounding the site. This includes the River Lea which is located approximately 160m east of the site and the River Thames is located approximately 550m south of the site. Both the River Lee and the River Thames are classified as 'main rivers'.
- 439.** This section has been drafted by Trium with assistance from Parmabrook.

Flood Risk and Surface Water Drainage

- 440.** Flood risk is regulated through the NPPF, and which outlines the need for a site-specific Flood Risk Assessment ('FRA') to be produced for all sites located within Flood Zone 2 and 3, larger than one hectare, or with critical drainage problems.
- 441.** Based on the Environment Agency's (EA) 'Flood Map for Planning'²⁹ the site occupies an area of approx. 17.4 ha and is located within Flood Zone 3a. Flood Zone 3a is defined as an area with a 1% or greater annual probability of river flooding, or a 0.5% or greater annual probability of flooding from the sea in any given year. According to the NPPF, the risk of flooding from rivers or the sea in Flood Zone 3a is classified as high. The primary risk cause of flooding to the site is tidal flooding from the River Lee and the River Thames. It should be noted that this classification does not account for the protection afforded by the Thames tidal flood defences present on the site, and that the actual risk of flooding will be lower.
- 442.** British Geological Survey (BGS) mapping indicates that the site is underlain by superficial deposits of clay, silt, sand and peat (Alluvium). The bedrock geology underlying the site is shown to comprise clay,

²⁹ Source: <https://flood-map-for-planning.service.gov.uk/> - Accessed June 2018

silt and sand of the London Clay Formation.

443. According to the Environment Agency (EA) Aquifer Designation Map, the site is underlain by a Secondary (undifferentiated) superficial aquifer with no bedrock aquifer denoted.
444. The BGS Groundwater Flooding Hazard map indicates that the majority of the site is at a very low risk of flooding from this source, with the western most side of the site at a significant risk of groundwater flooding.
445. According to the River Basin Management Plan, the Thames Middle (ref: GB530603911402), which encompasses both the River Lee and River Thames in the vicinity of the site, has 'Moderate' ecological status.
446. The EA Flood Risk from Surface Water map indicates that the majority of the site is at a very low risk of flooding from surface water. However, the risk of flooding along the site access roads is generally shown to be low, with isolated areas of medium and high flood risk where ground levels are lowest.
447. The London Borough of Tower Hamlets Surface Water Management Plan (Figure i) indicates that a Critical Drainage Area is located to the west of the site along the A12 / A102.
448. Given the FRA criteria referenced in the NPPF, an FRA will be prepared for the Proposed Development and will accompany the planning application(s). The FRA will be prepared in line with the NPPF requirements, and will present matters including:
- details of any historical flooding events;
 - acceptability of the proposed land use in relation to known flood zones;
 - indicative volume of surface water runoff likely to be generated by the development;
 - details of SuDS surface water drainage; and
 - details of flood resilience and resistance measures as appropriate.
449. The Drainage Strategy will include details of the outline surface water drainage strategy which will be the primary means to control the quality and quantity of surface water runoff from the new development in line with local policy and London Plan requirements. The strategy will also consider the options available for the management of surface water runoff in line with the drainage hierarchy, which will include minimising at source (i.e. through the use of sustainable drainage systems (SuDS)) through to attenuation and discharge to the public sewer network. It is expected that the drainage strategy presented will be further finalised during the detailed design stage as part of a standard condition attached to any future planning permission granted.
450. Through a well informed and considered design process with regard to flood risk and surface water drainage considerations, coupled with appropriate measures through the design to manage the residual flood risk at the site following redevelopment, no likely significant effects associated with flooding and surface water drainage are anticipated in line with London Plan Policy 5.
451. The results and conclusions of the FRA and the Drainage Strategy, including accounting for climate change resilience with regard to flood risk and surface water drainage, will be presented in **ES Volume 1, Chapter 4: Proposed Development**. Both the FRA and Drainage Strategy will be submitted as standalone planning deliverables with the planning application.

Sewers

452. The existing site is heavily urbanised and is served by a network of public combined water sewers. The current sewer network consists of primarily combined sewers. There is a mix of local and strategic sewers located across the site. There are minimal dedicated surface water sewers however and surface water sewers that are in place discharge into the combined network.

453. Sewer abandonments and diversions may be required due to the location of the proposed buildings. These are currently in the initial stages of discussion with Thames Water to agree a strategy.

Strategic Sewers

454. A pair of strategic combined 2250mm and 1524 x 1257mm sewer pipes encroach into the site and located primarily under the Blackwall Tunnel Northern Approach Road running south to north. A strategic 1219mm sewer running under Abbott Road which then splits into two 914mm sewers prior to one of the larger strategic sewers mentioned above. These sewers serve as the primary collectors for the site.

Local Sewers

455. There are various sewers serving the various sites and buildings located within the boundary of the masterplan. All local sewers collect discharge from the existing roads, hardstanding and buildings prior to discharging to the strategic sewers. The pipe diameters range from small diameter sewers to 475mm sewers.

Wastewater (Foul Drainage)

456. Foul water discharge rates to the existing Thames Water Utilities Ltd (TWUL) network³⁰ are expected to increase as a consequence of the Proposed Development relative to the existing condition. The consideration of foul drainage, and the strategic options for foul water management at the site, will be accounted for within the surface water Drainage Strategy referred earlier.
457. The anticipated increase in foul flows generated by the Proposed Development would be compensated by the expected reduction in the rate of surface water discharged to the drainage / sewer network. Further measures, including the installation of water efficient fixtures and fittings, can further help reduce the volume of foul water generated on-site and therefore reduce the overall magnitude of the impact of the Proposed Development on the public drainage network.
458. It is expected that during the detailed design stage, a pre-planning enquiry has been submitted to TWUL and they have stated that there is sufficient capacity in their network to accept the flows from the development. A S106 will be completed after planning and between RIBA Stages 4 and Stage 5 to obtain formal permission to connect. The assessment (undertaken by TWUL) would confirm the capacity of the local sewer network and details relating to the point of connection, with the aim to identify any requirement to upgrade the local sewer network (if required).
459. Where there is existing capacity available in the local sewer network, it is considered the increased peak foul flows will result in a low magnitude of impact and therefore have a likely minor effect (not significant) on TWUL infrastructure local to the site. If it is determined that capacity within the local sewer network needs to be increased, then agreement between the Applicant and TWUL would involve works to upgrade the local sewer network and therefore, following these works, any likely effect would remain not significant.

Water Demand

460. TWUL produce Water Resource Management Plans (WRMP) which sets out forecasts for water supply and demand, and outlines the strategy proposed to meet consumers' needs into the future. As part of the production of the WRMP, TWUL has taken into account the projected future growth within its defined catchment area (i.e. London), with forecasts based on underlying source data from Government census data, past trends and local authorities' forecasts of future population growth. TWUL bases its forecasts on a combination of these sources to determine the most likely scenarios for growth. It is therefore considered that the likely effects of the Proposed Development on water demand have been accounted for strategically within the TWUL assessments.

³⁰ Understood that Thames Water provides sewerage services

461. To inform the detailed design stage, consultation with TWUL may result in the need to carry out flow and pressure tests for daily demand estimations for the Proposed Development. This will assess the available capacity in the local supply network and determine whether any additional mains pipework is necessary to support the Proposed Development and provide an indication of any cost of upgrades to the network. This may be undertaken as part of the detailed design stage if required.
462. Following the inclusion of water efficiency measures to reduce water usage, in addition to the implementation by TW of the Thames Water Resource Management Plan (i.e. management and provision of water supply at a strategic level which has been made to accommodate future growth), it is considered that sufficient measures will be in place for water demand to be met and so no likely significant effects are anticipated.
463. It is therefore not considered that there is the potential for significant effects.

Demolition and Construction Works

464. A number of water resources and drainage mitigation measures shall be implemented throughout the demolition and construction works to protect water resources, particularly relating to groundwater and drainage networks. These mitigation measures can be categorised as 'Pre Commencement' measures, and measures implemented throughout the demolition and construction works themselves. The measures are as follows and will also be presented within the ES in **ES Chapter 16 - Mitigation and Monitoring Schedule (Volume 1)**.

- Pre-Commencement:
 - Discharge arrangements into the foul water sewer will be agreed with TW.
 - All existing utilities will be identified and marked before works commence, with the use of signs to warn of their presence.
 - Settlement facilities and oil / petrol interceptors will be installed at relevant discharge points into the sewers (for surface water runoff and wastewater discharges).
 - An Emergency Response Plan (ERP) will be prepared and which will set out the procedure to be adopted in the event of a leak or spill.
- During Enabling and Construction Works:
 - Any damage to existing infrastructure would be immediately repaired.
 - Any waste effluent will be tested and any water that may have come into contact with contaminated materials or be identified as being contaminated, will be disposed of appropriately and, to the satisfaction of the EA and/or TW; and where necessary, disposed of at the correctly licensed facility by a licensed specialist contractor/s.
 - Plant and machinery will be kept away from controlled waters and will have drip trays installed beneath oil tanks/engines/gearboxes/hydraulics, which will be checked and emptied regularly via a licensed waste disposal operator.
 - Refueling and delivery areas will be located away from the local sewer network drains.
 - All liquids and solids of a potentially hazardous nature (e.g. diesel fuel, oils and solvents) will be stored in designated locations with specific measures to prevent leakage and release of their contents, include the siting of storage areas away from surface water drains, on an impermeable base with an impermeable bund that has no outflow and is of adequate capacity to contain 110% of the contents in accordance with the EA's requirements. Any tanks storing more than 200 litres of oil on-site, will have secondary bunding.
 - All storage will be protected from vandalism and kept locked up when not in use.

- Wherever possible, plant and machinery will have drip trays beneath oil tanks/engines/gearboxes/hydraulics, which will be checked and emptied regularly via a licensed waste disposal operator.
- On-site provisions will be made to contain a serious spill or leak through the use of booms, bunding and absorbent material in accordance with an Emergency Response Plan (ERP).
- All relevant contractors will be required to investigate opportunities to sustainably manage the use of water, such as turning off taps when not in use, both on site and within site offices and the use of recycled water / a rainwater harvesting system for equipment such as wheel washes.
- The water consumption throughout the enabling and construction works will be monitored, either through sub-metering or reading of utility bills, to allow comparison against best practice benchmarks and improvements to be made.

Conclusion

465. Taking into account the above approach and the proposed mitigation / management measures, it is considered that the Proposed Development is unlikely to give rise to significant residual effects with respect to flood risk, drainage and water demand. Additionally, in recognition of the size of the site and it being located in Flood Zone 3a, an FRA will be prepared to accompany the planning application. Therefore, it is proposed that water resources, drainage and flood risk is scoped out of the EIA.

Project Vulnerability

466. With reference to Regulation 4(4) and Schedule 4 of the EIA Regulations, this Scoping Report also considers whether there are likely to be any significant effects on the environment or the Proposed Development arising from the vulnerability of the Proposed Development to major accidents or disasters that are relevant to the development.
467. Available IEMA information (IEMA Quality Mark Article 'Assessing the Risks of Major Accidents and Disasters in EIA (WSP, 2016)') defines major accidents and disasters as follows:
- "man-made and natural events which are considered to be likely and are anticipated to result in substantial harm that the normal functioning of the project is unable to cope with/rectify"*.
468. Paragraph 8 of Schedule 4 of the EIA Regulations provides further description of the information to be provided in the ES in relation to these events. In line with this description it is understood this information would in particular be considered to be of key importance for the assessment of major industrial and/or infrastructure schemes which could pose significant risks to society and the environment in the event of a major accident or a natural disaster which would impede its normal function (e.g. nuclear / petrochemical installations, major transport infrastructure such as tunnels, bridges or airports, etc.). While the Proposed Development does not fall into either of these scheme categories, the project's vulnerability to such events has nevertheless been taken into consideration in order to ascertain the potential risks to future site users and surrounding human and environmental receptors.
469. For any new development, a project's vulnerability to major accidents and natural disasters should be considered both in terms of the likelihood of the project itself to cause a major man-made accident, and in terms of the project being affected by an external man-made accident or by a natural disaster. In all these cases it is furthermore important to consider whether any aspect of a proposed development's design or operation could worsen the effects of any such events on nearby receptors.
470. The London Resilience Partnership has developed the London Risk Register³¹, which lists a range of

³¹ London Resilience Partnership, February 2017. London Risk Register. Available: https://www.london.gov.uk/sites/default/files/london_risk_register_6.0.pdf

natural hazards and man-made accidents/incidents and assesses the risks they pose to the London area based on their potential impact and likelihood. As well as assessing the risk of these events, the London Risk Register also provides an outline of the control measures already in place to avoid, manage and respond to them. These measures range from specific laws and regulations intended to avoid or manage the potential causes of major accidents and natural disasters, to government agency programmes intended to prevent, inspect and monitor these causes, as well as a variety of response plans, forecasting and early warning systems. The effective implementation of these plans, programmes, legislative tools and guidance is considered to reduce the risk of these events to a level which is as low as reasonably possible.

- 471. Due to the nature and surroundings of the Proposed Development, many of the events listed in the Register (e.g. wildfires, animal diseases, etc.) are not considered relevant or likely to pose a risk to future site users or surrounding receptors. The remaining events in the Register will be managed, or altogether avoided, through the aforementioned established regulatory framework and the control measures implemented at the local and/or national government level, with the support of specialist government agencies.
- 472. In some cases, this risk management process will be further supported with project-specific information and assessments which form part of the EIA and the wider planning process. This includes the assessment of potential weather-related events, such as those relevant to the wind microclimate assessment, which under certain conditions could pose a safety risk to pedestrians (in the event of said effects occurring, mitigation measures will be implemented). Likewise, the requirement for a Flood Risk Assessment within the planning application will address the flood related risks as listed in the London Risk Register.
- 473. In line with the above, within the context of the events assessed in the London Risk Register, it is considered that the vulnerability of the Proposed Development to major accidents and natural disasters will be adequately managed throughout the lifetime of the project. As such, it is considered that the vulnerability of the Proposed Development to such events, is in itself, unlikely to result in any further significant effects on introduced site users, and surrounding environmental and human receptors.
- 474. The EIA for the Proposed Development will therefore not specifically consider the issue of major accidents and natural disasters any further as they will be appropriately managed through the aforementioned established regulatory framework and the control measures implemented at the local and/or national government level and considered where relevant in ES technical assessments such as the wind microclimate and flood risk assessments.

Electronic (TV and Radio) Interference

475. Since the replacement of analogue TV with digital, there has been a reduced need to assess signal interference from new buildings, whilst mobile reception interference is unlikely to be affected in the site locality due to the lack of surrounding tall buildings. In addition, EIA best practice recognises that telecommunication issues do not normally constitute environmental effects and that such issues can be dealt with by way of standard planning conditions. It is therefore proposed that the topic of telecommunications is scoped out of the EIA.

Waste

Introduction

- 476. A waste technical assessment is proposed to be scoped out of the EIA because the Proposed Development would not give rise to significant environmental effects in relation to waste.
- 477. A separate Operational Waste Management Strategy (OWMS) will be prepared by Velocity Transport Planning and submitted as a standalone document as part of the Planning Application.

478. This topic is **SCOPED OUT** of the EIA.

Baseline Conditions

- 479. The site currently comprises occupied residential dwellings of varying composition, a primary school and a number of small commercial operations.
- 480. Existing waste streams include residential properties waste collected by LBTH and commercial / industrial waste collected by private contractors.
- 481. The London Plan 2021 provides apportionment targets for LBTH for household, and commercial and industrial waste. Table 6 below summarises these targets and LBTH’s waste projections to 2041.

Table 6 LBTH waste targets and projections

Waste Capacity	Tonnes per Annum	
	2021	2041
LBTH Household and Commercial / Industrial Waste Arisings	260,000	273,000
London Plan Apportionment	195,000	207,000

482. Extracted from the LBTH Local Plan, Table 7 demonstrates how LBTH can meet its apportionment targets through existing waste sites and identifying enough land suitable for new waste facilities. The ranges shown denote the differences in throughput per hectare for each type of facility / technology.

Table 7 LBTH target achievement strategy

Land and Tonnage	LBTH Capacity	
	2021	2041
Existing apportionment capacity (tonnes)	51,874	51,874
Potential capacity from vacant safeguarded waste sites * (tonnes)	23,850 – 34,450	23,850 – 34,450
Capacity gap (tonnes)	108,676 - 119,276	120,766 – 131,276
Additional land required (hectares)	1.67 – 2.65	1.86 – 2.92
Additional land identified (hectares)	5.28	5.28

483. The Local Plan summarises the active permitted waste management sites and land suitable for new waste facilities in the LBTH; it is considered likely that the combined annual waste capacity would exceed the LBTH London Plan apportionment figures. It is therefore expected that these facilities and land suitable for new waste facilities (combined) would provide sufficient capacity within the borough to manage the apportionment targets.

Mitigation

- 484. IEMA’s guide to Materials and Waste in Environmental Impact Assessment refers to different types of mitigation measures to prevent or reduce adverse effects:
 - Primary mitigation measures: are “an intrinsic part of the development, and do not require additional action to be taken”³²; for example, choosing to refurbish an existing building, rather than demolish it;
 - Secondary mitigation measures: are “foreseeable actions brought out by the environmental assessment process, and that have not previously been achieved through primary and tertiary mechanisms”³³; for example, the implementation of a Procurements Strategy or Construction Environmental Management Plan (CEMP); and

³² IEMA, (2020); IEMA guide to: Materials and Waste in Environmental Impact Assessment (page 19).

³³ IEMA, (2020); IEMA guide to: Materials and Waste in Environmental Impact Assessment (page 27).

- Tertiary mitigation measures: are “those that are in place with or without the iterative EIA process” and include “those that will be undertaken to meet existing legislative requirements, of those that are considered standard practices used to manage commonly occurring environmental effects”³⁴; for example, sending waste to active and permitted waste management sites, which have to adhere to the requirements of the Environmental Permitting Regulations, whereby carrying out certain types of activity (such as receiving waste for landfill) requires an active and permitted waste management site to hold an environmental permit to do so.

Development Context

485. The Proposed Development will bring forward a range of uses including commercial, residential and retail. Waste will be generated by the Proposed Development during the demolition, construction and operational phases.
486. Once operational, LBTH will be responsible for the collection and subsequent treatment and disposal of municipal waste, which is usually undertaken by specialist contractors.
487. Management of the commercial and industrial waste will be the responsibility of the individual commercial occupiers who will employ specialist contractors to undertake collections on their behalf.
488. Waste streams would be created from the demolition, enabling and construction of the Proposed Development, which would be the responsibility of the contractors and sub-contractors to manage, including disposal.

Discussion for Scoping Out

Demolition and Construction

489. The London Plan 2021 states that construction, excavation and demolition (CE&D) waste is re-used or recycled at a rate of between 85-95% for larger construction projects. Policy SI 7 also provides a target of 95% for re-use and recycling of CE&D waste. It is anticipated that CE&D material unsuitable for re-use on site will be processed outside of the local waste management infrastructure
490. During demolition, enabling and construction works, the greatest potential for waste arisings would be during the demolition phases. Expected waste streams arising during the demolition and construction phases include inert materials, such as crushed concrete, hardcore and brick, as well as materials stripped out from the existing structures. The excavation phase would generate soil and rubble of varying classification, subject to physical and chemical analysis.
491. Estimated volumes of materials arising during these phases, as well as any specific mitigatory measures required will be presented within the *Demolition and Construction* chapter of the ES.
492. The mitigatory measures that can be employed during the demolition and construction phases to reduce the potential impact of waste and recycling include:
- Provision of a Construction Environmental Management Plan (CEMP) and Site Waste Management Plan (SWMP) to include waste reduction and management objectives;
 - A suite of testing to identify on-site contamination and subsequent methodologies to segregate material accordingly; and
 - Minimisation of stockpiled construction materials.
493. A CEMP and SWMP will be prepared and implemented throughout the demolition, enabling and construction phases, pursuant to any planning conditions. Providing the measures included within the CEMP and SWMP are enforced and adhered to via a condition, significant adverse effects on sensitive receptors, pertaining to the quantity and composition of waste during the enabling and construction phase,

³⁴ IEMA, (2020); IEMA guide to: Materials and Waste in Environmental Impact Assessment (page 20).

are considered unlikely.

494. Considering the available capacity specified within the Local Plan for waste (including land suitable for new waste facilities) to accommodate the apportionment targets, and the adherence to mitigation measures pursuant to planning conditions, waste generated during the demolition and construction phases from the Proposed Development is not anticipated to cause strain to the borough’s waste management facilities. Therefore, significant adverse effects on the local waste management infrastructure and landfill capacity, resulting from the waste expected to be generated during the demolition and construction of the Proposed Development, are considered unlikely.
495. Based on the above, it is proposed to scope out an assessment of the Proposed Development’s demolition and construction effects on waste and recycling.

Completed Development

496. During the operation of the Proposed Development, it is anticipated that any waste for recovery or waste for disposal generated from the site would be directed to active and permitted waste management sites within the LBTH or London.
497. Once operational the Proposed Development is expected to generate the following materials:
- Residential waste; comprising of:
 - Residual waste;
 - Dry Mixed Recycling (DMR);
 - Food waste;
 - Garden waste; and
 - Bulky waste.
 - Commercial / industrial waste.

498. The LBTH Waste Management Strategy³⁵ identifies a requirement for new developments to include sufficient space for the separation of recyclable materials, whilst highlighting the associated issues with achieving this within blocks of flats.

499. To ensure there is sufficient space for storage of separate recyclable materials for residents in accordance with LBTH policy, the Proposed Development will use a combination of communal waste storage systems:

- Underground waste storage system (SULO (implemented across Phases 1 and 2));
- Portable compactors; and
- Wheeled bins.

500. The volume of waste storage provided for residents will be calculated in accordance with the LBTH requirements detailed in the Local Plan.

501. Waste generated by commercial and industrial uses will be the responsibility of the producer to arrange suitable storage and collection of waste streams. Storage requirements for commercial and industrial waste will be calculated in accordance with British Standard *BS5906:2005 Waste Management in Buildings – Code of Practice*.

502. An OWMS will be prepared and submitted as part of the planning application. This document will summarise the types and volumes of waste expected to be generated by the Proposed Development once occupied, as well as the methodologies for storage and collection of waste for residential as well as

³⁵ LBTH, Waste Management Strategy 2018-2030
https://democracy.towerhamlets.gov.uk/documents/s143602/6.4a%20Appendix%201%20-%20WasteStrategy_final.pdf

commercial users.

- 503. The strategy will identify how waste will be reduced, minimised and recycled in accordance with the waste hierarchy and LBTH guidance.
- 504. Considering the available capacity specified within the Local Plan for waste (including land suitable for new waste facilities) to accommodate the apportionment targets, and the adherence to mitigation measures pursuant to planning conditions, waste generated from the Proposed Development is not anticipated to cause strain to the borough's waste management facilities once operational. Therefore, significant adverse effects on the local waste management infrastructure and landfill capacity, resulting from the waste expected to be generated during the operation of the Proposed Development, are considered unlikely.
- 505. Based on the above, it is proposed to scope out an assessment of the Proposed Development's operational effects on waste and recycling.

SCOPE SUMMARY

- 506. To assist the reader, a summary of what is proposed to be 'scoped in' and 'scoped out' of the EIA, is provided in Table 88.
- 507. Further detail on each topic is provided in the preceding technical sections of this request for an EIA Scoping Opinion.

Table 8 EIA Technical Topics

Environmental Topics	'Scoped In' the ES	Additional Assessments to Accompany the Planning Application
Air Quality	✓	
Archaeology (Buried Heritage)	✓	Archaeological Desk Based Assessment
Climate Change	✓	
Daylight, Sunlight, Overshadowing and Solar Glare (residential properties outside of the red line boundary)	✓	
Daylight, Sunlight and Overshadowing (internal, new receptors within the Proposed Development)	x	
Ecology and Biodiversity	x	Preliminary Ecological Assessment
Geo-environmental (Ground Conditions, Groundwater and Land Take and Soils)	x	Geoenvironmental Desk Study
Built Heritage	✓	
Townscape and Visual Impact Assessment	✓	
Light Pollution	x	
Noise and Vibration	✓	
Project Vulnerability, Major Accidents and Natural Hazards	x	
Socio Economics	✓	
Health	x	Health Impact Assessment
Traffic and Transport	✓	
TV and Radio Interference	x	
Waste	x	
Water Resources, Drainage and Flood Risk	x	Flood Risk Assessment
Wind Microclimate	✓	

FORMAT AND CONTENT OF THE EIA

508. The proposed scope and structure of the ES is as follows:

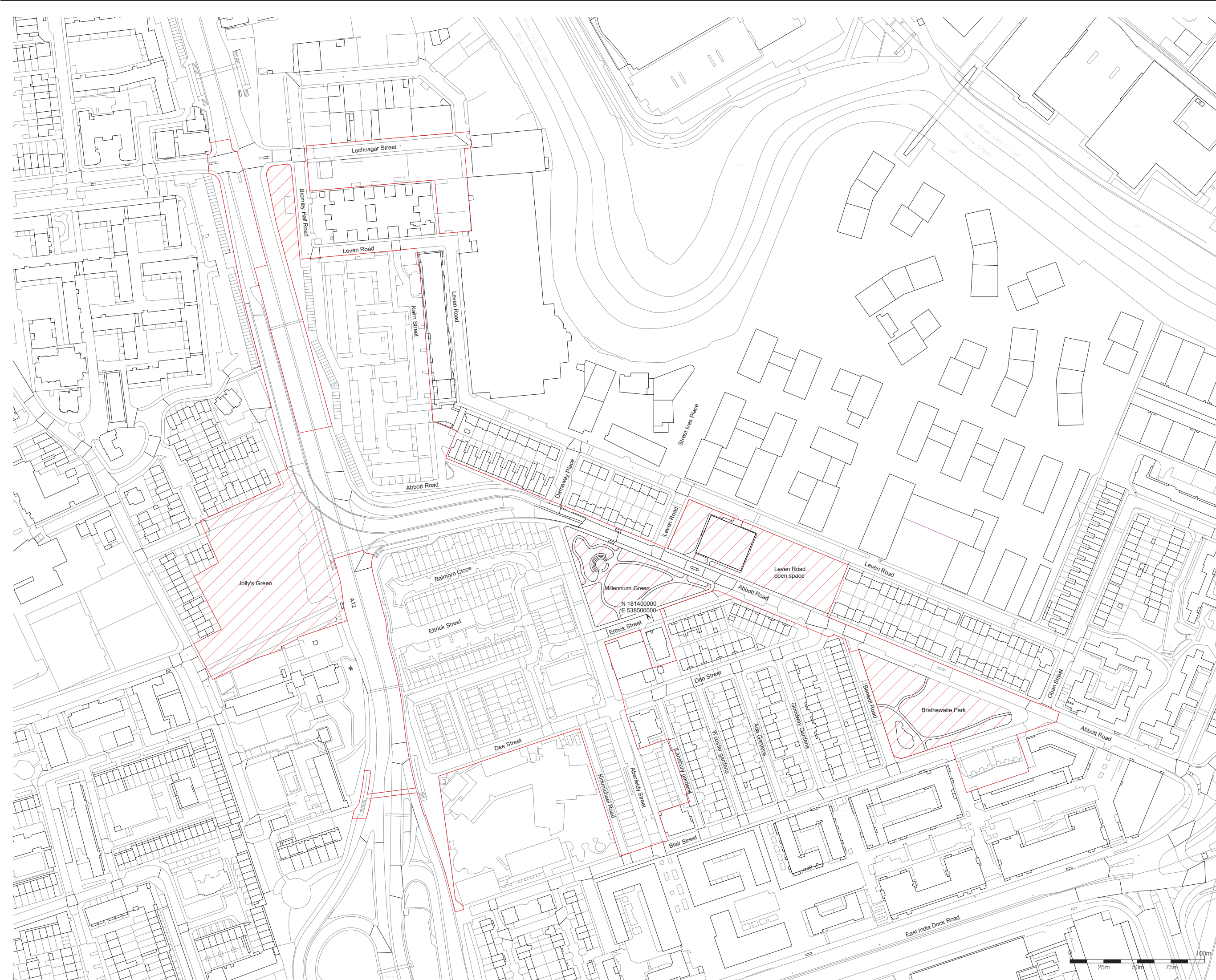
- **ES Volume 1: Main ES** – a document which forms the main body of the ES and which comprises of the following non-technical and technical chapters:
 - Chapter 1. Introduction and EIA Methodology;
 - Chapter 2. Reasonable Alternatives and Design Evolution;
 - Chapter 3. The Proposed Development;
 - Chapter 4. Demolition and Construction;
 - Chapter 5. Socio-Economics;
 - Chapter 6. Traffic and Transport;
 - Chapter 7. Air Quality;
 - Chapter 8: Climate Change
 - Chapter 9. Noise and Vibration;
 - Chapter 10: Archaeology
 - Chapter 12: Daylight, Sunlight, Overshadowing, Light Pollution and Solar Glare;
 - Chapter 13. Wind Microclimate;
 - Chapter 14: Effect Interactions;
 - Chapter 15. Likely Significant Effects and Conclusions;
 - Chapter 16. Mitigation and Monitoring Schedule;
 - Chapter 17. Glossary and Abbreviations.
- **ES Volume 2: Townscape Visual Impact Assessment** – a built heritage assessment and a separate townscape and visual impact assessment (TVIA) document that will be accompanied by a full set of views and verified images, and as agreed with LBTH as part of this EIA Scoping Process:
 - Built Heritage Assessment
 - Townscape Visual Impact Assessment
- **ES Volume 3: Technical Appendices** – comprises background data, technical reports, tables, figures and surveys. The following appendices are currently envisaged:
 - Appendix Introduction and EIA Methodology:
 - Appendix Socio-Economics:
 - Appendix Air Quality:
 - Appendix: Archaeology
 - Appendix Noise and Vibration:
 - Appendix Daylight, Sunlight, Overshadowing, Light Pollution and Solar Glare:
 - Appendix Wind Microclimate:
 - Appendix Flood Risk and Drainage:
 - Appendix Climate Change:
- **ES Non-Technical Summary (NTS)** - this will be a separate document providing a concise description of the Proposed Development, the alternatives considered, any identified mitigation measures and the residual likely significant environmental and socio-economic effects.

509. Schedule 4 of the EIA Regulations sets out the information for inclusion within an ES. In response to this Schedule of the EIA Regulations, **Appendix B** to this EIA Scoping Report provides a 'way-finding' table which sets out the information for inclusion within an ES and where this information will be presented within the ES.

REQUEST FOR AN EIA SCOPING OPINION

510. This Report requests a Scoping Opinion of the LBTH pursuant to Regulation 15 of the EIA Regulations.
511. The EIA Scoping Report suggests a comprehensive scope of work based on previous experience of the assembled team of specialists and existing knowledge of the site. The LBTH and consultees are invited to consider the contents of this Report and comment accordingly within the five-week period prescribed by the EIA Regulations.

APPENDIX A - Redline Planning Application Boundary



Notes

1. Do not scale this drawing.
2. All dimensions must be checked on site and any discrepancies verified with the architect.
3. Unless shown otherwise, all dimensions are to structural surfaces.
4. Drawing to be read with all other issued information. Any discrepancies to be brought to the attention of the architect.
5. This drawing is the copyright of Levitt Bernstein and may not be copied, altered or reproduced in any form, or passed to a third party without license or written consent.
6. This document is prepared for the sole use of EcoWorld London and no liability to any other persons is accepted by Levitt Bernstein. Levitt Bernstein accepts no liability for use of this drawing by parties other than the party for whom it was prepared or for purposes other than those for which it was prepared.

This is not a construction drawing, it is unsuitable for the purpose of construction and must on no account be used as such.

- Hybrid planning application boundary
- ▨ Land with the potential to be included within the application boundary

The copyright in the drawing shall remain vested in Levitt Bernstein, who asserts all "moral rights" conferred by statute.

This drawing is an uncontrolled version issued to enable the recipient to prepare their own documents/ models/ drawings for which they are solely responsible. The drawing is based on background information current at the time of issue. Levitt Bernstein accepts no liability for any such alterations or additions to or discrepancies arising out of changes to such background information which occur after that information after it is issued by Levitt Bernstein.

Levitt Bernstein prepared this drawing using Revit and does not accept liability for any loss or degradation of that information held in the drawing/model resulting from the transition from the original file format to any other file format or from the recipient's reading of it in any other programme or another version of the programme referred to above.

This drawing is prepared for the sole use of the client and no liability to any other persons is accepted by Levitt Bernstein. The contents have been prepared solely for their use and no other person or organisation should place reliance upon this information. Levitt Bernstein accepts no liability for use of this drawing by parties other than the party for whom it was prepared or for purposes other than those for which it was prepared.

This is not a construction drawing; it is unsuitable for the purpose of construction and must on no account be used as such.

It is not to be relied on and does not address build-ability or compliance with the Building Regulations. It is your responsibility to review thoroughly the design for these purposes prior to construction. Levitt Bernstein does not accept any responsibility for any delay and/or disruption to the construction of the project and/or any cost that may arise in relation to the above. You will indemnify Levitt Bernstein against all costs, losses, claims, proceedings and expenses incurred as a result of the use of the drawing by you.

By using the drawing you are deemed to have accepted the above terms.

P12	LS
P11	LS
P10	LS
P9	LS
P8	CL
P7	CL

Rev	Date	Description	Drawn / Checked

Project name

Aberfeldy New Masterplan

Drawing number

3663 - LBA - 01 P12

Drawing

Indicative Red line boundary

Purpose of issue

Information

Scale 1 : 1250 @ A1 Date 20/27/20

Client

EcoWorld London

APPENDIX B – Information for Inclusion within an ES: Way Finding

APPENDIX C– Cumulative Schemes

Cumulative Scheme List

Table C1 Cumulative Schemes

Ref.	Name/Address	Application Number	Scheme Description	Status
Applications Granted Permission				
1	Blackwall Reach The Robin Hood Gardens Estate together with land south of Poplar High Street and Naval Row, Woolmore School and land north of Woolmore Street bounded by Cotton Street, East India Dock Road and Bullivant Street	PA/12/00001/P0	Outline application for alterations to and demolition of existing buildings, site clearance and ground works and redevelopment to provide: Up to 1,575 residential units (up to 191,510 sq.m GEA - Use Class C3); Up to 1,710 sq.m (GEA) of retail floorspace (Use Class A1-A5); Up to 900 sq.m of office floorspace (Use Class B1); Up to 500 sq. m community floorspace (Use Class D1); Replacement school (up to 4,500 sq.m GEA - Use Class D1); Replacement faith building (up to 1,200 sq.m - Use Class D1) The application also proposes an energy centre (up to 750 sq.m GEA); associated plant and servicing; provision of open space, landscaping works and ancillary drainage; car parking (up to 340 spaces in designated surface, podium, semi-basement and basement areas plus on-street); and alterations to and creation of new vehicular and pedestrian access routes. All matters associated with details of appearance, landscaping, layout and scale and (save for the matters of detail submitted in respect of certain highway routes, works and/or improvements for the use by vehicles, cyclists and pedestrians as set out in the Development Specification and Details of Access Report) access are reserved for future determination and within the parameters set out in the Parameter Plans and Parameter Statements	Permission Granted by LBTH March 2012 Commenced
2	Castle Wharf Esso Petrol Station, Leamouth Road, London, E14 0JG	PA/16/01763/A1	Redevelopment of the former Service Station site with a residential led mixed use development, comprising residential units, together with 295 sqm of D1 floorspace, 81 sqm of flexible non-residential floorspace (Use Classes A1, A2, A3, B1, D1 and D2), 36 sqm café floorspace (Use Class A3), set across two main buildings including a 24 storey tower with stepped blocks of 20, 17, 11 and 8 storeys, linked by a 2 storey podium at ground level, with a single basement level, landscaping and associated amenities.	Permission Granted October 2017 by LBTH Under Construction
3	Ailsa Wharf, Ailsa Street, London	PA/16/02692 & PA/18/03461	Demolition of existing structures/buildings and the redevelopment of the site for a mixed use scheme providing 785 residential units (C3) and 2,954 sqm GIA commercial floorspace (A1/A3/B1/D2) within a series of thirteen building blocks varying between 3 and 17 storeys (Maximum AOD height of 59.9) ; the creation of a new access road and the realignment of Ailsa Street; the provision of cycle and car parking spaces; and associated site-wide landscaping and public realm works.	Permission Granted October 2018 by LBTH Commenced
4	Imperial 2 (formerly Clockhouse and Access House), Bromley by Bow, London, E3 3AE	17/00364/FUL 18/00572/NMA, & 18/00575/NMA	Full planning application for the demolition of the existing buildings on site and the construction of a residential-led mixed use scheme comprising a series of buildings ranging from one to 27 storeys in height to provide 3,570 sq m of flexible community, commercial and retail floorspace (Use Classes A1, A2, A3, A4, B1 and/or D1) at ground and mezzanine floor level, 491 residential units (Use Class C3) on the upper floors, parking/refuse/servicing at basement and ground floor, energy centre, communal amenity areas, and all associated landscaped public open space.	Permission Granted September 2018 by LLDC Under Construction

Ref.	Name/Address	Application Number	Scheme Description	Status
5	Chrisp Street Market, Chrisp Street, London	PA/16/01612/A1	Comprehensive redevelopment of the site (including existing car park) comprising the demolition of existing buildings with the exception of the Festival of Britain buildings, Clock Tower and Idea Store; erection of 19 new buildings ranging from 3 to 25 storeys (up to a maximum AOD height of 88m) providing 643 residential units (C3 Use Class) (including re-provision of 124 affordable residential units); existing market enhancement, including new canopy and service building; refurbishment of retained Festival of Britain buildings; reconfiguration and replacement of existing and provision of new commercial uses including new cinema (D2 use class); alterations and additions to existing Idea Store for community use and multi-function space (D1 Use Class); flexible affordable workspace/ community space (B1/D1 Use Class); office space (B1 use class); retail, financial and professional services and cafe/ restaurant floor space (A1 - A3 Use Class), including A1 food store; public house (A4 Use Class); hot food takeaway floor space (A5 Use Class); upgrade and provision of new public open space including child play space; new public realm, landscaping works and new lighting; cycle parking spaces (including new visitor cycle parking); and provision of disabled car parking spaces. (Reconsultation due to revised submission documents that take in to account Grade II Listed status of the clock tower and the Festival Inn pub. Also changes to housing mix and child play space. Additional documents uploaded since the last letter was sent.) The application is accompanied by an Environmental Impact Assessment.	Permission Granted March 2019 by LBTH Not Commenced
6	Barrett Industrial Estate, 20-22 Gillender Street, London	PA/18/00528/A1 & PA/19/00914	Demolition of the existing buildings, with the exception of 21-22 Gillender Street (Magnolia House), and redevelopment of the site to provide 307 residential units (Use Class C3), 1,815 sq m of commercial floorspace (Use Class B1) and 100 sq m of flexible commercial/retail floorspace (Use Class A1/A3/B1) within three buildings of 8 storeys (42.9m AOD), 17 storeys (67.0m AOD) and 20 storeys (78.5m AOD) with public and private amenity spaces, together with disabled car parking, cycle parking and associated landscaping.	Permission granted November 2018 by LBTH Commenced
		PA/18/00520/NC (related listed building consent)	Listed Building Consent for remedial works to Grade II listed wall that forms the north wall of the Dowgate Wharf P B Burgoyne and Company Limited Warehouse (List Entry UID: 1065050) in association with redevelopment of the site at 20 -22 Gillender Street for demolition of the existing buildings, with the exception of 21-22 Gillender Street (Magnolia House), and redevelopment of the site to provide 307 residential units (Use Class C3), 1,815 sq m of commercial floorspace (Use Class B1) and 100 sq m of flexible commercial/retail floorspace (Use Class A1/A3/B1) within three buildings of 8 storeys (42.9m AOD), 17 storeys (67.0m AOD) and 20 storeys (78.5m AOD) with public and private amenity spaces, together with disabled car parking, cycle parking and associated landscaping.	
7	Hercules Wharf, Castle Wharf and Union Wharf, Orchard Place, London, E14	PA/14/03594/A1, PA/17/02292 & PA/18/02805	Demolition of existing buildings at Hercules Wharf, Union Wharf and Castle Wharf and erection of 16 blocks (A-M) ranging in height from three-storeys up to 30 storeys (100m) (plus basement) providing 834 residential units; Retail / Employment Space (Class A1 ? A4, B1, D1); Management Offices (Class B1) and Education Space (Class D1); car parking spaces; bicycle parking spaces; hard and soft landscaping works including to Orchard Dry Dock and the repair and replacement of the river wall. Listed Building Consent application - Works to listed structures including repairs to 19th century river wall in eastern section of Union Wharf; restoration of the caisson and brick piers, and alteration of the surface of the in filled Orchard Dry Dock in connection with the use of the dry docks as part of public landscaping. Works to curtilage structures including landscaping works around bollards; oil tank repaired and remodelled and section of 19th century wall on to Orchard Place to be demolished with bricks salvaged where possible to be reused in detailed landscape design. The application is accompanied by an Environmental Impact Assessment	Permission granted September 2016 by LBTH Under Construction

Ref.	Name/Address	Application Number	Scheme Description	Status
			Amended proposal: A reduction of storeys to Blocks B, C, E, F and J, a reduction in number of residential units to 804, an increase in commercial floorspace, alterations to the mix of proposed residential units including a reduction in studio and one bed units and an increase in 3 and 4 bed units. Further integration of door step play space and mitigation measures in relation to Orchard Wharf including the change of use of three town houses in Block M from residential to commercial floor space and the addition of panels to the south and south-west balcony sides on Blocks J and K.	
8	Cody Dock 11c South Crest, Canning Town, London, E16 4TL	17/03659/OUT	Outline planning permission (with all matters reserved) for up to 1,500sqm of employment floorspace (Use Class B1 b/c), up to 500sqm of employment floorspace (Use Class B2), up to 50sqm ancillary community and exhibition space (Use Class D1), up to 200sqm ancillary restaurant/cafe space (Use Class A3), public toilets, dockside storage space, boat parking, car parking, cycle parking, and ancillary hard and soft landscaping. Full planning permission for up to 500sqm employment floorspace (Use Class B1 b/c), up to 60sqm employment floorspace (Use Class B2), up to 700sqm work/live mooring space (Use Class Sui Generis) and ancillary access pontoon, up to 50sqm ancillary community space (Use Class D1), a pedestrian footbridge, one mooring for a commercial passenger vessel, two moorings for visitor vessels, a composter, and ancillary hard landscaping and soft landscaping.	Permission Granted April 2019 by LBN Not Commenced
9	Former Parcel Force Depot, Street, Canning Town, London, E16 4SB [2.5km from site]	17/01847/OUT	Hybrid planning application comprising: Detailed planning application for Phase 1 with works to include: The proposed demolition of existing buildings and structures, The erection of buildings, including tall buildings, comprising: 1,020 Residential Units (Use Class C3) 689 sqm (GEA) of Business Floorspace (Use Class B1); 5,400 sqm (GEA) of Retail Floorspace (Use Class A1-A4); and 12,004 sqm (GEA) of Community and Leisure Floorspace including a Secondary School (Use Class D1 and D2). Associated infrastructure, including a new bridge connection to West Ham Station and two footbridges across Manor Road; Alterations to the existing access road and vehicle bridge; Streets, open spaces, landscaping and public realm; Car, motorcycle and bicycle parking spaces and servicing spaces; Utilities including energy centre and electricity substations; and Other works incidental to the proposed development Outline planning application (all matters reserved) for the balance of the site for: The proposed demolition of existing buildings and structures; The erection of buildings, including tall buildings, comprising: Residential Units (Use Class C3); Business Floorspace (B1); Retail (A1-A4); Community and Leisure (D1 and D2); and Associated infrastructure; Streets, open spaces, landscaping and public realm; Car, motorcycle and bicycle parking spaces and servicing spaces; Utilities including electricity substations; and Other works incidental to the proposed development.	Permission Granted August 2018 by LBN Commenced
10	Anchorage House, 2 Clove Crescent, London, E14 2BE	PA/16/01061/A1	Change of use at part ground floor level from Class B1 Office to a mix of flexible Class B1, A1, A3, A4 and D2 uses, the infill of the ground floor colonnades and the construction of a two storey podium at the south east corner of the building providing additional Class B1 Office space at first floor level, and associated alterations and landscaping.	Permission Granted July 2016 by LBTH Not Commenced
	Wood Wharf, Prestons Road	PA/13/02966/P0	Outline planning permission for comprehensive mixed use redevelopment of Wood Wharf comprising: Demolition of existing buildings and structures, including dwellings at Lovegrove Walk; The erection of buildings, including tall buildings, and basements comprising: Up to 3,610 residential units (C3); Hotel (C1);	Permission granted December 2014 by LBTH Under Construction

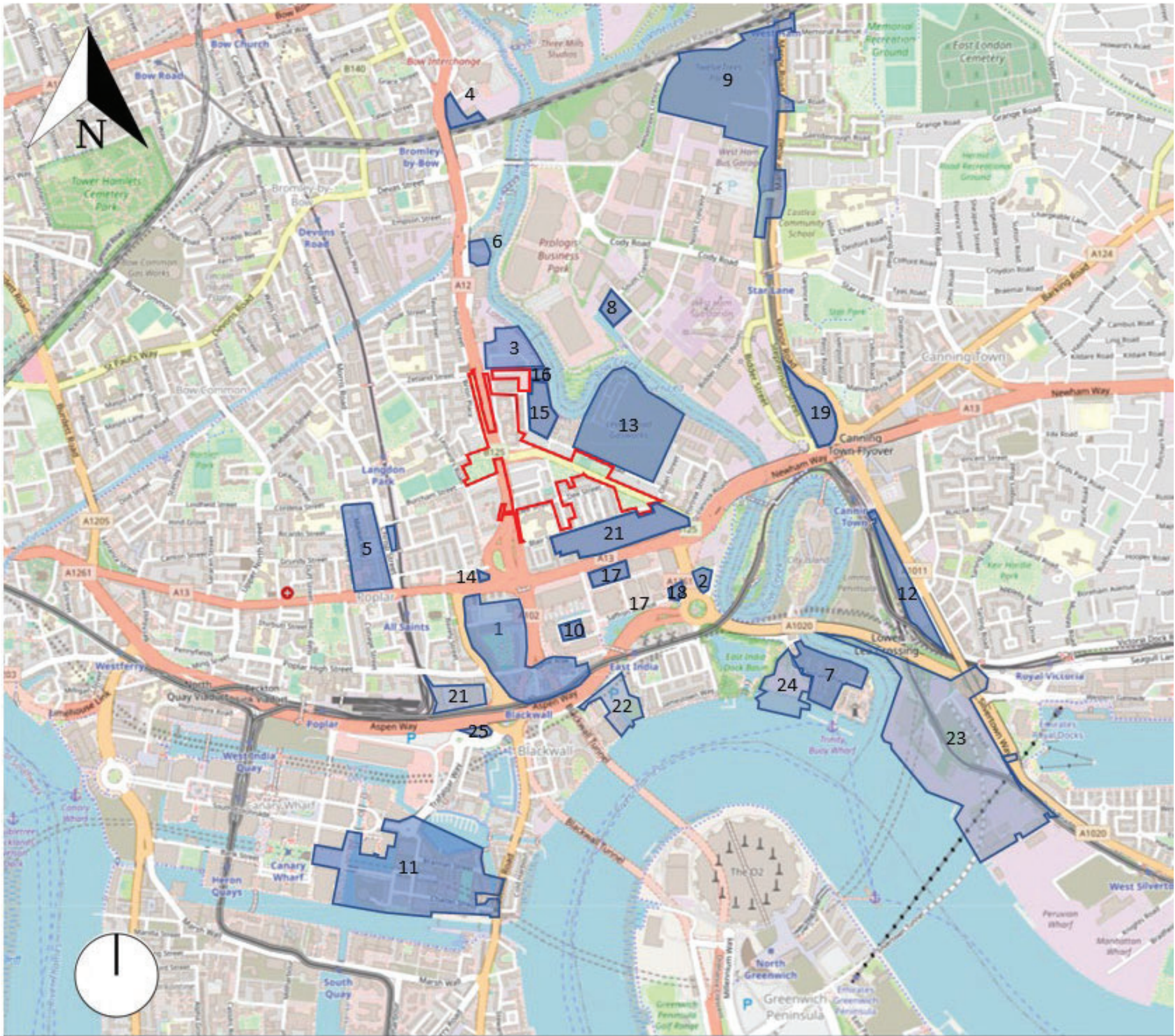
Ref.	Name/Address	Application Number	Scheme Description	Status
11			<p>Business floorspace (B1); Retail (A1-A5); Community and Leisure (D1 and D2); Sui Generis uses including Conference Centres, Theatres, Launderettes, and Data Centres Minimum commercial floorspace would be 165,000 sqm GIA; Associated infrastructure, including the creation of structures in Blackwall Basin, the Graving Dock, and South Dock; Streets, open spaces, landscaping and public realm; Bridge links; Car, motorcycle, and bicycle parking spaces, servicing; Utilities including energy centres and electricity substation(s); and Other works incidental to the proposed development.</p>	
12	<p>Brunel Street Works, Canning Town Area 8 Bounded by Peto Street North and Victoria Dock Road Sivertown Way, Canning Town</p>	16/03428/FUL	<p>Detailed planning permission for mixed use development to provide 975 residential units (Use Class C3), A 152 bedroom hotel (Use Class C1), A 3,000sqm (GIA) of flexible commercial floor space (Use Classes B1 (A,B&C), A1-A4, D2 and a nursery within Use Class D1) including a foodstore of up to 550sqm, An enhanced public realm with cycle ways, tree planting and public squares, amenity space, car parking, cycle parking, refuse stores and servicing arrangements and all associated works. Relocation of existing electricity substation. (This major application is accompanied by an Environmental Statement for the purposes of Environmental Impact Assessment)</p>	<p>Permission granted October 2017 by LBN Under Construction</p>
13	<p>Leven Road Gasworks, Poplar Gas Works, Leven Road, London</p>	PA/18/02803/A1	<p>A hybrid planning application (part outline/part full) comprising: 1.) In Outline, with all matters reserved apart from access, for a comprehensive mixed-use development comprising a maximum of 195,000 sqm (GEA) (excluding basement and secondary school) of floorspace for the following uses: Residential (Class C3); Business uses including office and flexible workspace (Class B1); Retail, financial and professional services, food and drink uses (Class A1, A2, A3 & A4); Community, education and cultural uses (Class D1); A secondary school (Class D1) (not included within the above sqm GEA figure); Assembly and leisure uses (Class D2); Public open space including riverside park and riverside walk; Storage, car and cycle parking; and Formation of new pedestrian and vehicular access and means of access and circulation within the site together new private and public open space. 2. In Full, for 66,600 sq.m (GEA) of residential (Use Class C3) arranged in four blocks (A, B, C and D), ranging from 4 (up to 23m AOD) 5 (19.7m AOD), 6 (up to 26.9m AOD), 8 (up to 34.1m AOD), 9 (up to 36.3m AOD) 12 (up to 51.3m AOD) and 14 (57.6m AOD) storeys in height, up to 2700 sq.m GIA of office and flexible workspaces (Class B1), up to 500 sq.m GIA community and up to 2000 sq.m GIA leisure uses (Class D1 & D2), up to 2500 sq.m GIA of retail and food and drink uses (Class A1, A2, A3 and A4) together with access, car and cycle parking, energy centre, associated landscaping and new public realm, and private open space. Further explanation (not forming part of the formal description of development set out above): Further details submitted with the application explain that the Proposed Development could deliver up to 2,800 new homes of which 577 new homes are included in the Full component of the Application (Phase 1), at least 1ha Public Park; and a maximum of 0.5 hectares of land secured for a secondary school. The application is accompanied by an Environmental Statement.</p>	<p>Permission granted October 2019 by LBTH Commenced</p>

Ref.	Name/Address	Application Number	Scheme Description	Status
14	267-269 East India Dock Road, London, E14 0EG	PA/19/01838/A2	Internal and external alterations to the existing residential units at no. 267 East India Dock Road and proposed erection of a 163-bedroom hotel (C1 use class) comprising of a part four, and part-eighteen storey building over basement, with associated roof top plant room, ground floor servicing, car and bike parking and landscaping.	Permission granted November 2020 by LBTH Not commenced
15	(Former Poplar Bus Depot), Leven Road, London, E14 0LN	PA/19/02148/A1	Part retention, part alteration, and part demolition of the existing boundary walls and the former tram shed depot arches, and retention of the three storey office building. Demolition of the remainder of the existing warehouse and the redevelopment of the site to provide 547 residential units (Class C3), 3,492sqm (GIA) of flexible space comprising of a mix of: office; retail; professional services; restaurant/bar; community space; and leisure space (Classes B1, A1, A2, A3, A4, D1 and D2) within buildings ranging from 3 storeys (20.2m AOD) to 20 storeys (72.7m AOD), with associated parking, landscaping, public realm and all associated works. This application is accompanied by an Environmental Statement.	Permission granted October 2020 by LBTH Not commenced
16	Islay Wharf, Lochnagar Street	PA/19/01760	Demolition of existing warehouse building and redevelopment of the site for mixed use development comprising two blocks ranging in height between 12 storeys and 21 storeys, accommodating 351sqm of flexible uses classes (Class A1, A2, B1, D1, D2) on ground floor and mezzanine with associated public realm works and residential accommodation (Class C3) on the upper floors providing 133 residential units.	Permission granted November 2020 by LBTH Not commenced
17	London Docklands Travelodge Hotel, Coriander Avenue, London, E14 2AA	PA/18/03088/A1	Outline application (with all matters reserved) for the demolition of existing Travelodge Hotel (Use Class C1) and erection of a data centre (Use Class B8).	Permission granted December 2019 by LBTH Not commenced
18	Site north west of Leamouth Road Roundabout, Leamouth Road, London	PA/18/03089	Erection of 19 storey building (up to maximum height of 64.250 metres AOD) to provide a new 350 room hotel (Use Class C1) together with ancillary restaurant and bar, car parking, cycle parking and landscaping.	Permission granted December 2019 by LBTH Commenced
19	300 Manor Road, Land Comprising Former HSS Site And 300 Manor Road Canning Town London	18/03506/OUT	Redevelopment of land bounded by Manor Road, (i) outline planning permission for up to 449 dwellings (Class C3), up to 1,845m ² of commercial (Class B1) and retail (Class A1/A2/A3/A4) floorspace; car parking, open space and associated infrastructure works; (ii) full planning permission for Phase 1 for 355 dwellings (Class C3), 555m ² of commercial (Class B1) and retail (Class A1/A2/A3/A4) floorspace; car parking, open space and associated infrastructure works. This application is accompanied by an Environmental Statement for the purposes of Environmental Impact Assessment under The Town and Country Planning (Environmental Impact Assessment) Regulations 2017	Permission granted November 2020 by LBN Not commenced
	Aberfeldy Estate, Abbott Road, London, E14	PA/11/02716/P0	Outline planning application (all matters reserved) for the mixed-use redevelopment of the existing Aberfeldy estate comprising:	Permission granted June 2021 by LBTH

Ref.	Name/Address	Application Number	Scheme Description	Status
20			Demolition of 297 existing residential units and 1,990 sq m of non-residential floorspace, including shops (use class A1), professional services (use class A2), food and drink (use class A3 and A5), residential institution (use class C2), storage (use class B8), community, education and cultural (use class D1); and creation of 1,176 residential units (Use Class C3) in 15 new blocks between 2 and 10 storeys in height plus 1,743sqm retail space (Use Class A1), professional services (Use Class A2), food and drink (Use Classes A3 and A5) and 1,786 community and cultural uses (Use Class D1) together with a temporary marketing suite (407sqm), energy centre, new and improved public open space and public realm, semi-basement, ground and on-street vehicular and cycle parking and temporary works or structures and associated utilities/services.	Commenced Phases 1-3a of the Aberfeldy Village masterplan complete Phase 3b works commenced
21	Poplar Business Park, 10 Prestons Road, London, E14 9RL	PA/11/03375	Demolition of existing buildings and redevelopment of the site to provide a mixed use scheme of between 3 and 22 storeys comprising 8,104 sq metres business accommodation (Use Class B1), 392 residential units (Use Class C3), associated parking and landscaping. This application is accompanied by an Environmental Impact Assessment	Permission granted under appeal (LBTH) Commenced
Applications Under Determination				
22	Land at Blackwall Yard, Blackwall Way, London, E14 2EH	PA/20/02509/A1	Phased redevelopment of the site and construction of 5 buildings (with maximum heights of between 9 and 39 storeys) comprising residential dwellings of mixed tenure, primary school & nursery, commercial, business & service floorspace, communal floorspace, public house, realignment of & environmental improvements to Blackwall Way, associated car & cycle parking, landscaping & public realm works (including alterations to the existing graving dock), installation of plant and associated works. External repairs and alterations to Grade II listed graving dock. This application is accompanied by an Environmental Statement.	Application under determination by LBTH Under determination
23	Land At Thameside West And Carlsberg Tetley Dock Road Silvertown London	18/03557/OUT	Hybrid planning application comprising: 1.Detailed planning application for Phase 1 with works to include: Proposed demolition of existing buildings and structures, erection of buildings, including tall buildings, comprising: 460 residential Units(Use Class C3), 3,417sqm(GEA) of flexible employment floorspace (Use Classes B1b, B1c, B2 (restricted), B8); 162 sqm(GEA) of flexible retail floorspace (Use Classes A1-A4) ;a new/altered access road from Dock Road/North Woolwich Road; new streets, open spaces, landscaping and public realm; car, motorcycle and bicycle parking spaces and servicing spaces; and other works incidental to the proposed development. 2. Outline planning application (all matters reserved) for phased delivery of the balance of the site for the proposed demolition of existing buildings and structures; erection of buildings, including tall buildings, comprising: a new local centre; a primary school (Use Class D1); residential and older person units (Use Class C3); flexible employment floorspace (Use Classes B1b, B1c, B2 (restricted), B8) ; flexible employment floorspace (Use Classes B1c, B2, B8); flexible retail floorspace (Use Classes A1-A4); community and leisure floorspace (Use Classes D1 and D2) ; the construction of a new flood defence wall and delivery of ecological habitat adjacent to the River Thames and associated infrastructure; streets, open spaces, landscaping and public realm (including new park and SINC improvements); car,motorcycle and bicycle parking spaces and servicing spaces; utilities including energy centre, electricity substations and incidental works. This is a major planning application, departure from the development plan and affects the setting of listed buildings and structures (see online for full details of listed buildings). The application is accompanied by an Environmental Statement for the purposes of Environmental Impact Assessment under the Town and Country Planning (Environmental Impact Assessment) Regulations 2017.	Application called in by GLA Under determination

Ref.	Name/Address	Application Number	Scheme Description	Status
24	Orchard Wharf, Orchard Place, London	PA/20/02488/A1	<p>Phased Hybrid Planning Application Part A - Full planning application for redevelopment of site following demolition of all existing buildings and enabling works to provide a mixed-use development consisting of the erection of five buildings between 15 and 30 storeys (56.6 m AOD and 103.75 m AOD) above a raised safeguarded wharf box (15.5m AOD) and one standalone 20 storey building (68.9 m AOD) which would deliver: (i) a total of up to 826 dwellings (Class C3) and ancillary accommodation; (ii) up to 8,212 m2 gross internal area (GIA) of General Industrial / Storage or Distribution floorspace (Class B2/B8) including ancillary office accommodation; and (iii) 135 m2 (GIA) of flexible commercial floorspace (Class E). Associated works include hard and soft landscaping; private amenity space; vehicular access and servicing facilities; car parking and cycle parking; and other works incidental to the proposals including works to the River Wall; and</p> <p>Part B - Outline planning application for external waterborne freight infrastructure and all other related works (including marine works) for which all matters are reserved.</p> <p>This application is accompanied by an Environmental Statement.</p>	<p>Application under determination by LBTH</p> <p>Under determination</p>
25	2 Trafalgar Way, London, E14 5SP	PA/20/01402/A2	<p>Redevelopment of the site to provide a new mixed use building including student accommodation units and associated uses (Sui Generis), residential units (Class C3), office (Class B1), shops/cafes (Class A1/A3) and a restaurant/takeaway (Class A3/A5) arranged over a 4 storey podium with three taller elements of 46, 36 and 28 storeys (with roof-top plant and basements), alongside parking, landscaping, public realm and other associated works.</p> <p>This application is accompanied by an Environmental Statement.</p>	<p>Application under determination by LBTH</p> <p>Under determination</p>

Figure C1 Cumulative Schemes map



APPENDIX D – Archaeological Desk-Based Assessment

THAMES VALLEY
ARCHAEOLOGICAL
SERVICES

**Aberfeldy Village, Lighterman Point, Poplar,
London Borough of Tower Hamlets**

Archaeological Desk-based Assessment

by Steve Preston

**Site Code: AVL 20/188
(TQ 3850 8140)**

Aberfeldy Village, Lighterman Point, Poplar, London Borough of Tower Hamlets

Archaeological Desk-based Assessment for Ecoworld London

by Steve Preston
Thames Valley Archaeological Services Ltd

Site Code AVL 20/188

December 2020

Summary

Site name: Aberfeldy Village, Lighterman Point, Poplar, London Borough of Tower Hamlets

Grid reference: TQ 3850 8140

Site activity: Archaeological desk-based assessment

Project coordinator: Elspeth St John-Brooks

Site supervisor: Steve Preston

Site code: AVL20/188

Area of site: c. 10 ha

Summary of results: There are no known heritage assets on the site itself. It is not considered that the development would have any negative impact on the settings of several nearby listed buildings. The site lies in the Lea Valley Archaeological Priority Area which may hold evidence from the earliest prehistory onwards, and in which the chance of exceptional organic survival in waterlogged conditions where the potential for palaeoenvironmental reconstruction is also high. Within the immediate environs of the site, there is significant evidence of Neolithic and Bronze Age occupation, although later periods are less well represented, until the important post-medieval industrial and commercial history of the area, chiefly focussed on shipbuilding. The size of the area increases the chances of archaeological remains of some period being present simply by chance. While the area has been repeatedly redeveloped since the late 19th century, which will probably have removed most if not all shallow archaeological remains, previous work in the area has demonstrated the presence of often quite deep alluvial deposits which may have protected archaeologically relevant levels below or within them, and the development of the area may also have involved raising the ground rather than cutting down in some instances, further protecting deeply buried levels. It is considered that it will be necessary to provide further information about the archaeological potential of the site from field observations in order to draw up a scheme to mitigate the impact of development on any below-ground archaeological deposits where necessary.

*This report may be copied for bona fide research or planning purposes without the explicit permission of the copyright holder. All TVAS unpublished fieldwork reports are available on our website:
www.tvas.co.uk/reports/reports.asp.*

Report edited/checked by: Steve Ford ✓ 31.12.20

Aberfeldy Village, Lighterman Point, Poplar, London Borough of Tower Hamlets Archaeological Desk-based Assessment

by Steve Preston

Report 20/188

Introduction

This report is an assessment of the archaeological potential of a complex of several parcels of land located east of the A12 in Aberfeldy Village, Poplar, in the London Borough of Tower Hamlets (Fig. 1). The project was commissioned by Ms Gemma Hale of EcoWorld London, 25 Victoria Street London SW1H 0EX and comprises the first stage of a process to determine the presence/absence, extent, character, quality and date of any archaeological remains which may be affected by redevelopment of the area.

Planning permission is to be sought from the London Borough of Tower Hamlets for the re-development of the site. No detailed proposals were to hand at time of writing. This assessment will form the basis of an input into an Environmental Statement that will accompany the application in order to inform the planning process with regard to potential archaeological implications.

Site description, location and geology

The site is located at Aberfeldy Village in Poplar in central London (Fig. 1) and consists of one large irregularly shaped area of land made up of many smaller plots, and one smaller detached portion to the north, both just south of the river Lea (or Lee), to the north of its confluence with the Thames. Limehouse Cut is also located to the north-west. The overall area is bounded by the A12 (Blackwall Tunnel northern approach) to the west, Blair Street (beyond which is the A13) to the south, and is within an area of mostly modern development (Fig. 2). The smaller area to the north is bounded by Lochnagar Street to the north, Bromley Hall Road to the west and Leven Road to the south. The development area is centred on NGR TQ 385 814. A site visit conducted on 27th November 2020 showed that the site covers four distinct zones (Pls 1–6). In the south and south west the area is primarily residential with houses along Ettrick Street, Dee Street, Aberfeldy Road, Kirkmichael Road and Baltimore Close. This area also includes a park (Millennium Green) and educational facilities. To the east there is an open space/games area on the east side of Abbott Road and south of Leven Road and another park Brathewaite Park also on Abbott Road. The northern part of the main development area is primarily occupied by large blocks of flats, bounded by Leven Road on the north, Abbott Road to the south, Nairn Road to the east and the A12 to the west. There is also a smaller detached area north of this between Leven Road and Lochnagar

Road, separated from the main area by Bramley Hall School. The site is located on alluvium overlying London Clay, with a thin strip of Kempton Park gravel in the extreme west roughly on the line of the A12 (BGS 1994 and Geoindex). It is at a height of approximately 5m above Ordnance Datum.

Planning background and development proposals

Planning permission is to be sought from the London Borough of Tower Hamlets for the re-development of the site. No detailed proposals were to hand at time of writing.

The Ministry of Housing, Communities and Local Government's *National Planning Policy Framework* as revised in 2019 (NPPF 2019) sets out the framework within which local planning authorities should consider the importance of conserving, or enhancing, aspects of the historic environment, within the planning process. It requires an applicant for planning consent to provide, as part of any application, sufficient information to enable the local planning authority to assess the significance of any heritage assets that may be affected by the proposal.

The Historic Environment is defined (NPPF 2019, 67) as:

‘All aspects of the environment resulting from the interaction between people and places through time, including all surviving physical remains of past human activity, whether visible, buried or submerged, and landscaped and planted or managed flora.’

Paragraphs 189 and 190 state that

‘189. In determining applications, local planning authorities should require an applicant to describe the significance of any heritage assets affected, including any contribution made by their setting. The level of detail should be proportionate to the assets' importance and no more than is sufficient to understand the potential impact of the proposal on their significance. As a minimum the relevant historic environment record should have been consulted and the heritage assets assessed using appropriate expertise where necessary. Where a site on which development is proposed includes, or has the potential to include, heritage assets with archaeological interest, local planning authorities should require developers to submit an appropriate desk-based assessment and, where necessary, a field evaluation.

‘190. Local planning authorities should identify and assess the particular significance of any heritage asset that may be affected by a proposal (including by development affecting the setting of a heritage asset) taking account of the available evidence and any necessary expertise. They should take this assessment into account when considering the impact of a proposal on a heritage asset, to avoid or minimise conflict between the heritage asset's conservation and any aspect of the proposal.’

A ‘heritage asset’ is defined (NPPF 2019, 67) as

‘A building, monument, site, place, area or landscape identified as having a degree of significance meriting consideration in planning decisions, because of its heritage interest. It includes designated heritage assets and assets identified by the local planning authority (including local listing).’

‘Designated heritage asset’ includes (NPPF 2019, 66)

‘A World Heritage Site, Scheduled Monument, Listed Building, Protected Wreck Site, Registered Park and Garden, Registered Battlefield or Conservation Area designated under the relevant legislation.’

‘Archaeological interest’ is glossed (NPPF 2019, 65) as follows:

‘There will be archaeological interest in a heritage asset if it holds, or potentially holds, evidence of past human activity worthy of expert investigation at some point.’

Specific guidance on assessing significance and the impact of a proposal is contained in paragraphs 192 to 197:

- ‘192. In determining planning applications, local planning authorities should take account of:
- ‘a) the desirability of sustaining and enhancing the significance of heritage assets and putting them to viable uses consistent with their conservation;
 - ‘b) the positive contribution that conservation of heritage assets can make to sustainable communities including their economic vitality; and
 - ‘c) the desirability of new development making a positive contribution to local character and distinctiveness.
- ‘193. When considering the impact of a proposed development on the significance of a designated heritage asset, great weight should be given to the asset’s conservation (and the more important the asset, the greater the weight should be). This is irrespective of whether any potential harm amounts to substantial harm, total loss or less than substantial harm to its significance.
- ‘194. Any harm to, or loss of, the significance of a designated heritage asset (from its alteration or destruction, or from development within its setting), should require clear and convincing justification. Substantial harm to or loss of:
- a) grade II listed buildings, or grade II registered parks or gardens, should be exceptional;
 - b) assets of the highest significance, notably scheduled monuments, protected wreck sites, registered battlefields, grade I and II* listed buildings, grade I and II* registered parks and gardens, and World Heritage Sites, should be wholly exceptional⁶³.

Footnote 63 extends the application of this provision considerably:

‘Non-designated heritage assets of archaeological interest, which are demonstrably of equivalent significance to scheduled monuments, should be considered subject to the policies for designated heritage assets.’

‘195. Where a proposed development will lead to substantial harm to (or total loss of significance of) a designated heritage asset, local planning authorities should refuse consent, unless it can be demonstrated that the substantial harm or total loss is necessary to achieve substantial public benefits that outweigh that harm or loss, or all of the following apply:

- ‘a) the nature of the heritage asset prevents all reasonable uses of the site; and
- ‘b) no viable use of the heritage asset itself can be found in the medium term through appropriate marketing that will enable its conservation; and
- ‘c) conservation by grant-funding or some form of not for profit, charitable or public ownership is demonstrably not possible; and
- ‘d) the harm or loss is outweighed by the benefit of bringing the site back into use.

‘196. Where a development proposal will lead to less than substantial harm to the significance of a designated heritage asset, this harm should be weighed against the public benefits of the proposal including, where appropriate, securing its optimum viable use.

‘197. The effect of an application on the significance of a non-designated heritage asset should be taken into account in determining the application. In weighing applications that directly or indirectly affect non-designated heritage assets, a balanced judgement will be required having regard to the scale of any harm or loss and the significance of the heritage asset.’

Paragraph 199 requires local planning authorities to ensure that any loss of heritage assets advances understanding, but stresses that advancing understanding is not by itself sufficient reason to permit the loss of significance:

‘199. Local planning authorities should require developers to record and advance understanding of the significance of any heritage assets to be lost (wholly or in part) in a manner proportionate to their importance and the impact, and to make this evidence (and any archive generated) publicly accessible. However, the ability to record evidence of our past should not be a factor in deciding whether such loss should be permitted.’

In determining the potential heritage impact of development proposals, ‘significance’ of an asset is defined (NPPF 2019, 71) as:

‘The value of a heritage asset to this and future generations because of its heritage interest. The interest may be archaeological, architectural, artistic or historic. Significance derives not only from a heritage asset’s physical presence, but also from its setting. For World Heritage Sites, the cultural value described within each site’s Statement of Outstanding Universal Value forms part of its significance.’

while ‘setting’ is defined as:

‘The surroundings in which a heritage asset is experienced. Its extent is not fixed and may change as the asset and its surroundings evolve. Elements of a setting may make a positive or negative contribution to the significance of an asset, may affect the ability to appreciate that significance or may be neutral.’

The Tower Hamlets Local Plan (THBC 2020) contains detailed policy (and explanation) relating to heritage and the historic environment:

‘Policy S.DH3 Heritage and the historic environment

- ‘1. Proposals must preserve or, where appropriate, enhance the borough’s designated and non-designated heritage assets in a manner appropriate to their significance as key and distinctive elements of the borough’s 24 places.
- ‘2. Proposals to alter, extend or change the use of a heritage asset or proposals that would affect the setting of a heritage asset will only be permitted where:
 - ‘a. they safeguard the significance of the heritage asset, including its setting, character, fabric or identity
 - ‘b. they are appropriate in terms of design, height, scale, form, detailing and materials in their local context
 - ‘c. they enhance or better reveal the significance of assets or their settings
 - ‘d. they preserve strategic and locally important views and landmarks, as defined in Policy D.DH4, and
 - ‘e. in the case of a change of use from a use for which the building was originally designed, a thorough assessment of the practicability of retaining its existing use has been carried out outlining the wider public benefits of the proposed alternative use.
- ‘3. Applications affecting the significance of a heritage asset will be required to provide sufficient information to demonstrate how the proposal would contribute to the asset’s conservation. Any harm to the significance of a heritage asset must be justified having regard to the public benefits of the proposal: whether it has been demonstrated that all reasonable efforts have been made to sustain the existing use, find new uses, or mitigate the extent of the harm to the significance of the asset; and whether the works proposed are the minimum required to secure the long term use of the asset. Factors that will be considered can include:
 - ‘a. The significance of the asset, architecturally, historically and contextually
 - ‘b. The adequacy of efforts made to retain the asset in use, and
 - ‘c. The merits of any alternative proposal for the site.
- ‘4. Substantial harm to or the total loss of significance of a designated heritage asset will only be supported where it is necessary to achieve substantial public benefits that outweigh that harm or loss, or the following criteria can be satisfied:
 - ‘a. The nature of the heritage asset prevents all reasonable uses of the site
 - ‘b. No viable use of the heritage asset itself can be found in the medium term through appropriate marketing that will enable its conservation

'c. Conservation by grant-funding or some form of charitable or public ownership is demonstrably not possible

'd. The harm or loss is outweighed by the benefit of bringing the site back into use.

'5. Alterations, extensions or changes of use, or development in the vicinity of listed buildings (as shown on the Policies Map) will be expected to have no adverse impact on those elements which contribute to their special architectural or historic interest, including their settings.

'6. Significant weight will be given to the protection and enhancement of the borough's conservation areas (as shown on the Policies Map), including their setting. Development within a conservation area will be expected to preserve or, where appropriate, enhance those elements which contribute to their special character or appearance. There will be a presumption in favour of the retention of unlisted buildings that make a positive contribution to the character and appearance of a conservation area. Planning applications should explore opportunities from new development within conservation areas and their setting to enhance or better reveal their significance.

'7. Significant weight will be given to the protection and enhancement of scheduled monuments (as shown on the Policies Map) and other archaeological sites of equivalent importance. Any harm to their significance must be justified having regard to the public benefits of the proposal: whether it has been demonstrated that all reasonable efforts have been made to mitigate the extent of the harm to the significance of the asset; and whether the works proposed are the minimum required to sustain the asset.

'8. Applications affecting the significance of the archaeology will be required to provide sufficient information to demonstrate how the proposal would contribute to the asset's conservation. Where the development includes or has the potential to include heritage assets with archaeological interest, an appropriate desk-based assessment and, where necessary, field evaluation will be required. Where harm can be fully justified, we will require archaeological excavation and/or recording as appropriate, followed by analysis and publication of the results.

'9. Development that lies in or adjacent to archaeological priority areas (as shown on the Policies Map) will be required to include an archaeological evaluation report and will require any nationally important remains to be preserved permanently in situ, subject to consultation with Historic England.

'10. We will seek to ensure the protection and appropriate enhancement of the borough's historic parks and gardens (as shown on the Policies Map). Development proposals should therefore safeguard those features which form an integral part of the special character or appearance of the park or garden and ensure they do not detract from the enjoyment, layout, design, character, appearance or setting of the park or garden, key views into and out of the park, or prejudice its future restoration. Where development is likely to affect a historic park and garden or its setting, applications should include a heritage impact assessment setting out the likely impact which it would have upon its significance and the means by which any harm might be mitigated.'

'Explanation

...

'8.26 Tower Hamlets has a higher proportion of scheduled monuments, listed buildings and conservation areas compared to that of other London boroughs. Some of the key elements of the borough's heritage include:

'a. Military and naval buildings (e.g. Tower of London)

'b. Museums, art galleries, music halls and breweries (e.g. Bethnal Green Museum of Childhood and Wiltons Music Hall)

'c. Squares, cemeteries and parks and gardens

'd. Indoor and outdoor markets (e.g. Spitalfields)

'e. Industrial heritage and archaeology

'f. Residential streets and buildings of Georgian and Victorian origin

'g. Innovative post-war housing (e.g. Keeling House and Balfron Tower)

'h. Religious and education institutions (e.g. Christ Church, Spitalfields and Tonybee Hall).

...

'8.29 In order to satisfy the criteria set out in Parts 2 to 9, developments will need to demonstrate an understanding of the significance of the relevant asset, including the contribution setting makes to its significance, as part of the planning application process. It should also include an assessment of group value, as well as the individual significance of heritage assets. As a minimum, this should include both desktop analysis and on-site investigation, with reference to the Greater London His-

toric Environment Record and other relevant documentation. The borough has a local history library, which provides a useful resource. Research undertaken into the heritage asset affected should describe the significance of the heritage asset in sufficient detail to determine its historic, archaeological, architectural or artistic interest to a level proportionate to its importance. The Greater London Historic Environment Record will help inform whether a site on which development is proposed includes or has the potential to include heritage assets with archaeological interest.

...

'8.31 Where a new heritage asset is discovered, the developer will be expected to work with us to seek a solution that protects the significance of the new discovery, so far as is practicable within the existing scheme. Depending on the importance of the discovery, modifications to the scheme being implemented may be required

'8.32 In relation to Parts 1 and 4, designated heritage assets include listed buildings and structures, registered parks and gardens and conservation areas. We will not permit harm to or total loss of a designated heritage asset unless the benefits of the proposal outweigh the harm or the criteria set out in Part 4 can be met.

'8.33 In particular, listed buildings and structures in the borough make an important and valued contribution to the character and appearance of the borough and provide places to live and work in, well-known visitor attractions and cherished local landmarks. We have a duty to preserve and maintain these assets for present and future generations.

'8.34 Proposals relating to works to a listed building or within the vicinity of a listed building will be required to demonstrate that it will not affect the special interest of the listed building. In addition to planning permission, listed building consent may also be required for works that will affect the special character of a listed building.

'8.35 When considering proposals within conservation areas, as set out in Part 6, consideration will be given to the relative significance of the element affected and its contribution to the significance of the conservation area as a whole and its setting.

...

'8.37 In relation to Part 9, any development in or adjacent to archaeological priority areas is required to investigate and consider any archaeological interests in the area. The archaeology of the borough can best be protected if as much information as possible is available at the planning application stage. The evaluation, which may involve fieldwork, is needed so that we can assess the archaeological implications of proposals. Where appropriate, the evaluation may show how developments can be designed so that they do not harm a site of archaeological interest and/or how the remains will be preserved at the site, and where appropriate, preserve the archaeological findings at the site.

Policy S.DH5 also deals with heritage but relates specifically to World Heritage Sites, not relevant in this instance.

The site lies within the Lea Valley Archaeological Priority Area. There are no Scheduled Monuments, Conservation Areas, nor Registered Parks/Gardens or Battlefields nearby.

Methodology

The assessment of the site was carried out by the examination of pre-existing information from a number of sources recommended by the Chartered Institute for Archaeologists' paper *Standards in British Archaeology* covering desk-based studies (CIfA 2014). These sources include historic and modern maps, the Greater London Historic Environment Record, geological maps and any relevant publications or reports.

Archaeological background

General background

Tower Hamlets was originally part of the county of Middlesex with its southern and eastern boundaries being defined by the rivers Thames and Lea respectively. From the Mesolithic period onwards, a marsh landscape developed along the river valleys. It comprised small areas of dry land separated by numerous water channels. When these marshes were reclaimed in the 19th and 20th centuries, large expanses were buried under made ground, leaving their archaeological content intact. The wetland environment preserves a rich palaeoenvironmental record and there is potential for evidence for human activity to be preserved on contemporary land surfaces and within the peat deposits that are recorded in the borough. The geoarchaeology of the Lea Valley has been extensively studied and modelled in recent years as a result of developments including at the Olympic Park (Single *et al.* 2017, 10-11).

However, evidence for early prehistoric activity in the immediate vicinity of the proposal site is fairly sparse. It comprises several findspots for Palaeolithic flintwork at Bromley-by-Bow and Old Ford while Mesolithic finds have been discovered at Old Ford and Poplar. During the Neolithic period small settlements developed on drier areas in the marsh and the Neolithic burial found on Yabsley Street in Blackwall (Coles *et al.* 2008) indicates the presence of a more permanent settlement in the valleys. Blackwall has also produced a Neolithic axe while finds of Bronze Age metalwork in Bromley indicate activity there. Old Ford and Stepney have produced evidence for Iron Age occupation while Iron Age findspots are recorded at Blackwall (Single *et al.* 2017).

Lying beyond the eastern edge of the Roman London, the borough had satellite settlements at Old Ford on the Colchester Road and at Shadwell on a Roman route now followed by The Highway. Well-preserved remains of the Colchester road have been found at Old Ford, where it forded the Lea, along with structural, funerary and agricultural remains dated between the 1st-2nd and 4th centuries. The Shadwell settlement comprised a bath house dating from the mid-2nd to mid-3rd century as well as evidence of riverside commercial activity and a cemetery (Single *et al.* 2017, 12).

Due to its location and the presence of the river, the borough became a main provider of various services for London. The earliest documentary evidence of milling on the Lea dates from the Saxon period. The Lea's mills ground flour for London while other industries included cloth dyeing and fulling as well as livestock for the City's markets. In 1110 the Lea was bridged at Bow, replacing the ford at Old Ford, and the road east from London realigned on a route south of the old Roman road. During the later Middle Ages, there were five

monastic sites in the borough including the Benedictine convent of St Leonard's Priory founded in Bromley-by-Bow in the late 11th or early 12th century (Single *et al.* 2017, 13).

Historic maps suggest that the area remained marshland until the late 19th and early 20th centuries, although it was divided into fields from at least the mid-18th century. Reclamation of the land for use as docks would be expected to have required the laying of some depth of made ground. Due to the proximity of London's docks, the area was heavily bombed during the Second World War, with most of the houses and buildings demolished by the late 20th century.

Development of the Aberfeldy Estate has already seen several phases of archaeological investigation (Taylor 2012; McNicoll-Norbury 2015; Wallis 2017). The first two of these revealed nothing of archaeological interest except a buried soil horizon, while the third located a single, poorly dated, prehistoric pit.

The site is within the Lea Valley Archaeological Priority Area (which carries a tier 3, or low, grading). Extensive excavations at the Olympic Park (to the north) demonstrated that the Lower Lea Valley had potential for prehistoric sites, although finds were relatively few, while in later periods the area saw the establishment of numerous industries which required water for power or used the river as a method of transport. The wetland environment may also have high potential for palaeoenvironmental reconstruction and organic survival, though deeply buried (Single *et al.* 2017, 141).

Greater London Historic Environment Record

A search was made on the Greater London Historic Environment Record (HER) on 27th November 2020 for a radius of 750m around the proposal site. This revealed 103 entries within the search radius, comprising: 51 'monuments', 6 Archaeological Priority Areas, 46 'events' (archaeological investigations) within the search radius. Excluding 12 entries for desk-based assessments, these are summarized as Appendix 1 and their locations are plotted on Figure 1, where multiple entries for one site, or sites which are very close together, have been combined.

Palaeolithic/Mesolithic

There are no GLHER entries relating to the earliest prehistoric periods within the search radius.

Neolithic/Bronze Age

Archaeological investigations as part of previous phases of development at what was then referred to as the Aberfeldy Estate [Fig. 1: 1] trial trenches were excavated within the south-western corner of the current proposal area in 2017 (Wallis 2017). These revealed that, other than small undulations in the underlying gravel geology, the area was relatively flat before being covered with alluvial deposits, which may suggest that the area was part

of the western floodplain of the River Lea. A possible buried soil or peat horizon was recorded which had also been seen in other work nearby. A small pit was recorded in the north-east part of the site, containing tiny fragments of prehistoric pottery that could belong to the Bronze Age or Iron Age. A similar deposit sequence was also recorded in trenching towards the northern end of the site [5] along with a few cut features possibly of Bronze Age date. More significant evidence came from an excavation at Yabsley Street to the south [3] in 2002 (Coles *et al.* 2008), where an Early Neolithic burial of a possible woman accompanied by pottery and flints was radiocarbon dated to 4220-3979 cal BC. This represented London's earliest known inhabitant at that time. Peat deposits showed evidence for arable farming, suggesting a settlement may have existed nearby. A hearth near the grave contained early Bronze Age pottery, and analysis of the peat deposits showed the growth of grasslands (and later cereals) and decline in woodland cover through the Middle Bronze Age.

There have been two finds of Bronze age metalwork from the River Thames, a sword and a socketed axe. The location given for these finds [2] is likely imprecise but in any case they could have been moved considerable distances by the river since their original deposition (or loss). Prehistoric pottery and flints were also found at Culloden Street [6] to the south-west.

Iron Age

There are no records of Iron Age finds or sites in the vicinity.

Roman

Roman evidence within the search radius is rather sparse. An excavation in 2009 on Gillender Street [7] north-west of the proposal site revealed a single ditch containing early Roman pottery and there is a record for a Roman wine jug donated to the Museum of London in 1912 from the Blackwall area [8], probably to the south. One of a series of Roman watchtowers supposedly stood at Shadwell [9], also to the south, but it is not clear exactly what the evidence for this is.

Saxon

There are no entries in the GLHER within the search radius relating to the Saxon period.

Medieval

Much of the medieval evidence recorded in the GLHER for the area is documentary rather than archaeological. This includes entries for the first naming of Blackwall and Poplar in the 14th century [3, 10], and tidal mills being recorded up to the 16th century [3] and general use of the area throughout the medieval period, including known routes of roads [4, 11, 12, 14, 15]. Only one medieval feature has been recorded archaeologically, a pit below what may be chapel walls at St Matthias Centre [10]. Timbers in Bromley Hall [13] to the north-west of the proposal area have been dated by dendrochronology to the period 1482–95 and the building is Listed, Grade

II*. Besides the Lea valley APA, there are two further Archaeological Priority Areas within the search radius, with specific potential for the medieval period, at the Limmo to the south-east [15] and Poplar to the west [16].

Post-medieval, Victorian

The majority of the GLHER entries in the area are for post-medieval features. Virtually all archaeological investigations in central London uncover evidence for post-medieval, 19th-century and early 20th-century occupation, little of which is of much archaeological significance. In this area, there is much evidence for successive raising of the ground level or efforts at drainage, both designed to permit occupation or industry on the river front and in the tidal zone, recorded in multiple observations, including within the site itself or adjacent to it [5, 17, 27, 36, 37]. Several entries refer to elements associated with the very extensive construction and activity of the East India Docks to the south [21–25, 28]. There are also specific entries for some other industrial sites: a casting hall and kilns were excavated at the Thames Plate Glass Company site in 2007 [18]. A post-medieval fishpond [19] is recorded below the gas holders immediately north of the site. Three gas holders dating from the 1870s, 1920s and 1970s on Leven Road were recorded prior to demolition [29]. The Blackwall Tunnel [31], to the south, dates from the 1890s; its entrance [33] is a listed building.

There are also entries covering documentary evidence for the importance of the shipbuilding industry and other commercial enterprises along the river [3, 10, 15, 16], or continuing post-medieval use of medieval roads [11, 12, 14, 15]. The medieval gatehouse at Bromley Hall [13] was remodelled after 1700 and more timbers have been dated by dendrochronology to the period from the end of the 17th to early 18th century: these appear to have been imported from Scandinavia. Other 19th-century finds such as masonry foundations are of less interest [32, 36, 37].

Other 19th-century listed buildings include St Michael's Church [34] the East India Dock House [35], and Dowgate Wharf [38].

Modern, undated, negative

Dumping to raise the ground level continued in the 20th century and again is recorded in multiple archaeological investigations in the area, along with records for undated alluvial layers [17, 27, 36, 37, 41, 48, 51, 53, 54]. Modern Listed Buildings in the area include the war memorial at St Michael's Church [34], Carradale House [39] and Balfron Tower [42] to the west, Poplar Library [40], where there are also Second World War civil defence structures, the former Bromley Hall School for the Physically Handicapped [43], Glenkerry House, and the former fire station on Gillender Street [44]. A 1970s tower block [45] is also recorded in the HER though not listed.

Many archaeological investigations in the area have revealed modern features and finds, or truncations, or undated features [26, 30, 41, 47–54].

Scheduled Ancient Monuments

There are no Scheduled Monuments in the immediate area.

Cartographic and documentary sources

The place-name Bromley derives from Old English nouns *broembel* meaning ‘bramble’ and *lēah* denoting ‘a woodland clearing or glade’ giving the composite meaning of ‘Woodland clearing where brambles grow’ (Mills 2010, 35; Mills 2011, 80). It was first recorded in c. 1000 in an Anglo-Saxon charter as *Broembelege*, then as *Brembellee* in the 12th century, *Brambeley* in c. 1128 and *Bromlegh* in 1274 (Mills 2010, 35). In spite of some early confusion of the first element with the Old English noun *brōm* meaning ‘broom’ spellings with -a- like *Brambeley* are usual up to the end of the 16th century (Mills 2010, 35). Neither *Poplar* nor *Bromley* (-by-Bow) is mentioned by name in Domesday Book (though the *Bromley* in Kent is), while *Tower Hamlets* is a much later name. In the absence of the definitive *Victoria County History* for this area, *Poplar*’s early history remains obscure. For more recent times, it is served by the Royal Commission’s *Survey of London* (Hobhouse 1994), although this focuses more on architecture than history. *Poplar* attracted a succession of notably large-scale developments, from *Blackwall Yard* in 1614, and *Brunswick Dock* in 1789–90, to the *West India and East India Docks* of 1800–1806. Accompanying these large-scale commercial complexes were more modest developments typical of London’s East End riverside: shipbuilding yards, metal-working and food-processing factories, noxious establishments such as tar and chemical works, and much substandard housing. Very little of this survives, however, and almost the whole area has been rebuilt since the Second World War, with only pockets of exceptions.

The long riverside on the *Thames* and the *Lea* was the dominant influence on the area’s economy until the late 20th century. The general pattern of development established by the late 15th century remained largely unchanged until a period of expansion during the mid-19th century. There was settlement along *Poplar High Street* and, by the 17th century at *Blackwall*. Ship repairing was established at *Blackwall* before 1500, and the area was chosen by the *East India Company* for its shipbuilding yard, constructed between 1614 and 1617. The yard was the largest commercial employer in London, and remained the basis of *Poplar*’s economy throughout the 17th and 18th centuries. However, employment was almost all casual and despite the bustle, did not generate much prosperity for the area, while fluctuations in the demand for ships often led to widespread unemployment

(Hobhouse 1994) and by the later 19th century there was a prolonged period of decline in the industry, though also a surging population growth. By the end of the century *Poplar* was recognised as one of the poorest parts of the capital (Hobhouse 1994, 7).

A range of Ordnance Survey and other historical maps of the area were consulted online in order to ascertain what activity had been taking place throughout the site’s later history and whether this may have affected any possible archaeological deposits within the proposal area (see Appendix 2). Due to the COVID restrictions, some maps such as tithe and enclosure were not available to view.

The earliest map available of the area is *Saxton’s map of Middlesex*, 1575 (Fig. 3). At this scale little detail is afforded, but the general location of the site can be suggested showing a close proximity to the confluence of the rivers *Thames* and *Lea*. ‘*Stretfort Bowe*’ and *Stepney* are the closest settlements named. *Norden’s map of Middlesex* from 152–3 adds several more of the hamlets, including *Blackwall* (Fig. 4) but still shows no detail for the area of the site. *Speed’s* 1610 update of *Norden’s* map adds no new detail for this area except to name *Osulston Hundred* (not illustrated). Other 17th-century maps (listed in Appendix 2, not illustrated) show some of the growth of London but add no detail for this area until *Ogilby’s county map* of 1672 (Fig. 5) which shows *Bromley* for the first time. The 18th-century maps show London’s continuing growth but tends to be no more informative for the area of interest here. A notable exception is the map by *Warburton* from 1749 (Fig. 6) which shows the outline of the road layout and names *Bromley Hall*, allowing the site to be located a little more closely. It appears to have remained undeveloped. *Rocque’s* map of 1762 (Fig. 7) appears to show much more detail including the layout of fields, but it is suspected that much of this is schematic rather than accurately surveyed. Nonetheless, the site’s location can be pinpointed a little better on this map, and it appears to be undeveloped. *Bromley Hall* is not noted but there is a *Copperas House* to the north. What appears to be an earthwork of some sort to the south-east is unexplained. *Cary’s* map of 1801 (Fig. 8) shows a little more detail on the roads, and the *Limehouse to Bromley canal* whose more direct route would have cut off the long sweep south around the *Isle of Dogs*.

The *First Edition Ordnance Survey map* of 1872 (Fig. 9) provides the first detailed mapping of the site and surroundings. Much of the layout of the area is recognizable but almost nothing within the site is in its current form. The *East India Docks* dominates the vicinity. *Brunswick Road* marks more or less the course of the modern *A12* and four blocks of four houses long its east side are just within the site boundary, as are the houses

on the north side of Blair Street in the south. The rest of the site appears to be fields, partly within Bromley Marsh with the majority probably belonging to Mackintosh's farm, including one orchard, and part of the farm building complex. There is a small group of other buildings set back from Brunswick Road towards the west of the site.

The site and environs have almost completely changed by the second edition of 1894 (Fig. 10) and present as very close to its modern overall layout with many of the streets already in place. The whole of the site area is under housing on these streets. The blocks at the west edge of the site on Brunswick Road are recognizably those for the previous map and those on Blair Street might be, but everything else in the area is new. The 1920 map (Fig. 11) shows some minor change to buildings between Dee Street and Culloden Street (probably schools) and one new building probably also a school, south of Lochnagar Street, but all else remains the same. By 1955 (Fig. 12) there has again been some demolition in the Etrick Street, Dee Street and Culloden Street area, perhaps clearance of war-time bomb damage, and modifications to the school buildings in the north but little other change within the site. By 1965 (Fig. 13) new housing has arisen on Etrick Street, Dee Street and Culloden Street but other changes appear only to be in cartographic style. Maps of the 1970s (1973 illustrated as Fig. 14) shows more dramatic change, with Brunswick Road now rerouted and houses along it demolished, along with the whole blocks either side of Nairn Street. The school to the north has been wholly rebuilt and no longer occupies any part of the site. Culloden Street and the school on Dee Street have both vanished, replaced by another school slightly to the south.

By 1981 (Fig. 15) the former Nairn Street area has been redeveloped and much of the housing along Abbot Road and Lochnagar Street demolished. By 1989 (Fig. 16) there has been more development in the north of the site along the western edge, and more space cleared between Abbot Road and Leven Road to the east. The Ordnance Survey map of 2001 (Fig. 17) shows a major new building on Dee Street but no other change. By 2020 (Fig. 18) this new building has expanded and the road layout here remodelled. There has also been further demolition at the south-eastern extreme of the area.

Listed buildings

There are 19 listed buildings within 750m of this site, as listed in Appendix 1 and detailed above, many of which are intervisible with it and therefore in positions where their settings may be affected by the development. The most significant of these are the Grade II* listed Bromley Hall, East India Dock House, Balfour Tower and Glenkerry House. All of the listed buildings are located in positions where their settings are already thoroughly

modern, bustling city landscapes, subject to almost continuous change. Any contribution made by their settings to the heritage significance of these assets lies in this vibrant modern urban scene. While no detailed plans of the proposed redevelopment were available at time of writing, it is anticipated that it will not in any way alter the essential character of this landscape and thus will have no detrimental effect on the heritage significance of any nearby heritage asset and may positively reinforce it.

Registered Parks and Gardens; Registered Battlefields

There are no registered parks and gardens or registered battlefields within close proximity of the site.

Historic Hedgerows

There are no hedgerows, historic or otherwise, on the site.

Aerial Photographs, LiDAR

The site areas lies within an urban area which has been heavily developed since before the advent of aerial photography. No photographic collections nor LiDAR data have therefore been consulted.

Discussion

There are no known heritage assets on the site but there are several listed buildings in positions where their settings may be liable to be affected by its development. The discussion above suggests that the heritage significance of these listed buildings will suffer no measurable harm from the proposed development and could potentially be enhanced. It remains therefore to establish if there may be potential for previously unknown heritage assets, that is, below-ground archaeological remains.

In considering the archaeological potential of the study area, various factors must be taken into account, including previously recorded archaeological sites, previous land-use and disturbance and future land-use including the proposed development.

In general, the site lies in an area of high archaeological potential as recognized by its designation as part of the Lea Valley Archaeological Priority Area. This area is known to hold evidence from the earliest prehistory onwards, in which the chance of exceptional organic survival in waterlogged conditions, and the potential for palaeoenvironmental reconstruction is also high. Within the immediate environs of the site, there is significant evidence of Neolithic and Bronze Age occupation, although later periods are perhaps surprisingly less well

represented until we reach the important post-medieval industrial and commercial history of the area, chiefly focussed on ship-building. Even without this specific potential, the sheer size of the area increases the chances of archaeological remains of some periods simply by chance.

Previous phases of development in Aberfeldy have allowed some archaeological investigation and while on the whole this has not been very productive, some prehistoric features have been recorded and the work has demonstrated the existence of (sometimes quite deep) peat and alluvial deposits which may have protected archaeological levels even in areas of extensive modern truncation.

The entire site area has been developed and redeveloped repeatedly since the late 19th century. While it is reasonable to predict that this will have removed any shallow archaeological remains, there is the possibility that deposits and features could survive below or within any deeper peat or alluvial layers. The constant redevelopment of the area may also have involved raising the ground rather than cutting down in some instances, further protecting deeply buried levels.

No detailed development plans are available but it is understood that at least part of the development will involve basements and thus inevitably have the potential to impact the archaeologically relevant level, assuming this survives anywhere on the site.

It will be necessary to provide further information about the potential of the site from field observations in order to draw up a scheme to mitigate the impact of development on any below-ground archaeological deposits if necessary. A scheme for this evaluation will need to be drawn up and approved by the archaeological advisers to the Borough and implemented by a competent archaeological contractor.

References

- BGS, 1994, *British Geological Survey*, 1:50000, Sheet **256**, Solid and Drift Edition, Keyworth.
- ClfA, 2014, *Standard and guidance for historic environment desk-based assessment*, Chartered Institute for Archaeologists, Reading
- Coles, S, Ford, S and Taylor, A, 2008, 'An Early Neolithic grave and occupation, and an Early Bronze Age hearth on the Thames foreshore at Yabsley Street, Blackwall, London', *Proc Prehist Soc* **74**, 215-33.
- Corcoran, J, Halsey, C, Spurr, G, Burton, E, and Jamieson, J, 2011, *Mapping Past Landscapes in the Lower Lea Valley*, MOLA Monogr **55**, London
- FA, 2008, *From Hunter-gatherers to Huntsmen: A History of the Stansted Landscape*, Framework Archaeology, Oxford and Salisbury
- GLA, 2016, *The London Plan - The Spatial Development Strategy for London Consolidated with Alterations Since 2011*, Greater London Authority, London
- Hobhouse, H, 1994, 'General introduction', in RCHM(E), *Survey of London*, Vol **43/44**, *Poplar, Blackwall and Isle of Dogs*, London, 1-20. [<http://www.british-history.ac.uk/survey-london/vols43-4/pp1-20>, accessed 8 December 2020].
- McNicoll-Norbury, J, 2015, 'Aberfeldy Estate (Phase 2), East India Dock Road, South Bromley, London Borough of Tower Hamlets - an archaeological evaluation', TVAS unpubl rep **12/112b**, Reading
- Meddens, F M, 1996, 'Sites from the Thames Estuary, England and their Bronze Age use', *Antiquity*, **70**, 325-34
- Mills, A D, 1998, *Dictionary of English Place-Names*, Oxford

- MoLAS, 2000, *The Archaeology of Greater London; an assessment of archaeological evidence for human presence in the area now covered by Greater London*, Museum of London Archaeology Service Monogr, London
- NPPF, 2019, *National Planning Policy Framework* (revised), Ministry of Housing, Communities and Local Government, London
- Single A, Taylor, J, Kidd, S, Sidell, J, Bright, I and Booth, P, 2017, *London Borough of Tower Hamlets Archaeological Priority Areas Appraisal*, Historic England
- Stafford, E, 2012, *Landscape and Prehistory of the East London Wetlands*, Oxford Archaeology Monogr **17**, Oxford
- Taylor, A, 2012, 'Aberfeldy Estate (Phase 1), East India Dock Road, South Bromley, London Borough of Tower Hamlets: An Archaeological Evaluation', TVAS unpubl rep **12/112**, Reading
- THBC, 2020, *Tower Hamlets Local Plan 20131 adopted January 2020 Managing growth and sharing the benefits*, Tower Hamlets Borough Council, London
- VCH, 1969, *Victoria History of the Counties of England: Middlesex*, **i**, London
- Wallis, S, 2017, 'Aberfeldy Estate (Phase 3), East India Dock Road, South Bromley, London Borough of Tower Hamlets: An Archaeological Evaluation', TVAS unpubl rep **12/112c**, Reading
- Williams, A and Martin, G H, 2002, *Domesday Book, A complete Translation*, London

APPENDIX 1: Historic Environment Records within a 750m search radius of the development site

No	HER Ref	Grid Ref (TQ)	Type	Period	Comment
1	ELO18795	3855 8119	Evaluation	Prehistoric	In 2017 four trenches were excavated in the Aberfeldy Estate, revealing one pit containing flint and pottery.
2	MLO2541 MLO25630 FLO6267	39 81	Find Spot	Bronze Age	A Late Bronze Age sword of Wilburton type was found at Bow Creek. Unstratified artefact near Leamouth Road consisting of a Bronze Age socketed axehead made of copper alloy.
3	DLO37840	3849 8057	Excavation Background	Neolithic Bronze Age Medieval Post-medieval Modern	Yabsley Street, Early Neolithic burial (radiocarbon dated to 4220-3979BC). Peat deposits showing evidence for arable farming during the Neolithic suggesting a settlement may have existed nearby. Sea levels rising caused intertidal activity in the form of timber trackways (Neolithic/Bronze Age). Archaeological Priority Area: Blackwall is named in the 14 th century along with tidal mills until the 16 th century. Important for ship building and the area preserves remains of Blackwall's significant industrial and commercial power from the middle ages until the 19th century.
4	DLO37857	3792 8280	Background	Prehistoric Medieval Post-medieval Modern	Archaeological Priority Area: Lea Valley. The area has been extensively excavated showing deeply buried islands, gravel terraces, channels and wetlands exploited since early prehistory.
5	ELO2630 MLO744	3841 8148	Evaluation Find Spot	Prehistoric Post-medieval	An evaluation in 2000 discovered a sequence of alluvial deposits associated with the River Lea floodplain and a palaeochannel. Peat deposits containing burnt flint and sealing a few cut features were possibly mid-late Bronze Age. Two post-medieval channels or ditches presumably for drainage. A gully and a shallow feature were cut into a possible buried land surface with burnt flint.
6	ELO3739 MLO6392 FLO15513 FLO15514	3833 8107 3830 8120	Evaluation Findspot	Prehistoric Post-medieval	Excavations in 1993 around Abbey Mills. At Culloden Street unstratified finds of fire cracked flint and a single pot sherd. At 13 St Leonards Road, three shafts were dug and a 19th century cellar was identified. At No. 12 Culloden Street, prehistoric potsherds and flint were found.
7	ELO10470 MLO101087 FLO15603	38190 81852	Excavation	Roman	Excavation on Gillender Street found a 1 st century Roman ditch cutting alluvium, this included 18 sherds of Grey Ware pottery.
8	MLO3851 FLO1102	386 807	Find Spot	Roman	A Roman miniature oenochoe (wine vessel) was found.
9	MLO3893	389 809	Monument	Roman	Roman watchtower, one of a series.
10	ELO8767 MLO100465 MLO100466 FLO13235 MLO3931	38189 80961 381 809 382 810	Watching Brief Background	Medieval Post-medieval Victorian	In 2008 geotechnical pits were dug at St Matthias Centre, showing the foundation walls and basement of a potential house also walls where it is believed a Chapel was located along with a medieval pit below the foundations. Finds included Post-medieval pottery. The village of Poplar was so named by at least 1327 and expanded with the shipping industry.
11	MLO9170	377 813	Road	Medieval Post-medieval	Road from Poplar High Street to Bromley.
12	MLO1125	3719 8082	Street	Medieval Post-medieval	Limehouse Causeway, Narrow Street to Poplar High Street road.
13	DLO28414 ELO20319 ELO20318 ELO20232 ELO7890 MLO93430 ELO7890 MLO93430 MLO3738	3817 8190 38173 81908 3816 8192	Dendrochronology Listed Building Building Recording	Medieval Post-medieval Victorian Modern	Timbers associated with Bromley Hall have been dated from 1482-95 to the late 17th or early 18th century. Bromley Hall is Grade II* listed including the walls, house and tower house. A building survey concluded the existence of a medieval gatehouse (c. 1482-95), evidence and details about the previous towered house (3 stories) and its remodelling after 1700. Use after this period is documented up until damage in WW2 and reconstruction in 1951. A post-medieval gate lodge on Brunswick Road
14	MLO9164	3815 8185	Street	Medieval Post-medieval	St Leonard Street from Bromley to Blackwall along the west side of Lea.
15	DLO37841	3906 8091	Background	Medieval Post-medieval Modern	Archaeological Priority Area. The Limmo occupies the west bank of the mouth of the River Lea and its confluence with the Thames which has great potential for the area's historic industry.
16	DLO37839	3771 8085	Background	Medieval	Archaeological Priority Area. The historic settlement

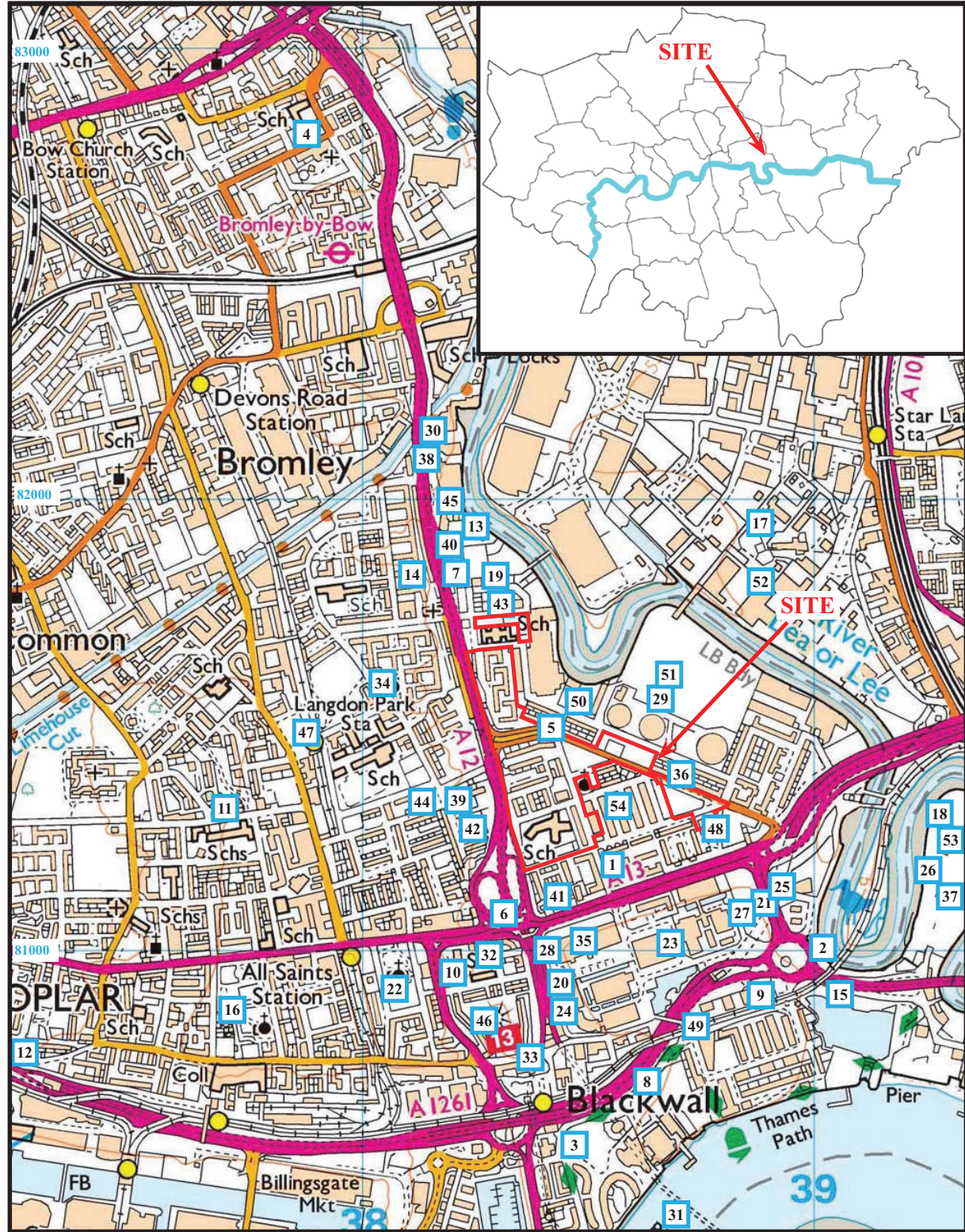
No	HER Ref	Grid Ref (TQ)	Type	Period	Comment
				Post-medieval Modern	of Poplar with Medieval origins, includes buildings, burial grounds, settlements and flood defences associated with the seafaring industry. Survival of ironworks is fair.
17	ELO19643	3891 8196	Watching Brief Evaluation	Post-medieval Modern	Fieldwork in 2006 on the Olympic and Paralympic Park Underground Shafts East-1 and West-1. In the west alluvial clays and a peat band was observed underlying dark modern debris layers. East showed alluvial gravels underlying modern demolition and levelling.
18	ELO18549	3930 8131	Excavation	Post-medieval	Thames Plate Glass Company excavation in 2007. found the full extent of the casting hall and adjacent kilns including details of construction and surviving foundations and walls.
19	MLO3029	3830 8180	Structure	Post-medieval	A post-medieval fishpond underlying later gas tanks.
20	DLO28095 MLO93111 DLO28425 MLO93441	38421 80914 38616 80811 3880 26/877	Listed Building	Post-medieval Victorian	Early 19th century dock and boundary wall to the East India Docks including a gateway
21	DLO28468 MLO93484	38899 81122	Listed Building	Post-medieval Victorian	East India Dock Pumping Station mid 19th century
22	MLO104373 MLO93108 MLO104374 MLO93502 DLO28423 MLO93439	3807 8093 38076 80937	Listed Building	Post-medieval Victorian	All Saints' Church on East India Dock Road with 19th century railings, gate piers and churchyard, cemetery, Garden of Rest and Park along with the Newby Place All Saints' Rectory.
23	MLO7284	3870 8100	Cartographic	Post-medieval Victorian	Landfill site from the Eastern Dock.
24	DLO27730 MLO92759	38431 80854 3880 26/888	Listed Building	Post-medieval Victorian	Embankment wall, railings and steps on Naval Row associated with the East India Docks.
25	DLO28347 MLO93363	38908 81144	Listed Building	Post-medieval Victorian	Gate pier and wall called Blackwall Goods Yard II, was an original entrance to the East India Company's Cos Pepper group of Warehouses.
26	ELO18131	3926 8115	Evaluation	Post-medieval Victorian	The Thames Plate Glass Company 12 evaluation trenches dug in 2007, with further stripping of 5 trenches where remains were found.
27	ELO19609	3885 8110	Evaluation	Post-medieval Victorian	East India Dock: evaluation in 2006 discovered the dock wall and areas of built up ground. Modern concrete yard and with modern dumps.
28	DLO28093 MLO93109	38399 81000 3881 19/685	Listed Building	Post-medieval Victorian Modern	A plaque on the modern dock wall
29	ELO20230	3870 8157	Building Recording	Post-medieval Modern	Gasholder Station on Leven Road surveyed in 2015 in advance of demolition.
30	ELO19817	3818 8213	Watching Brief Evaluation	Post-medieval Victorian Modern	Fieldwork in 2019 on Barratt Industrial Estate with five trenches and four test pits finding masonry and brick structures
31	DLO33367 MLO7485	3871 8010	Structure	Victorian Modern	The Blackwall Tunnel built between 1892 and 1897. This included a north and south gatehouse, one of which survives today (south). A second tunnel was built in 1937.
32	ELO2693 MLO7151 084132/00/00	3828 8100	Evaluation	Victorian	In 1997 trenches on the north side of Ashton Street found two 19th century walls.
33	DLO27667 MLO92696	38394 80782	Listed Building	Victorian	Blackwall Tunnel northern portal and parapet.
34	DLO27644 MLO92673 DLO28499 MLO93515	38066 81583 3881 19/701 38079 81534 3881 19/700	Listed Building	Victorian Modern	St Michael's Church, includes south tower and a short spire. A war memorial also listed.
35	DLO38147 MLO107687	3850 8102	Listed Building	Victorian Modern	East India Dock House former Financial Times Print Works Grade II* Listed.
36	ELO3868 MLO749	3872 8138	Evaluation	Victorian Modern	In 2000 a channel was recorded cutting natural gravel and sandy layers were succeeded by peaty deposits. Above these were 19th century dumped deposits.
37	ELO4234 MLO67565 ELO7575 MLO98915	3925 8105 39312 81089	Watching Brief Building Recording	Victorian Modern	Watching Brief at Orchard Place where alluvial deposits were overlain by backyards and walls dating to the Victorian period and later. Building recording on Orchard Place, before demolition of warehouses.
38	DLO27646 MLO92675	38165 82087	Listed Building	Victorian Modern	Early/Mid 19th century brick warehouse at Dowgate Wharf, P.B. Burgoyne and Company Limited Warehouse

No	HER Ref	Grid Ref (TQ)	Type	Period	Comment
39	DLO28234 MLO93250	38228 81343	Listed Building	Modern	Concrete framed building called Carradale House.
40	DLO28070 MLO93086 ELO1031 ELO1034 MLO75402	38192 81869 3881 19/683 38212 81872	Listed Building Field Survey Building Recording	Modern	Poplar Public Library and two Second World War civil defence structures at the rear of Poplar Library. Two excavations in 2001 to expose features and access the interiors.
41	ELO10939 MLO741 FLO19744	3847 8112	Test Pit	Modern	Only remains found were 19 th /20 th century made ground/dumps and a sequence of alluvial layers including peat.
42	MLO93337	38266 81277	Listed Building	Modern	Balfon Tower on St Leonard's Road is a concrete framed Grade II* listed building (flats).
43	MLO102830	38309 81697	Listed Building	Modern	Former Bromley Hall School for the Physically Handicapped.
44	DLO37943 MLO107594	3813 8133	Listed Building	Modern	Concrete framed building on Burcham Street, Glenkerry House on Brownfield Estate, Grade II*.
45	DLO35262 MLO93430	38186 81966	Listed Building	Modern	Former Fire Station on Gillender Street.
46	MLO107824	3827 8083	Building	Modern	Tower block on Woolmore Street/Robin Hood Lane/Poplar High Street/Cotton Street, c. 1970s.
47	ELO7559	37888 81475	Watching Brief	Undated	Undertaken at Langdon Park DLR Station for new platform construction, no archaeology found.
48	ELO13384	38816 81271	Evaluation	Undated	Aberfeldy Estate 3 trenches excavated in 2012, with no archaeological remains but deep alluvial deposits.
49	ELO10385	3876 8084	Borehole Survey	Undated	In 2009 a geoarchaeological investigation was undertaken at the DLR East India Station totalling 2 boreholes. Only truncation noted.
50	ELO17461	38503 81554	Borehole Survey	Undated	In 2015 a geoarchaeological survey was carried out made up of 18 boreholes showing inorganic alluvial deposits with 2 boreholes capturing peat.
51	ELO19826	3870 8157	Borehole Survey	Undated	Around Leven Road 40 boreholes were put down in 2019. These were used to produce an up-to-date detailed geoarchaeological deposit model. Pleistocene deposits were discovered with overlying Holocene deposits, the later consisted of alluvial deposits with infrequent peats, the alluvial deposits were truncated in certain areas by made ground.
52	ELO2760	3890 8181	Watching Brief	Undated	A total of 26 test pits with no archaeology found. The area was contaminated and highly truncated.
53	ELO10128	394 813	Evaluation	Undated	Canning Town Station evaluation in 1991. Included well preserved organic deposits and well stratified alluvium deposits.
54	ELO2642 MLO6432	3857 8130	Watching Brief	Undated	Watching brief at Ada Gardens in 1993 found alluvial deposits with peat layers.

Listed Buildings Grade II unless stated.

APPENDIX 2: Historic and modern maps consulted

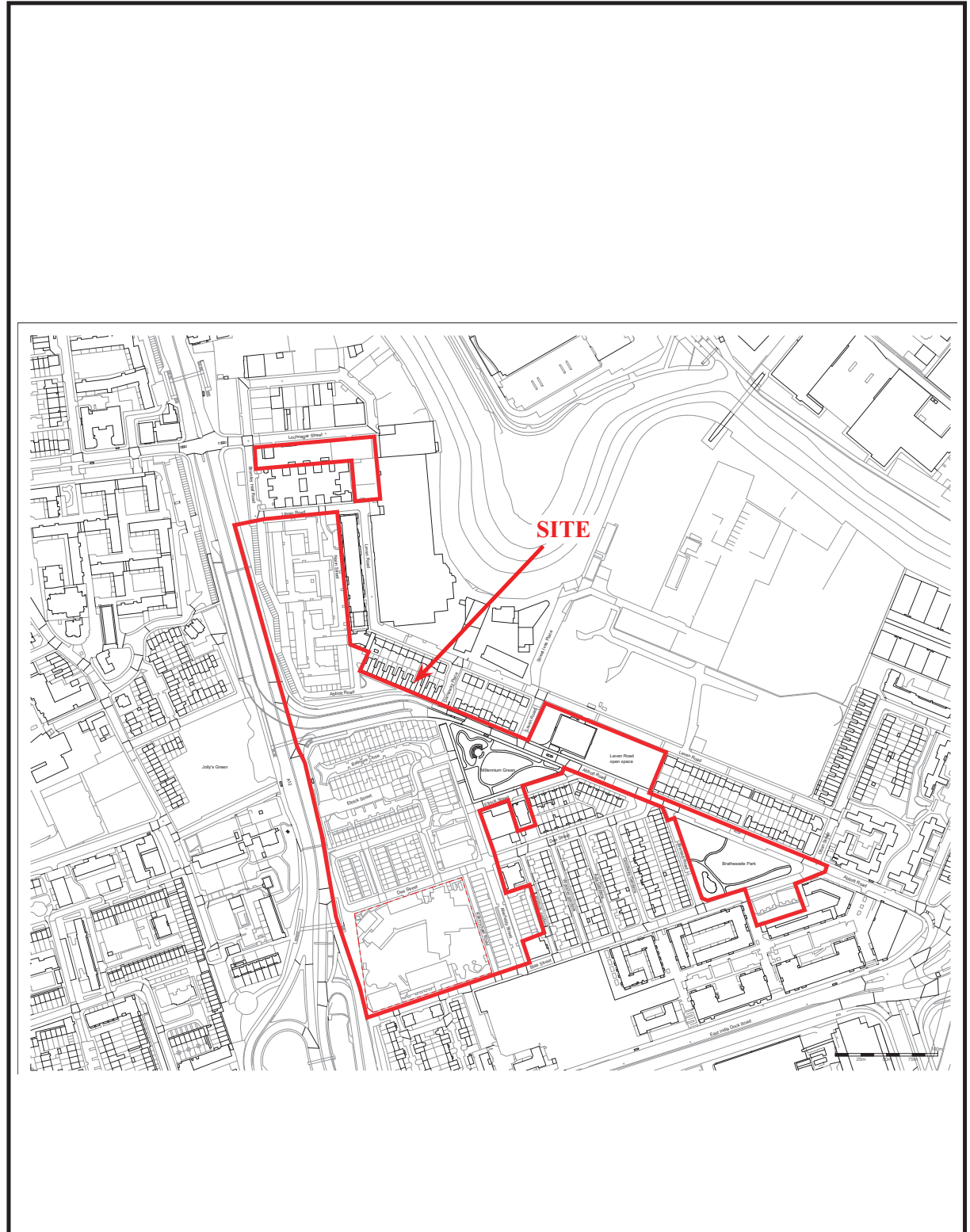
1575	Saxton's map of Middlesex (Fig. 3)
1593	Norden's map of Middlesex (Fig. 4)
1610	Speed's map of Middlesex
1645	Anonymous, map of Middlesex
1672	Blome's map of Middlesex
1672	Ogilby's map of Middlesex (Fig. 5)
1749	Warburton's map of Middlesex (Fig. 6)
1762	Rocque's map of Middlesex (Fig. 7)
1785	Bowles' map of Middlesex
1801	Cary's map of Middlesex *Fig. 8)
1872	Ordnance Survey First Edition (Fig. 9)
1894	Ordnance Survey Second Edition (Fig. 10)
1920	Ordnance Survey Third Edition (Fig. 11)
1955	Ordnance Survey Third Edition (Fig. 12)
1965	Ordnance Survey Third Edition (Fig. 13)
1973	Ordnance Survey Third Edition (Fig. 14)
1981	Ordnance Survey Third Edition (Fig. 15)
1989	Ordnance Survey Third Edition (Fig. 16)
2001	Ordnance Survey Third Edition (Fig. 17)
2020	Ordnance Survey Third Edition (Fig. 18)



AVL 20/188

Aberfeldy Village, Lighterman Point, Poplar, London, 2020
Archaeological Desk-based Assessment
 Figure 1. Location of site within Tower Hamlets and London, showing locations of GLHER entries.
 Reproduced under licence from Ordnance Survey Explorer Digital mapping at 1:12500
 Crown Copyright reserved

THAMES VALLEY
ARCHAEOLOGICAL SERVICES

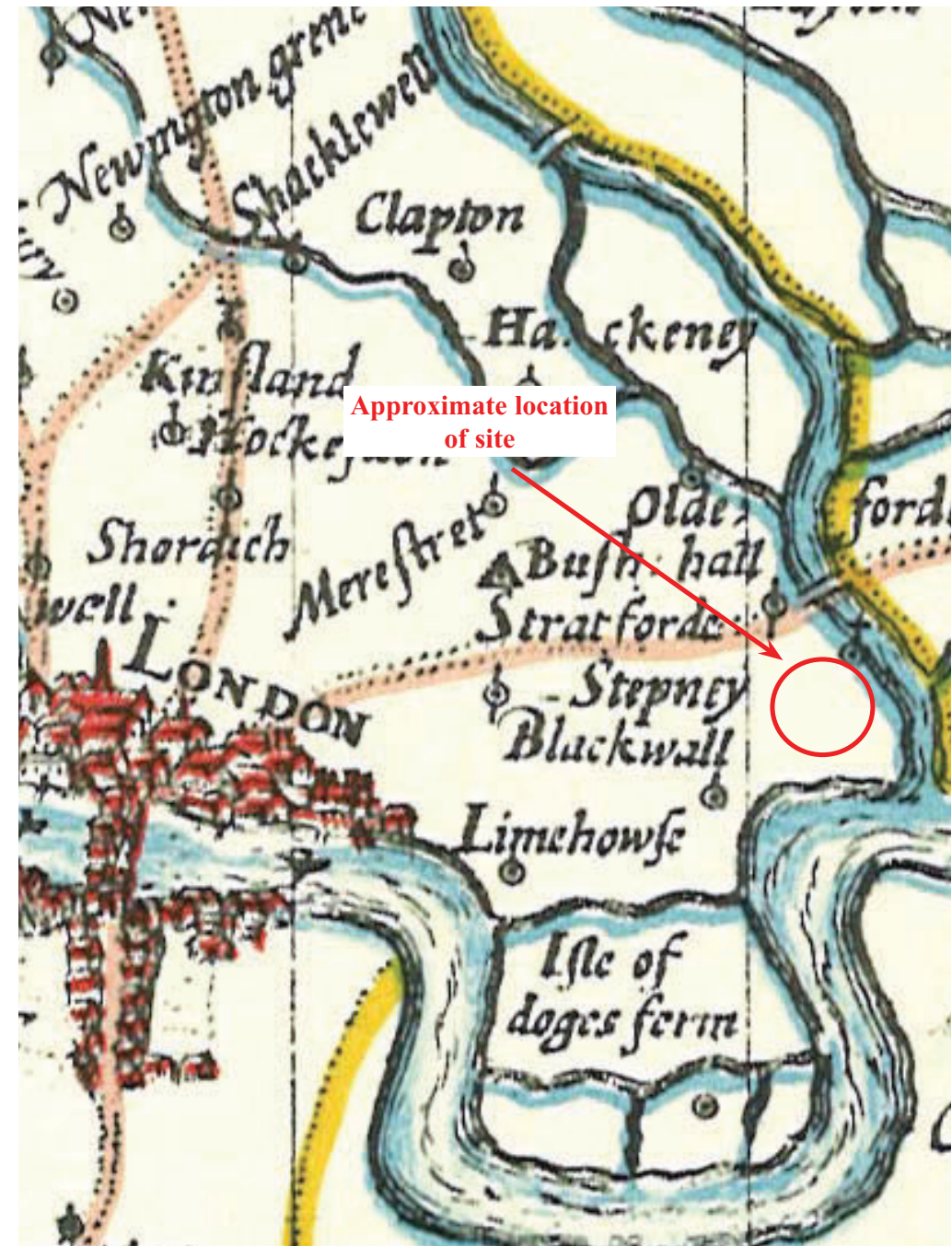


NM 20/177

Aberfeldy Village, Lighterman Point, New Village Avenue, Poplar, London, 2020
Archaeological Desk-based Assessment
 Figure 2. Current layout of site. Not to scale.

N

TVAS
 EAST MIDLANDS



AVL 20/188

Aberfeldy Village, Lighterman Point, Poplar,
London, 2020
Archaeological Desk-based Assessment
Figure 4. Norden's map of Middlesex, 1593.

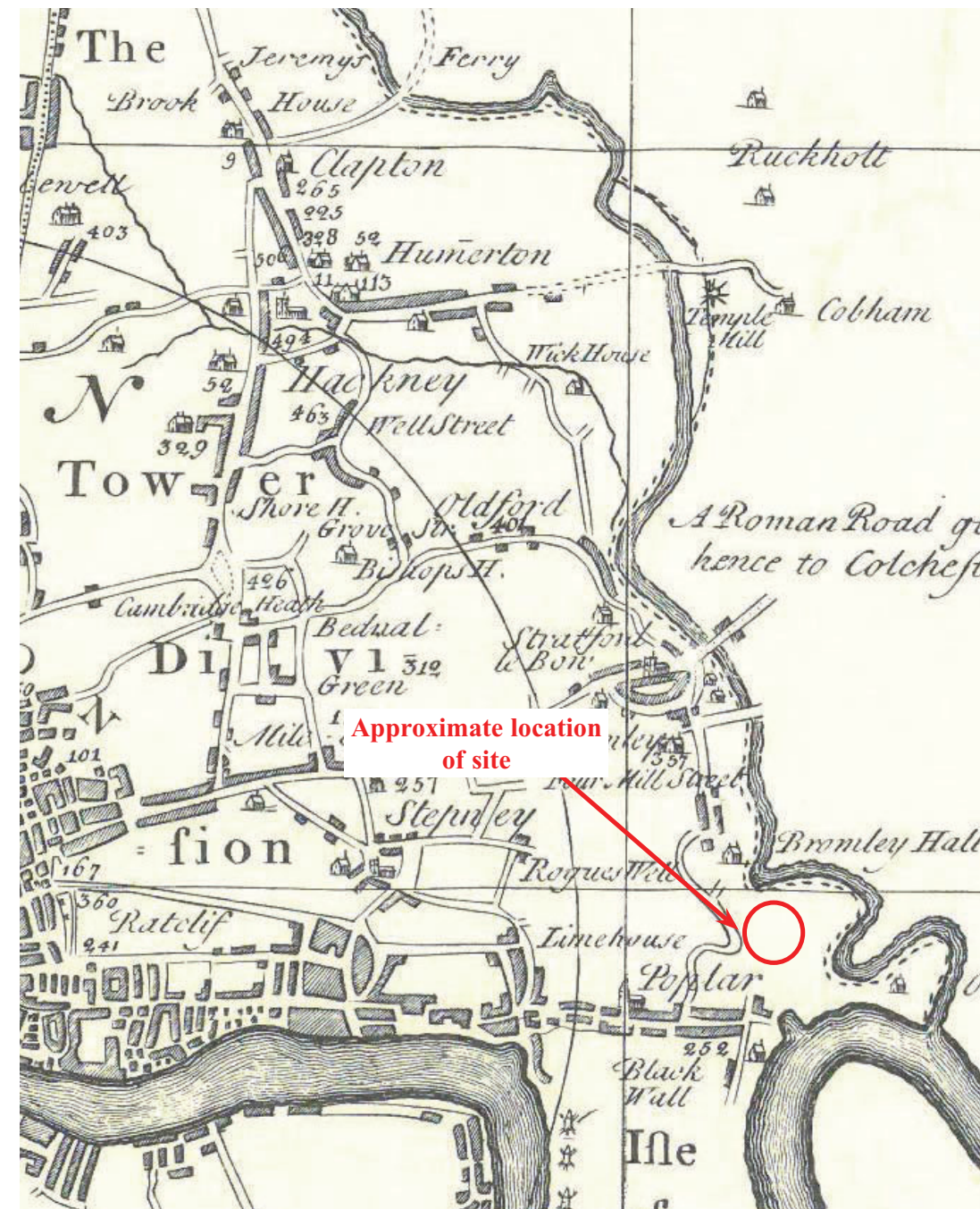
THAMES VALLEY
ARCHAEOLOGICAL
SERVICES



AVL 20/188

Aberfeldy Village, Lighterman Point, Poplar,
London, 2020
Archaeological Desk-based Assessment
Figure 5. Ogilby's map of Middlesex, 1672.

THAMES VALLEY
ARCHAEOLOGICAL
SERVICES



AVL 20/188

Aberfeldy Village, Lighterman Point, Poplar,
London, 2020
Archaeological Desk-based Assessment
Figure 6. Warburtons' map of Middlesex, 1749.

THAMES VALLEY
ARCHAEOLOGICAL
SERVICES