

THE GOODSYARD

Environmental Statement Addendum Volume 2

September 2019 – Chapter 3 of 21

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CHAPTER 3: EIA METHODOLOGY

3.1 INTRODUCTION	
3.1.1	This chapter sets out the methodology used to prepare each chapter of the ES Addendum and describes the general structure and content of the technical chapters. In particular, it sets out the process of identifying and assessing the likely significant effects of the Revised Scheme on the environment.
3.1.2	Further detail on how the assessment methodology is applied to each topic is presented within the respective technical chapters of this ES Addendum.
3.1.3	This ES Addendum has been prepared to comply with the 2011 EIA Regulations ¹ in line with GLA requirements. The ES Addendum has also drawn on current good practice guidance in EIA and as such additionally incorporates the requirements of the 2017 Regulations.

3.2 EIA SCOPING AND CONSULTATION	
3.2.1	An Environmental Statement (ES) prepared in line with the 2011 EIA Regulations was submitted in support of the 2015 planning applications (as discussed in Volume 2, Chapter 1: Introduction). As part of this process a Scoping Report was issued to LBTH and LBH in December 2013 and a subsequent Scoping Opinion was issued jointly by the LBTH (Ref: PA/14/107) and LBH (Ref: 2014/0249) in 2014 (ES Addendum Volume 4, Appendix A: Scoping).
3.2.2	The GLA considers that the Revised Scheme falls under the 2011 EIA Regulations and they invited the Applicant to request a review of the 2014 Scoping Opinion. The resultant Scoping Opinion Review (ES Addendum Volume 4, Appendix A: Scoping) was therefore prepared in accordance to the 2011 EIA Regulations and was submitted to the GLA on the 5th March 2019.
3.2.3	The Scoping Opinion Review identifies the revisions and additions required to address the likely significant effects of the Revised Scheme. Potential environmental topics in relation to the Revised Scheme were evaluated.
3.2.4	Since the 2014 Scoping Opinion was issued, the 2017 EIA Regulations ² have come into force. Whilst it is accepted that the Application is being assessed under the 2011 EIA Regulations, in the interest of best practice, consideration has been given to the 2017 EIA Regulations, which now requires the consideration of additional environmental topics.
3.2.5	As part of the scoping exercise undertaken in 2014 and again in 2019 key statutory and non-statutory consultees were consulted. This has been carried out in order to determine which topics should be included in the EIA, having regard to whether they are likely to give rise to significant effects.
3.2.6	Key consultees included: <ul style="list-style-type: none"> LBTH (including departments such as Highways and Planning); LBH (including departments such as Highways and Planning); Greater London Authority (GLA); Environment Agency (EA); Historic England (HE); Transport for London (TfL); Metropolitan Police; National Grid (NG) and other Statutory Utility providers (including Thames Water Utilities Limited (TWUL), UK Power Networks (UKPN) and BT; Local residents and local community groups (to be agreed with the Planning Authority); and Important neighbouring occupiers comprised of local business and industry.
3.2.7	The following topic chapters were agreed in scope for the 2019 ES Addendum: <ul style="list-style-type: none"> Waste and Recycling; Socio-Economics; Ground Conditions; Traffic and Transport; Wind Microclimate; Daylight, Sunlight, Overshadowing, Solar Glare and Light Pollution; Air Quality; Noise and Vibration; Water Resources, Drainage and Flood Risk; Archaeology;

	<ul style="list-style-type: none"> Townscape and Visual Impact Assessment (Volume 3);
	<ul style="list-style-type: none"> Built Heritage; Ecology; and Climate Change Mitigation and Adaptation.
3.2.8	The following topic chapters were scoped out of the ES Addendum as standalone chapters. <ul style="list-style-type: none"> Aviation; Electronic Interference; Population and Human Health; and Major Accidents and Disasters.
3.2.9	Sections 3.2.12 to 3.2.43 outline the justification for their exclusion from the ES Addendum.
3.2.10	The following statutory and non-statutory bodies provided consultation responses to GLA which are appended to the 2014 Scoping Opinion (ES Addendum Volume 4, Appendix A: Scoping): <ul style="list-style-type: none"> LBTH; LBH; Canal and River Trust; Crossrail Safeguarding; City of London Corporation; English Heritage (GLAAS); English Heritage (Built Heritage); Environment Agency; Historic Royal Parks; London Borough of Greenwich; London Borough of Southwark; London City Airport; London Fire and Emergency Planning Authority; Marine Management Organisation; Natural England; Network Rail; Port of London Authority; and Thames Water.
3.2.11	A summary of the key points identified in the 2014 Scoping Opinion and the 2019 Scoping Opinion Review]in terms of the overarching approach to the EIA, methodology and criteria for assessment are presented in Table 3.1 including details as to where the topics have been addressed within the ES Addendum or documents supporting the Application.

Table 3.1. Summary of Key Revisions and Additions to be addressed in the ES Addendum

Revisions or Additions Proposed	Consultee	Summary of Comments	Response provided in the ES Addendum / Planning Application
General	LBTH & LBH	<p><i>Paragraph 3.10 of 2014 Scoping Opinion: “The ES should differentiate between measures that have been incorporated into the design of the development, and those additional measures required to mitigate adverse effects.”</i></p> <p><i>Paragraph 4.10 of 2014 Scoping Opinion: “Plans showing the location of receptors should be included in the ES. A figure showing the site, the phasing and any changes in access and egress should be provided.”</i></p> <p><i>Paragraph 1.5 of the 2019 Scoping Opinion Review: The GLA take the view that the determination of the Applications, so far as the EIA is concerned, remains governed by the 2011 Regulations.</i></p> <p><i>Paragraph 3.9 of the 2019 Scoping Opinion Review: The ESA should include sufficient figures, maps and</i></p>	<p>All topic chapters (Chapters 6-18).</p> <p>Chapter 1: Introduction / Chapter 3: EIA Methodology.</p>

¹ The Town and Country Planning (Environmental Impact Assessment) Regulations 2011 (SI 2011/1824).

² The Town and Country Planning (Environmental Impact Assessment) Regulations 2017 (SI 2017/571).

Revisions or Additions Proposed	Consultee	Summary of Comments	Response provided in the ES Addendum / Planning Application
		<i>diagrams to aid understanding of the assessment including visual representations of the proposed scheme changes and how they differ to the previous scheme.</i>	All topic chapters (Chapters 6-18).
Methodology	LBTH & LBH	<p>Paragraph 4.3 of 2014 Scoping Opinion: “The EIA must consider the potential significant effects on both external and internal receptors (i.e. those introduced as a result of the proposed development).”</p> <p>Paragraph 3.5 of 2019 Scoping Opinion Review: “...topic specific approaches [to determining the significance of an effect] will need to be clearly explained in the ES Addendum.”</p> <p>Paragraph 36 of the 2019 Scoping Opinion Review: “it is important that the ES Addendum clearly identifies [embedded mitigation and best practice measures] to enable them to be identified by the GLA and conditioned. A table or list summarising all embedded and additional mitigation would be helpful”</p>	<p>Chapter 3: EIA Methodology, All topic chapters (Chapters 6-18).</p> <p>All topic chapters (Chapters 6-18).</p> <p>All topic chapters (Chapters 6-18), Residual Effects and Conclusion chapter (Chapter 20).</p>
Consultation	GLA, LBTH and LBH	Paragraph 3.8 of the 2019 Scoping Opinion Review: “The ES Addendum should include a clear summary of the consultation undertaken, and should summarise key responses from consultees and how these have been addressed”.	Chapter 3: EIA Methodology and all topic chapters (Chapters 6-18).
	TfL	From the 2019 Scoping Opinion Review TFL prime concerns would be: Impact on road safety – interaction between vulnerable road users and heavy goods vehicles [...] impact on health [...] impact on equality and inclusion	Chapter 9: Traffic and Transport.
Demolition and Construction	LBTH and LBH	<p>Paragraph 4.25 of 2014 Scoping Opinion: “The ES chapter will provide an overview of the works required during demolition and construction activities.”</p> <p>Paragraph 4.27 of 2014 Scoping Opinion: “Information will be provided on site access and egress, and any changes to these locations over the 12 years construction period should be highlighted. Working hours, HGV movements and estimates of demolition, excavation and construction waste will be provided, as will the quantities of materials to be used during construction.”</p> <p>Paragraph 4.29 of 2014 Scoping Opinion: “Within the phases, time slices will be identified to allow the technical environmental assessments to assess the worst case scenario. A figure showing the site, the phasing and any changes in access and egress should be provided in the ES.”</p> <p>Paragraph 4.31 of 2014 Scoping Opinion: “The chapter should also provide an indication of the typical plant to be used during the works, and whether the particular plant is required for a particular phase.”</p>	<p>Chapter 5: Revised Scheme and Construction Overview.</p> <p>Chapter 5: Revised Scheme and Construction Overview.</p> <p>Chapter 5: Revised Scheme and Construction Overview, Chapter 12: Air Quality, Chapter 13: Noise and Vibration.</p> <p>Chapter 5: Revised</p>

Revisions or Additions Proposed	Consultee	Summary of Comments	Response provided in the ES Addendum / Planning Application
		<p>Paragraph 4.32 of 2014 Scoping Opinion: “The chapter will also provide a framework of the Construction Environmental Management Plan, Code of Construction Practice and Site Waste Management Plan. These will take into account best practice guidance. The ES should identify who will be responsible for preparing and implementing these documents”</p> <p>Paragraph 4.33 of 2014 Scoping Opinion: “When considering demolition and construction waste the Applicant should also indicate its intentions regarding re-use, recycling and disposal of the waste.”</p> <p>Paragraph 3.1.3 of the 2019 Scoping Opinion Review: “The chapter should include details of an indicative construction programme, split into the main phases of the project; the likely plant and vehicle movements during each phase, including for any overlap of activities; information on any phasing of the project and whether any new receptors will be created through the occupation of any phases”.</p>	<p>Scheme and Construction Overview, Chapter 13: Noise and Vibration.</p> <p>Chapter 5: Revised Scheme and Construction Overview.</p> <p>Chapter 6: Waste and Recycling</p>
Waste and Recycling	LBTH and LBH	<p>Paragraph 4.37 of 2014 Scoping Opinion: “The ES should identify who is responsible for the Site Waste Management Plan.”</p> <p>Paragraph 4.38 of 2014 Scoping Opinion: “The ES chapter should identify the current capacity at waste disposal sites, and identify whether there is sufficient capacity for the development and cumulatively.”</p> <p>Paragraph 4.39 of 2014 Scoping Opinion, updated in 2019 Scoping Opinion Review: “When estimating total waste arisings regard is to be given to the types and volumes of demolition, excavation and construction wastes likely to be generated. For each waste types the ES should clarify how the wastes are to be managed, for example re-used, recycled, landfilled and whether such activities are to be undertaken on-site or off-site.”</p> <p>Paragraph 4.41 of 2014 Scoping Opinion: “The mode of waste transfer should be identified and where this is by road, the number of vehicle movements should be taken into account in the traffic impact assessment.”</p> <p>2019 Scoping Opinion Review: “...the baseline environment including existing levels of waste generated at the site will be examined...”</p> <p>This assessment should consider waste management policies and also those pertaining to the sustainable use of natural resource policies. This should include consideration of the updated Draft London Plan and the Local Development Plan and associated guidance.</p>	<p>Chapter 5: Revised Scheme and Construction Overview, Chapter 6: Waste and Recycling</p> <p>Chapter 6: Waste and Recycling</p> <p>Chapter 6: Waste and Recycling</p> <p>Chapter 5: Revised Scheme and Construction Overview,</p> <p>Chapter 6: Waste and Recycling</p> <p>Chapter 6: Waste and Recycling</p>

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		<p>...consideration should also be given to sustainable construction practices during the development ...</p> <p>Cumulative effects, during both the construction and operation phases, will also be considered with the committed developments listed in the updated Scoping Report. This should also cover any cumulative impacts during the demolition phase.”</p> <p>The inclusion of appropriate waste storage and recycling facilities is required</p>	
Socio-Economics	LBTH and LBH	<p>Paragraph 4.51 of 2014 Scoping Opinion “The assessment should appropriately assess the loss of the existing land uses, and where these will be relocated.”</p> <p>Councils affordable housing target i.e. 35% (LBTH) and 50% (LBH). If these targets cannot be met on-site, but will instead be secured through financial contributions and/ or off-site locations, the ES should consider these effects.”</p> <p>Paragraph 4.52 of 2014 Scoping Opinion, updated in the 2019 Scoping Opinion Review: “It is accepted that LBTH policy will be used for the housing and affordable housing assessments, as the residential element is only located in LBTH. If LBTH’s targets cannot be met on-site, but will instead be secured through financial contributions and /or off site locations, the ESA should consider these effects</p> <p>Paragraph 4.5 of 2019 Scoping Opinion Review The assessment should take into account the Public Land status of the site for which a 50% affordable housing target is required.</p>	<p>Chapter 7: Socio-Economics</p> <p>Chapter 7: Socio-Economics</p>
Ground Conditions	LBH, LBTH and GLA	<p>2019 Scoping Opinion Review: “The assessment methodology and significance criteria...will require detailed description in the ES.</p> <p>The assessment should include consideration of previous site investigation results in the light of the proposed residential land use and should include consideration of ground gases...geotechnical or other issues ...as well as potential impacts on groundwater.</p> <p>A site visit should be included in the assessment”.</p>	<p>Chapter 8: Ground Conditions</p> <p>Chapter 8: Ground Conditions</p> <p>Chapter 8: Ground Conditions</p>
Traffic and Transport	LBH, LBTH and GLA	<p>2019 Scoping Opinion Review: “The Transport Assessment should be scoped by the Applicant’s transport consultants in conjunction with LBH, LBTH and TfL.”</p> <p>The scale and extent of assessment would be expected to be defined in accordance with TfL’s Transport Assessment Best Practice Guidance document (April 2010) as well as the Mayor of London’s ‘Healthy Streets Approach’, National Planning Policy Framework (2019), specific LBH and</p>	Chapter 9: Traffic and Transport Assessment

Revisions or Additions Proposed	Consultee	Summary of Comments	Response provided in the ES Addendum / Planning Application
		<p>LBTH requirements and IEMA 1993 Guidelines for The Environmental Assessment of Road Traffic.</p> <p>Paragraph 1.10.12 of the Scoping Report states that there is potential for temporary road closures during construction. These should be clarified, and consequential effects assessed. LBTH has increasing concerns regarding the servicing of buildings and deliveries. The assessment on this element should be clear, realistic and robust and a draft Delivery and Servicing Plan should be submitted.</p> <p>It would be prudent for the Applicant to include justifications for the fleet mixes adopted in the modelling of construction vehicles.”</p>	
Wind Microclimate	LBTH and LBH	<p>Paragraph 4.79 of 2014 Scoping Opinion: “The assessment should consider the effect on the wider neighbouring area. Consideration should also be given to the wind climate to be experienced on balconies and roof terraces accessible by residents.”</p> <p>Paragraph 4.82 of 2014 Scoping Opinion : “The ES should identify the impacts pre and post mitigation.”</p> <p>Paragraph 4. 83 of 2014 Scoping Opinion: “A full statistical breakdown of the wind microclimate should be provided.”</p> <p>2019 Scoping Opinion Review: “The applicant should explain why desktop studies are necessary when wind tunnel assessments are taking place.</p> <p>The applicant should include a description of the sensitive receptors that will be targeted in the assessment.</p> <p>It is recommended that that the Lawson Comfort and Safety criteria be used in the assessment and this should be detailed in the assessment methodology. The applicant should detail the height at which wind speed measurements will be made, 1.5m above ground level is recommended. “</p> <p>Details on where the historical wind data will be taken from should be included in the assessment methodology.</p> <p>All data used to inform the wind microclimate assessment should be provided and submitted in a form which can be independently verified and include digital copies of drawings, 3D models and circulation sheets etc</p>	<p>Chapter 10: Wind Microclimate</p> <p>Chapter 10: Wind Microclimate</p> <p>Chapter 10: Wind Microclimate</p> <p>Appendix F: Wind Microclimate</p>
Daylight, Sunlight and Overshadowing		A scenario in which both the cumulative effects and the Revised Scheme are present should be tested.	Chapter 11: Daylight, Sunlight, Overshadowing, Light Pollution and Solar Glare.
Air Quality	LBTH and	Paragraph 4.104 of 2014 Scoping Opinion:	Chapter 12: Air Quality

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	LBH EHO	<p><i>"The ES should provide a transparent account of the modelling undertaken, all assumptions made and all input data (for example, traffic flows) used."</i></p> <p>2019 Scoping Opinion Review: <i>"Confirmation that the Applicant will assess the scheme's impact upon the long- and short-term air quality objectives (AQOs) for NO2 and PM10, as well as the impact upon the PM2.5 air quality objective."</i></p> <p><i>Further information on the screening of odour impacts from A3 properties.</i></p> <p><i>Consideration for adjustment for future trends in emission projections and baseline air quality for the scheme opening year.</i></p> <p><i>Inclusion of intermediate years in modelling assessment to adequately reflect the risk posed to new points of exposure, as they're introduced.</i></p> <p><i>Consideration of the accordance of the proposals with Government policies and guidance including those referenced above.</i></p> <p><i>The assessment will include a cumulative assessment of combined emissions from committed developments in close proximity to the proposed development.</i></p> <p><i>The ES needs to provide further details and justifications of the traffic scenarios that will be used to undertake the assessment and provide a transparent account of the modelling undertaken. The Air Quality chapter should assess the effects at various heights and identify at which levels mitigation is required</i></p>	
Noise and Vibration	LBTH and LBH EHO	<p>Paragraph 4.108 of 2014 Scoping Opinion: <i>"The vibration assessment should meet BS6472:2008 criteria for vibration and TfL criteria for ground-bourne noise."</i></p> <p>2019 Scoping Opinion Review: <i>"to ensure that the location of potential sensitive receptors are clearly defined – the provision of a map is sought for the ES."</i></p> <p><i>the construction noise and vibration calculation methodology should be specified and the assessment should take account of existing ambient conditions at the sensitive receptors.</i></p> <p><i>the magnitude of impacts is defined in accordance with recognised noise and vibration guidance and corresponding EIA terminology. The scale of effects is to refer to guidance within the Noise Policy Statement for England and agreed during consultation with the EHOs.</i></p> <p><i>to ensure that consideration of the accordance of the proposals with Government policies and guidance including those referenced above.</i></p> <p><i>to ensure that mitigation measures proposed should</i></p>	Chapter 13: Noise and Vibration

Revisions or Additions Proposed	Consultee	Summary of Comments	Response provided in the ES Addendum / Planning Application
		<p><i>be detailed and contained in a CEMP.</i></p> <p><i>to ensure that construction phasing should be taken into account whereby completed phases become sensitive receptors during later construction phases."</i></p> <p><i>Noise monitoring should be undertaken informed by BS7445-1:2003, BS4142, BS5228, BS8233, BS6274 and BS 8233:2014</i></p> <p><i>Noise monitoring and sensitive receptors should be agreed with LBTH's Environmental Health Officer</i></p> <p><i>Both the Significant Observed Adverse Effect Level (SOAEL) and Lowest Observed Adverse Effect Level (LOAEL) should be defined for all of the noise and vibration matters assessed and these thresholds should be used to determine the significance of absolute noise levels. The lowest LA90 should be used as the baseline on which to determine the Sound Pressure Level at the nearest noise-sensitive receptor, as opposed to the representative LA90</i></p> <p><i>The amended application should be supported by a vibration suitability assessment.</i></p>	
Water Resources and Flood Risk Assessment	LBTH and LBH EHO	<p>Paragraph 4.121 of 2014 Scoping Opinion: <i>"The FRA and Water resources Chapter will need to take into account potential impacts of climate change in the assessment."</i></p> <p>Paragraph 4.21 of 2019 Scoping Opinion Review <i>The updated EA climate change allowances (2019) should be considered as part of the assessment and modelling undertaken. It should be demonstrated that the site passes the Flood Risk Sequential Test, and it is advised that consultation is undertaken with the EA regarding FRA requirements and the need to ensure the Proposed Development provides safe access in the event of a flood. LBTH consider that the drainage strategy should be designed to accommodate the 1 in 100-year event + 4-% climate change</i></p>	<p>Chapter 14: Water Resources And Flood Risk</p> <p>Appendix J, Part 1: Flood Risk Assessment</p>
		<p>2019 Scoping Opinion Review: <i>"the Applicant should undertake a thorough SuDS appraisal and specifically reference SuDS as part of the drainage solution/surface water flooding mitigation for the Proposed Development. If found to be 'not feasible/viable', only then can alternatives be considered."</i></p> <p><i>...ensure that Thames Water Utilities can accommodate the increased demand in potable water and wastewater via consultation and assessment of the Proposed Developments usage.</i></p> <p><i>with respect to the water environment, outline mitigation measures for demolition, construction and operational phases of the Proposed Developments should be detailed and contained in a Construction Environmental Management Plan (CEMP).</i></p>	Appendix J, Part 2: Outline Drainage Strategy

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		<i>[Consider] ...any cumulative impacts during the demolition phase, in terms of increased waste water from activities such as dust suppression."</i>	
	Thames Water	<i>Paragraph 4.134 of 2014 Scoping Opinion: "The developer needs to consider the net increase in water and waste water demand to serve the development and also any impact the development may have off site further down the network. "</i>	Chapter 14: Water Resources and Flood Risk
Archaeology	English Heritage (GLASS)	<i>Paragraph 4.150 of 2014 Scoping Opinion: "The EIA should explore the potential to enhance or make a positive contribution to undesignated heritage assets through effective building design."</i> <i>Paragraph 4.23 of 2019 Scoping Opinion Review: The assessment should, where appropriate, consider the likelihood of alterations to drainage patterns that might lead to decomposition or destruction of below ground archaeological remains and deposits.</i>	Chapter 15: Archaeology, Chapter 16: Built Heritage, Volume 3: Townscape and Visual Impact Assessment
Ecology	GLA, LBH and LBTH	<i>Paragraph 4.32 of 2019 Scoping Opinion Review: The effects on ecological receptors should be undertaken for demolition, construction and operation.</i>	Chapter 17: Ecology
Built Heritage		<i>Paragraph 4.164 of 2014 Scoping Opinion: "A clear analysis of the heritage significance of each affected heritage asset, including the contribution of its setting to heritage significance, should be provided. All judgements on the significance and direction of effects on heritage assets (including the World Heritage Site) need to be fully explained and justified."</i>	Chapter 16: Built Heritage, Volume 3: Townscape and Visual Impact Assessment
		<i>2019 Scoping Opinion Review: "scheduled monuments or registered parks and gardens should be added to the scope of assessment.</i> <i>The following guidance and sources should be referred to for their identification of designated and non-heritage assets and the assessment of their significance, and the impact of a proposal on an asset</i> <ul style="list-style-type: none"> • <i>Historic England (2008) Conservation Principles, Policies and Guidance</i> • <i>Historic England (2017) The Setting of Heritage Assets: Historic Environment Good Practice Advice in Planning Note 3 (second edition)</i> • <i>Local Historic Environment Record (HER) data</i> • <i>The National Heritage List for England</i> • <i>Conservation area appraisals</i> • <i>Tower of London World Heritage Site Management Plan (2016) & Tower of London Local Setting Study (2010)</i> 	Chapter 16: Built Heritage.

Revisions or Additions Proposed	Consultee	Summary of Comments	Response provided in the ES Addendum / Planning Application
		<ul style="list-style-type: none"> • <i>Ministry of Housing, Communities & Local Government (2018) Planning Practice Guidance: Conserving and Enhancing the Historic Environment</i> • <i>Historic England (2015) Tall Buildings: Historic England Advice Note 4</i> <p><i>the applicant should clarify in the ESA what the definition and extent of 'nearby' is and how this decision was reached, clearly documenting the rationale for the selection of any given study area and the inclusion / omission of specific heritage assets.</i></p> <p><i>Paragraph 4.29 of the 2019 Scoping Opinion Review: Non-designated features of historic, architectural, archaeological or artistic interest should also be identified as receptors for assessment</i></p>	
Townscape	LBTH and LBH Design Conservation Officers	<p><i>Paragraph 4.188 of 2014 Scoping Opinion: "The townscape and visual impact assessment should assess:</i></p> <ul style="list-style-type: none"> • <i>impacts of the development on the physical characteristics of the site (including vegetation loss) and its surroundings and on landscape and townscape character – this should be separate to the visual impact assessment.</i> • <i>assessment of visual effects – the viewpoints for assessment have been agreed with LBH and LBTH.</i> <p><i>Paragraph 4.201: "Images should be prepared in accordance with the Landscape Institute's Advice Note 01/11 'Photography and photomontage in landscape and visual impact assessment' and guidance contained in the LVMF SPG for LVMF viewpoints."</i></p> <p><i>Paragraph 4.202: "The viewpoints should assess the worst case scenario i.e. winter views."</i></p> <p><i>2019 Scoping Opinion Review:</i></p> <p><i>the Applicant should include sufficient detail to understand how the proposal will fit or contrast with the character of adjacent areas, including considering the height and massing of the proposed new structures, the materials to be used, and the character of the spaces between them</i></p> <p><i>The ES should assess winter views.</i></p>	Volume 3: Townscape and Visual Impact Assessment.
Townscape	Historic Royal Palaces	<i>Historic Royal Palaces note that the Visual Impact Assessment section of the updated Townscape and Visual Impact Assessment volume of the Environmental Statement will include 'Accurate Visual Representations' of LVMF views 10A.1 (from Tower Bridge, north and south bastions), 25A.1-3 (from the Queen's Walk) and the view from the Tower of London North Wall Walk. These should</i>	Volume 3: Townscape and Visual Impact Assessment

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		<i>provide the information we need to assess whether or not the amended scheme will have an impact on key views of and from the Tower of London World Heritage Site.</i>	
		<p><i>Where there is vegetation within a view winter views are key to enable a full assessment of the scheme</i></p> <p><i>Additional views;</i></p> <ul style="list-style-type: none"> <i>• South west pavement corner at junction of Bishopsgate and Commercial Street;</i> <i>• View east from Holywell Lane;</i> <i>• Kingsland Road, from the pavement on the west side of the road, in front of St Leonard's Hospital;</i> <i>• North eastern edge of the front gardens to the Geffrye Museum (Grade I);</i> <i>• Just south of Christ Church, Spitalfields looking north along Commercial Street to Spitalfields Market;</i> <i>• Northern end of Boundary Street, from the pavement on the west side, looking south;</i> <i>• A view which shows the relationship between the Oriel Gate and Building 2, with a view down Middle Road, probably taken from the pavement on the west side of Shoreditch High Street.</i> 	<p>Volume 3: Townscape and Visual Impact Assessment</p> <p>Volume 3: Townscape and Visual Impact Assessment</p> <p>Volume 3: Townscape and Visual Impact Assessment</p> <p>View 55 is taken from a position sufficiently nearby to the identified view at Kingsland Road</p> <p>This can be extrapolated from the view from within the museum grounds.</p> <p>This can be extrapolated using views 43 and 44.</p> <p>The impact is shown in view 58 from the rear of Shoreditch Church at the northern end of Boundary Street</p> <p>Design and Access Statement</p>
Scoped out topics	GLA, LBTH and LBH	<p><i>Paragraph 5.5 of 2019 Scoping Opinion Review In accordance with emerging policy, the applicant is required to submit a detailed HIA</i></p> <p><i>Paragraph 5.7 of Scoping Opinion Review It is considered that the ES should include a description and assessment of the potential vulnerability of the Proposed Development to risks of major accidents and / or disasters, including vulnerability to climate change, which are relevant to the Proposed Development. Measures to prevent or mitigate significant adverse effects of such events should be provided in the ES where relevant. It is important that the introductory section(s) of the ES sign-post to where accidents and hazards have been assessed in the ES, such as flood risk, construction and contaminated land as stated in paragraph 1.21.36.</i></p>	<p>Health Impact Assessment</p> <p>Chapter 18: Climate Change Mitigation and Adaptation, Chapter 3: EIA Methodology</p>

Topics to be Scoped Out of the ES Addendum

- 3.2.12 The following environmental topics are not considered likely to give rise to likely significant effects and have therefore been scoped out of the ES Addendum:
- Aviation;
 - Electronic Interference;
 - Population and Human Health; and
 - Major Accidents and / or Disasters.
- 3.2.13 The following sections provide detailed justification as to this approach.
- Aviation**
- 3.2.14 The site is located approximately 24 km east of London Heathrow Airport (LHR) and approximately 8 km west of London City Airport (LCY). As the site is located a significant distance away from London Heathrow Airport, it can be concluded that there will be no likely adverse impacts on operations at London Heathrow Airport as a result of the Revised Scheme, and as such, this will not be considered within the ES Addendum.
- 3.2.15 It is understood that LCY is designated as an 'officially safeguarded aerodrome' in accordance with the Office of the Deputy Prime Minister (ODPM) Circular 1/2003: Safeguarding Aerodromes. Precise and integrated airspace management procedures are necessary to maintain safety and efficiency.
- 3.2.16 This requires the operations of LCY traffic to be at altitudes below LHR traffic. The international aviation criteria require a 1000 feet (ft) (or 304.8m) obstacle clearance in the central London area (including construction cranes). The height of the tallest element of the Revised Scheme will be circa AOD + 142.4 m. With regards to physical safeguarding, the Take Off and Climb Surface (TOC) and the Approach Surface (APP) begin on the airfield with different origins and rise at different angles relative to the airport.
- 3.2.17 The Revised Scheme are not located within the flight paths and will sit below the TOC for LCY and so the Revised Scheme are clear of the safeguarding distances for LCY. The Revised Scheme are therefore not anticipated to affect the current use of approach and/or departure procedures for LCY.
- 3.2.18 The Revised Scheme are considered unlikely to have any significant effects on aviation and therefore in line with the EIA Regulations and agreement with the GLA it has been scoped out of this ES Addendum.
- Electronic Interference**
- 3.2.19 Interference to certain telecommunications systems (e.g. television (TV), mobile phone and radio) can arise from buildings physically blocking and absorbing associated signals. Therefore, a loss or degradation of the reception of such systems can result from the introduction of new buildings and is often referred to as 'electronic interference', with the affected area referred to as the 'shadow area'.
- Radio Signals*
- 3.2.20 Due to radio signals being at lower frequencies, they can 'bend' to a greater extent around buildings (or other obstructions) when compared to TV signals. Radios are also able to make constructive use of reflected signals. As such, radio signals are able to operate successfully in dense urban settings (i.e. containing a large density of tall and large buildings) and therefore radio reception (both analogue and digital) is not considered to be at risk of degradation as a result of the Revised Scheme. No likely significant effects to radio reception (both analogue and digital) are therefore anticipated as a result of the Revised Scheme.
- Mobile Phone Reception*
- 3.2.21 A review of Ofcom's mobile availability checker has identified that both 3G and 4G mobile services for four network providers (EE, O2, Vodafone and Three) are available within and in close proximity to the site. A search of the Mast Data database identified one Orange UTMS mast currently present on-site. This will need to be relocated by the network provider prior to demolition works commencing on-site and is the responsibility of the provider.
- 3.2.22 There are no off-site mobile phone masts within close proximity to the site boundary (i.e. within ~3-5 metres of a proposed building), as a result, it is considered that there is no risk of degradation to mobile phone reception as a result of the Revised Scheme (note: mobile phone signals can travel through buildings, and unless a proposed building is in very close proximity to a mast, and significantly overshadows it, effects on mobile phone reception are negligible).
- 3.2.23 No likely significant effects to mobile phone reception are therefore anticipated as a result of the Revised Scheme.

Terrestrial TV Reception

- 3.2.24Terrestrial (land based) TV signals are transmitted in digital format (Digital Terrestrial TV (DTTV) i.e. Freeview). The site receives DTTV signals from the Crystal Palace transmitter mast, located approximately 11 km directly south of the site, any resultant DTTV shadow areas will therefore be located directly north of the site.
- 3.2.25The closest relay transmitter mast is the ‘Poplar’ relay transmitter mast, which is located approximately 3.5 km to the east of the site. It is considered that the Revised Scheme would not affect the reception of services transmitted by this relay transmitter mast, and no likely significant effects to DTTV services received from the ‘Poplar’ relay transmitter mast is anticipated as a result of the Revised Scheme.
- 3.2.26With regards to determining the potential effects of the Revised Scheme on DTTV reception received by residential dwellings, and transmitted by the Crystal Palace transmitter mast, the design information relating to the Revised Scheme has been reviewed. In general, the longer DTTV shadows are generated from the height of Building 1 (outline) and Building 2 (detailed) of the Revised Scheme, as a result, the longer DTTV shadows will fall from the buildings within the western portion of the site, there are unlikely any shadows falling from the buildings on the eastern side of the site as they are of similar heights to the surrounding buildings.
- 3.2.27The DTTV shadow generated as a result of the Revised Scheme is anticipated to fall to the north of the site for approximately 700 m at its longest point, predominantly falling over a number of residential and commercial dwellings to the north of the site.
- 3.2.28It should be noted that a DTTV shadow cast by a building/obstruction diminishes with distance as a result of ‘knife-edge diffraction’. This diffraction mechanism is a process whereby signals appear to bend (or ‘diffract’) behind a structure and eventually meet, like that of a knife-edge as opposed to a straight block. The most noticeably adverse effects are experienced by residential dwellings located in close proximity to the site, with the magnitude of the impact reducing with distance away from the site. Therefore, the adverse effects experienced further away from the site are lesser than those close to the site.
- 3.2.29The 2015 ES outlined that the Proposed Development had the potential to affect up to 14 terrestrial aerals this number affected is likely to be reduced due to the change in heights associated with the Revised Scheme however the following mitigation measures were suggested to mitigate the potential effects:
 - upgrading the existing DTTV aerals by increasing their height and gain;
 - the provision of a non-subscription satellite service which is available from the BBC and ITV (‘Freesat’) or Sky for a one-off cost; or
 - linking affected residential dwellings up to the existing available CATV network at a one-off cost.
- 3.2.30These standard measures would still be applicable to the Revised Scheme and are straight forward to implement and would remove any adverse effects to DTTV reception. However as effects experienced on DTTV reception are likely to be unnoticeable, it is not considered that mitigation of any adverse effects will be necessary.
- 3.2.31Satellite TV services to the UK are provided by geo-stationary satellites, which are primarily located within the Astra 28.2oE satellite cluster. Due to the geostationary positioning of the satellites in relation to London, satellite TV shadow areas will fall to the northwest of the site.
- 3.2.32Based on the information available, it can be concluded that there is no potential for adverse effects on radio signals and mobile phone reception. However, there is a slight potential for a loss or degradation to DTTV reception received by residential dwellings as a result of the Revised Scheme. Suitable mitigation measures have been identified and are potentially available to all affected residential dwellings.
- 3.2.33Whilst there is the potential for some impact to occur, taking into account the size and extent of potential impacts and the availability of standard measures to monitor and remedy potential impacts, the likely residual effects on DTTV reception to surrounding receptors are not considered to be significant, and therefore in agreement with the GLA this has been scoped out of this ES Addendum.

Population and Human Health

- 3.2.34Health is influenced by many factors, including age, gender, ethnicity, education, employment, income, social networks, air, water quality, contaminated land and access to social and public health services.
- 3.2.35The human health implications of the Revised Scheme would be as a result of issues which are already assessed and presented within the ES Addendum. **Table 3.2** outlines where population and human health are addressed within the Application.

Table 3.2. Location of Information on Population and Human Health

Application Document	Topic Area Addressed
Volume 2, Chapter 7: Socio economics	Access to local facilities e.g. GPs, school availability and open space.
Volume 2, Chapter 12: Air Quality	Effects on air quality and human health.
Volume 2, Chapter 8: Ground Conditions and Contamination	Contact with contaminated land.
Volume 2, Chapter 14: Water Resources and Flood Risk	Potential for water pollution.
Volume 2, Chapter 18: Climate Change Resilience and Mitigation.	Effects of climate change.
Volume 4, rapid Health Impact Assessment	Impact assessment of the health effect of the Revised Scheme in line with GLA Policy.

- 3.2.36There may be significant beneficial health effects resulting from the development of high-quality residential properties and the large area of public realm. There will also be beneficial effects on the population due to the increase in employment during the construction and operational phases of the Revised Scheme. The increased population may result in minor adverse effects to the local population with respect to access to public health services and pressure on vulnerable groups as the introduction of additional residential properties may increase the number of users of the public health services. However, these effects are not expected to be significant, and where required contributions to the local authority in the form of the Community Infrastructure Levy (CIL) will be considered sufficient to mitigate any adverse effect.
- 3.2.37The Application is also supported by a Health Impact Assessment (HIA) in accordance with GLA policy.
- 3.2.38On this basis it is considered that the likely effects on human health will be adequately assessed within other applicable areas of the ES Addendum and the supporting Application documents.

Major Accidents and / or Disasters

- 3.2.39Under Schedule 3 of the 2017 EIA Regulations, the risks of major accidents and natural disasters relevant to the Revised Scheme need to be considered.
- 3.2.40The Revised Scheme would introduce residential properties and commercial space into an area which currently supports similar land uses.
- 3.2.41No structural, geomorphological or geochemical features are recorded on or near the site by BGS mapping. The site is not in an area that could be affected by coal or metalliferous mining activity and there are no Health and Safety Executive (HSE) Control of Major Accident Hazards (COMAH) sites in close proximity to the site. Therefore, the Revised Scheme are not likely to produce an elevated risk of accidents or natural disasters.
- 3.2.42The Code of Construction Practice (CoCP) Part A has been prepared to support the Application. This sets out the standards and procedures that will be adhered to manage the impacts of construction works in general across the site.
- 3.2.43Further detail in the form of Part B will be provided by the Applicant prior to the construction stage of the Revised Scheme, this will include all proposed construction mitigation measures.
- 3.2.44The design of the Revised Scheme are in accordance with industry standards, including drainage and building regulations, to reduce the potential for accidents and natural disasters to impact on the Revised Scheme. **Table 3.3** outlines where the potential for accidents and disasters have been addressed within the Application.

Table 3.3. Location of Information on Accidents and Disasters

Potential Accidents and Disasters	Location within the ES Addendum and the Application
Flood Risk	Volume 2, Chapter 14: Water Resources and Flood Risk; Flood Risk Assessment.
Construction	Construction Management Plan; Construction Logistics Plan.
Contaminated Land	Volume 2, Chapter 8: Ground Conditions; Land Contamination.
Water Pollution	Volume 2, Chapter 14: Water Resources and Flood Risk; Chapter 18: Ground Conditions; Land Contamination.
Vulnerability to Climate Change	Volume 2, Chapter 18: Climate Change Mitigation and Adaptation.

Additional Consultation

- 3.2.45
- Consultation is an on-going process as part of the design of the development. The process of consultation is also critical to the preparation of a comprehensive and balanced ES. To focus the environmental studies and to identify specific issues that require further investigation, information and views have been sought and received from a range of statutory and non-statutory bodies through both bilateral and public consultation.
- 3.2.46
- The following pre-application meetings and design workshops took place between the Applicant, the GLA, LBTH, LBH, TfL and CADAP between 2018 and 2019:

- Design meetings with the GLA, LBH and LBTH: approximately every 2 weeks from 9th August 2018;
 - Mayor’s Design Advocates Panel: 13th September 2018 and 18th March 2019;
 - Joint Borough Design Review Panel: 23rd January 2019;
 - Meeting between design team and TfL: 18th December 2018; and
 - Meeting between design team and TfL: 15th March 2019.
- 3.2.47
- A number of consultation and engagement events have been held the initial outreach began in 2011. This was followed by extensive consultation between 2013-2015, which engaged with over 1,500 local people during the process. This included a wide range of public events, regular newsletters, a steering group made up of local residents and community liaison group. The consultation recorded the areas of most importance locally, setting community aspirations and tracking where the proposals had and hadn’t met these, and why.
- 3.2.48
- Consultation on the Revised Scheme has continued with a series of mini and main exhibitions and a series of workshops to discuss the key aspects of the proposals from the 8th to the 15th November 2018 and on the 4th, 6th and 9th March 2019. Key feedback from this process helped inform and shape the Revised Scheme.
- 3.2.49
- Further details of the public consultation and exhibition events are provided within the Statement of Community Engagement (SCI) report submitted as part of the Application.

3.3 THE REQUIREMENT FOR AN EIA

- 3.3.1
- The 2011 EIA Regulations implement EU Directive 2011/92/EU. They apply to the assessment of environmental impacts that are likely to arise from certain types of public and private projects.
- 3.3.2
- EIA is a systematic process during which potential significant environmental effects from a proposed development project are identified and assessed, and the scope for minimising these is presented to the relevant decision maker (in the EU Directives, the ‘competent authority’) in an ES accompanying a planning application.

- 3.3.3
- The aim of the EIA is to provide the competent authority with the information necessary to consider potential significant environmental effects (both negative and positive), to ascertain whether these are acceptable, and, where appropriate, to secure mitigation measures to minimise negative impacts prior to granting relevant consents.
- 3.3.4
- The requirement for an EIA is either mandatory or conditional, depending on the classification of the development project and in the latter case, this is based, in turn, on the likelihood of significant effects arising. Under the EIA Regulations, an ES must be submitted with planning applications for “EIA Development”. EIA Development may be:

- Schedule 1 Development (development of a description set out at Schedule 1); or
 - Schedule 2 Development likely to have significant effects on the environment by virtue of factors such as its nature, size or location (where Schedule 2 Development is development of a description mentioned in column 1 of Schedule 2 where the relevant thresholds in Column 2 are exceeded (or any part of the development is in a “sensitive area” (e.g. AONBs, National Parks)).
- 3.3.5
- Schedule 1 Development always requires EIA. Schedule 2 development requires EIA only if it is likely to have significant effects on the environment.
- 3.3.6
- Schedule 3 of the EIA Regulations describes the criteria that must be taken into account in determining whether a development, which falls within the size threshold applicable to Schedule 2 Development, is likely to have significant impacts and hence should be subject to EIA. These include:

- the characteristics of the development;
 - the environmental sensitivity of the location; and
 - the characteristics of the potential impact.
- 3.3.7
- Where it is determined that a proposed development requires an EIA or where an ES is submitted, the application is known as an ‘EIA Development’.
- 3.3.8
- The Revised Scheme is not considered to constitute a Schedule 1 Development.
- 3.3.9
- The Revised Scheme falls within a description of development listed within Schedule 2 of the EIA Regulations: paragraph 10b Urban Development Projects. The thresholds for developments under paragraph 10b are:

- the area of development exceeds 0.5 hectares.
- 3.3.10
- The Revised Scheme will include the provision of up to 500 residential homes and will provide in excess of 135,752 m² GEA of commercial floorspace. For Schedule 2 development, exceeding the thresholds alone does not make a development an ‘EIA Development’, and the proposed development must also have likely significant effects on the environment to be considered ‘EIA Development’.
- 3.3.11
- Given the nature and location of the site of the Applicant elected to undertake a voluntary EIA which was submitted alongside the planning application in 2014 with amendments in 2015. Therefore the 2014 and 2015 ES was written based upon a 2013/14 baseline. The subsequent Revised Scheme by the Applicant have been reassessed to take into account a current baseline (2018/19) which has been represented in this ES Addendum.
- 3.3.12
- The Applicant recognises that the Revised Scheme will constitute ‘EIA Development’ under the EIA Regulations and has committed to undertaking an EIA for the Revised Scheme. This ES Addendum has been prepared to report the findings of the EIA.

3.4 THE EIA REGULATIONS

- 3.4.1
- The EIA Regulations require that an EIA be undertaken for the Revised Scheme, and that an ES identifying impacts and associated mitigation measures must be provided to accompany the planning application.
- 3.4.2
- For the purposes of the EIA Regulations, Regulation 2 (1) defines an environmental statement as:

“...a statement which includes at least:

(a) that includes such of the information referred to in Part 1 of Schedule 4 as is reasonably required to assess the environmental effects of the development and which the applicant can, having regard in particular to current knowledge and methods of assessment, reasonably be required to compile, but

(b) that includes at least the information referred to in Part 2 of Schedule 4.

3.4.3

Temple has been commissioned by the Applicant to prepare the EIA. The GLA considered that the EIA should proceed in line with the 2011 EIA Regulations. In the interest of best practice this ES Addendum also incorporates the requirements of the 2017 Regulations.

3.4.4

The Applicant has provided the necessary information to enable preparation of this ES Addendum. The ES Addendum will ensure that sufficient information is provided to enable the Local Planning Authority (GLA) to make a decision about the planning application with due regard to and in the knowledge of any likely significant environmental effects.

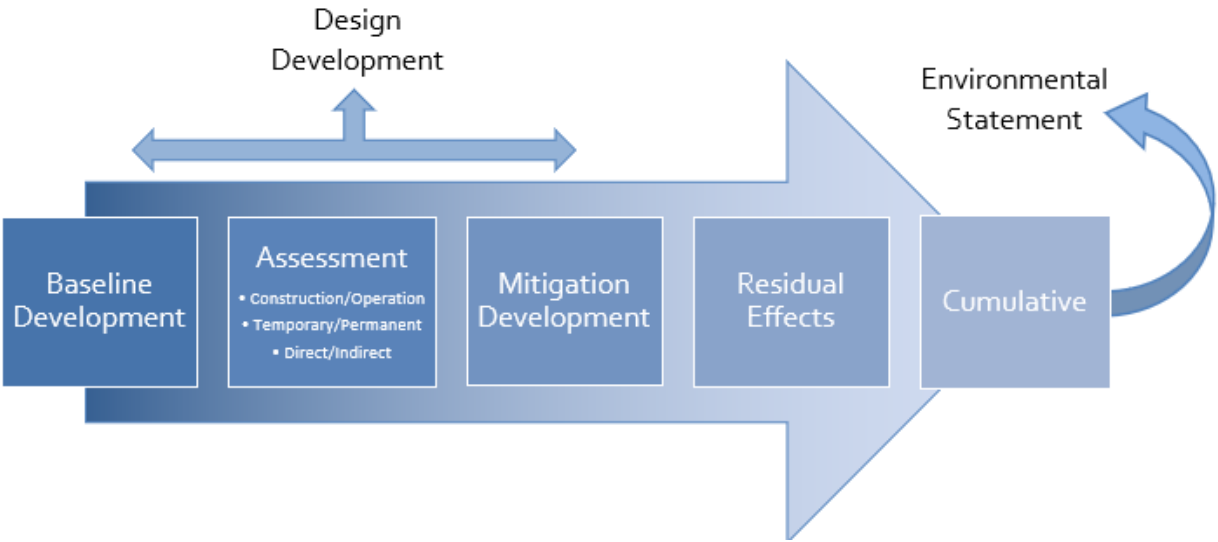
3.4.5 Once submitted, the GLA is required to publicise the availability of the ES Addendum (and any related additional information) to potentially interested parties, such as statutory and non-statutory consultees and the public, so as to enable their opinions on the project and ES Addendum to be represented to the planning process.

3.5 THE ENVIRONMENTAL STATEMENT APPROACH

Approach to Technical Studies

3.5.1 The approach taken to the EIA process is shown in **Figure 3.1**. The general approach to the assessment establishes the baseline for each topic. Receptors and resources are identified, and their sensitivity classified. The potential impacts of the Revised Scheme on these receptors and resources are assessed for the construction and operational phases of the Revised Scheme, taking into account any embedded mitigation. Subsequently, additional mitigation measures are considered, as appropriate, allowing the likely significant residual and cumulative effects to be identified.

Figure 3.1. EIA Assessment Process



3.5.2 In order to inform the design process, the EIA studies for the ES Addendum commenced at an early stage in the development and design process of the Revised Scheme in 2018. The studies have been undertaken in accordance with current best practice. Specific guidance used is referenced within each of the respective technical chapters.

3.5.3 The assessments involved consultation with statutory and non-statutory bodies, desk-based research, site inspections and surveys, impact and effect prediction and identification of mitigation measures.

3.5.4 The assessment and conclusions of the ES Addendum are based on the Revised Scheme applied for and as described in **Chapter 5: The Revised Scheme and Construction Overview**.

Baseline Development

3.5.5 The ES Addendum primarily describes environmental impacts in terms of the extent of likely change to the baseline environment. Unless stated otherwise, the baseline represents the current environmental conditions of the site (2018/2019).

3.5.6 For most of the technical ES Addendum chapters, this means the baseline has been updated and taken as the existing conditions (2018/19) at the site. However, in some circumstances it may be necessary to apply a 'future baseline' or a more historic one when based on population survey data. Where this has been undertaken this has been explained within the relevant technical ES Addendum chapters.

Spatial Scope

3.5.7 The redline boundary of the Revised Scheme remains unchanged from the boundary presented in the 2015 Proposed Development and is shown at the end of this chapter in **Figure 3.3**.

3.5.8 As in the 2015 Proposed Development, the scale and layout of the outline components will be presented as scale and layout parameters (both in terms of a maximum and minimum building envelope). Full details of the scale and layout parameters described in **Chapter 5: The Revised Scheme and Construction Overview** and the Application parameter plans **[DOC.02]**.

3.5.9 Assessment study areas will vary by topic areas, according to the baseline information and the nature of likely impacts. These may differ from those assessed in the 2015 ES due to the nature of the Revised Scheme.

3.5.10 Where appropriate the ES Addendum tests the maximum and/ or minimum extent of the building envelope or illustrative scheme so as to ensure that the environmental impacts sought for outline approval are assessed by the EIA. This is in accordance with the Rochdale Envelope approach. The maximum extent of the building envelope potentially leads to, for example, increased view obstruction, increased wind speeds, greater overshadowing or daylight / sunlight reductions, a reduction in the amount of available open space between the buildings than the minimum parameters. This may not be the case for all assessment areas. For example, when assessing the socio-economic matters such as employment generation, the minimum parameters have been assessed as they would constitute the worst-case scenario.

3.5.11 Although there is not a significant variation between the maximum and minimum building envelope, to assess how the likely impacts would differ between the maximum and minimum extent, a qualitative assessment using professional judgement has been undertaken. For example, where the worst case scenario is the maximum envelope, the qualitative assessment assesses how the impacts would change if the minimum envelope were applied. This assessment has been provided where relevant within each of the aforementioned technical chapters.

3.5.12 In terms of the amount of development, the Application states an upper and lower limit and maximum GEA in respect of commercial floorspace, retail floorspace, hotel number of rooms, residential homes and non-residential institutions within the outline component. For the detailed element of the Revised Scheme, a defined amount of commercial and retail floorspace is presented.

3.5.13 The technical aspects of the EIA that apply the amount of development / floorspace for the purposes of the assessment of impacts are as follows:

- Socio-Economics specifically in relation to employment creation, population and child yield estimates and so demand for social infrastructure (e.g. healthcare, school places, open space, etc.) and additional local spending; and
- Traffic and Transport specifically in relation to trip generation and modal split (and so indirectly, Air Quality and Noise and Vibration in relation to the assessment of road traffic noise and air quality impacts).

Temporal Scope

3.5.14 This ES Addendum assesses the environmental impacts of the Revised Scheme during both construction and operation. The assessment compares the current and future baseline conditions (as appropriate) to those conditions expected with the construction and operation of the Revised Scheme. The assessment assumes that construction starts in January 2021, subject to securing planning consent.

3.5.15 The assessment considers the totality of the Revised Scheme from construction through to operation, using the following assessment scenarios:

- existing baseline (2018 – 2019);
- future baseline (without Revised Scheme 2033);
- assessment of peak construction effects; and
- assessment of operational effects (all construction complete, the Revised Scheme are fully occupied and operational (2033)).

3.5.16 It is anticipated that the construction period for the Revised Scheme will take place in a phased manner reduced from the previously reported 16 years to approximately 12 years and undertaken over 7 distinct phases rather than 5 presented and assessed in the 2015 Proposed Development.

Limited Development Scenario

3.5.17 The application site straddles the borough boundary between LBH and LBTH, therefore the 2015 planning application included two identical planning applications (one to each borough). Both of these applications were 'called in' by the Mayor for determination in 2015. Whilst it is accepted now that determination for the whole site lies with the GLA, it may still be possible (subject to permission being granted) that the Applicant decides to build out only the parts of the Revised Scheme that lay wholly within the borough of LBTH. In the event where this situation occurs it is necessary that the ES Addendum has adequately assessed the 'likely significant' effects.

3.5.18 Therefore, as this situation is still applicable regarding the Revised Scheme, the ES Addendum also presents an additional assessment scenario. The scenario includes the development that will wholly occur within the LBTH (hereafter referred to as the 'Limited Development Scenario (LDS)') and will encompass the development plots (which do not straddle the boundary) that can be brought forward independently of the LBH elements of the scheme. This will include development Plots 4 - 11.

- 3.5.19 An assessment will be provided of the demolition and construction effects, the effects once the LDS is complete and operational and the cumulative effects of the LDS with other surrounding development schemes. An alternative scenario considering the development plots in LBH is not being considered as these buildings straddle the boundary and therefore it would not be possible to build them out independently.
- 3.5.20 The LDS is presented as a stand alone report in **ES Addendum Volume 4 Appendix N: The Limited Development Scenario** to this ES Addendum. **Chapter 21: Limited Development Scenario** is presented within the main body of the ES Addendum which summarises the effects associated with this possible development scenario coming forward independently. The summary of effects states where the residual effects / mitigation measures are the same or different as the residual effects reported for the main assessment of the Revised Scheme, with relevant justification. This also includes a description of the demolition and construction programme relevant construction phases and the condensed time period of construction that would be applied to the LDS.
- 3.5.21 The baseline for the LDS as for the main development scenario consists of the current conditions on site (2018/19). The assessments when considering the LBH section of the site also assumes the current (2018/19) conditions on the site.
- 3.5.22 **ES Addendum Volume 4 Appendix N: The Limited Development Scenario** only presents the difference in the LDS assessments, the mitigation measures, the cumulative effects and the associated justification in comparison with the main assessment of the Revised Scheme. The methodology, guidance and policy applied is as presented for LBTH section of the main assessment chapters.
- 3.5.23 The associated ES Addendum documents namely the Townscape and Visual Impact Assessment (TVIA) and the Transport Assessment (TA) also assess the LDS, these assessments will also be appended to the ES Addendum in a similar format. A summary of this information will be provided within the summary chapter with further detail to be included within **ES Addendum Volume 4 Appendix N: The Limited Development Scenario**.

Structure of Technical Chapters

- 3.5.24 Each technical chapter of the ES Addendum (**Volume 2, Chapters 6 to 18**) has been set out broadly in line with structure outlined in **Table 3.4**.

Table 3.4. Structure of the Technical Chapters

Technical Chapter Structure	
Scope of Assessment	Each of the technical chapters begins with an introduction to the assessment, explaining its purpose in the context of the Revised Scheme and ES Addendum, including any key topics / aspects which have been scoped in or out of the assessment.
Legislation, Policy and Guidance	This section includes a summary of national, regional and local policies of relevance to the environmental discipline and assessment. Where applicable, relevant legislation has also been summarised.
Assessment Methodology and Significance Criteria	This section provides an explanation of methods used in undertaking the study with reference to published standards, guidelines and best practice. Limitations or difficulties encountered are discussed, if any. It also discusses the application of sensitivity, magnitude and significance criteria within the assessments.
Baseline Conditions	This section describes and evaluates the baseline environmental conditions i.e. the current situation and anticipated changes over time in the absence of the Revised Scheme. This is a critical part of the EIA process as it provides a measure against which the likely significant effects on the environment can be assessed.
Assessment of Effects	This section identifies the likely significant effects on the environment resulting from the Revised Scheme during construction and operational phases taking into account the embedded mitigation outlined in the CEMP and within each of the topic chapters 6 to 18. A description of the likely effects of the Revised Scheme and an assessment of their predicted significance are also provided.
Mitigation Measures	One of the main aims of the EIA process is to develop suitable mitigation measures to avoid, reduce or compensate for all significant adverse effects of a project. These measures relate to all phases. This section describes the additional

Technical Chapter Structure	
	measures which would be implemented to mitigate against potentially significant adverse effects. Where possible, enhancement measures have been proposed.
Residual Effects	<p>The residual effects, i.e. the remaining effects of the Revised Scheme assuming implementation of the proposed embedded and additional mitigation measures, have been estimated and presented.</p> <p>A comparison of residual effects as identified in the 2015 ES and the residual effects identified in the 2019 ES Addendum will be provided</p>
Cumulative Effects	This section summarises the cumulative effects of the Revised Scheme in combination with identified schemes.
Summary	Each technical chapter concludes with a brief summary outlining the potential residual effects for the construction phase (short / medium) and operation (long-term) phase of the Revised Scheme along with any cumulative effects identified.

- 3.5.25 The TVIA follows the same structure as the technical chapters listed above but is provided as a separate volume (**ES Addendum Volume 3**).

Assessment of Effects

- 3.5.26 The assessment of significance of effects has been undertaken using appropriate national and international quality standards. Where no such standards exist, the judgements that underpin the attribution of significance are described. The guidelines, methods and techniques used in the process of determining significance of effects are contained within each of the technical chapters presented.
- 3.5.27 The assessment of operational effects is undertaken against the future baseline in 2033/34 (the 'without development'/'do nothing' scenario, see **Chapter 5: The Revised Scheme and Construction Overview**), unless otherwise stated in the individual technical chapters.
- 3.5.28 Certain topics have undertaken an assessment of peak construction effects to ensure a reasonable worst-case scenario is considered and that any conclusions are sufficiently robust to accommodate potential changes in the construction methodology. Where a worst-case scenario has been assessed, this has been set out in the assumptions and limitations section of the technical chapters (**ES Addendum Chapters 6 to 18**).
- 3.5.29 The construction of the Revised Scheme will occur over 7 phases, as described in **Chapter 5: The Revised Scheme and Construction Overview**. Therefore, there will be periods where the phases are occupied whilst the subsequent phase is under construction, introducing new receptors onto the site. This scenario is considered on a case-by-case basis within the technical chapters.
- 3.5.30 Peak construction traffic is anticipated 2027 on the completion of Phase 3. **Chapter 5: The Revised Scheme and Construction Overview**, provides further detail on the proposed construction movements, construction methodology and outlines the key construction activities that are likely to generate environmental effects.

Defining Significance

- 3.5.31 The changes generated by a development project may result in outcomes which are considered to be positive or adverse, and in some cases may be considered to be neutral. Examples would include new scheme-related noise or air pollution, changes in lighting levels, loss of habitat or topsoil, new planting and habitat re-provision, changes to the townscape, loss of surface permeability, waste production, etc.
- 3.5.32 Examples of receptors / resources that might be affected by such changes include people (residents, passers-by, workers etc.), designated sites (Sites of Specific Scientific Interest, Conservation Areas, groundwater protection zones etc.) and non- designated environmental resources of value.
- 3.5.33 Effects come about as the result of imposing changes on receptors / resources. The physical extent of effects (in terms of the geographical area affects, or the size of the human population affected, or the spatial extent of any protected species or habitats affected) should all be taken into account when assessing the importance of likely changes along with duration, frequency and reversibility.

- 3.5.34 Step 1 of the process of assessing the significance of an effect (i.e. the imposition of a change onto a receptor / resource) is to identify all relevant combinations of change and receptor / resource which may arise as a consequence of implementing the Revised Scheme. This is most easily and clearly done by dividing the assessment by topic area and then further sub-dividing within topic areas the source and type of change (distinguishing between direct, indirect and secondary) and the receptor(s) effected by this.
- 3.5.35 Step 2 is to use professional judgement and/or appropriate best practice guidance (and taking into account specific statutory or non-statutory values and objectives as may be applicable, for example, in relation to air quality or water quality threshold values) to identify:
- the sensitivity of the receptors / resources concerned;
 - the strength (and the geographical scale at which the change is identified), duration and frequency of the likely changes; and
 - to score these components of the effect under consideration.
- 3.5.36 The duration of an effect can be assessed to be:
- temporary (e.g. demolition and construction phase); and
 - permanent (e.g. once the Revised Scheme are completed and operational).
- 3.5.37 Where appropriate and greater precision is helpful the following terms can also be used:
- short term (<5 years);
 - medium term (5-10 years); and
 - long term (>10 years).
- 3.5.38 Some changes will affect different receptors / resources to different degrees, and some receptors / resources may be affected by a range of potential changes (to which they may well exhibit different sensitivities). Significance must therefore be judged in the context of a specific combination of change and receptor / resource.
- 3.5.39 Generic criteria for determining the value / sensitivity of a receptor or resource based on its relative importance and its ability to accommodate change and / or recover from impacts is provided in **Table 3.5** below.

Table 3.5. Methodology for Determining Value / Sensitivity

Sensitivity	Example of Receptor / Resource
High	The receptor/resource has little ability to absorb change without fundamentally altering its present character or is of international or national importance.
Moderate	The receptor/resource has moderate capacity to absorb change without significantly altering its present character or is of high importance.
Low	The receptor/resource is tolerant of change without detriment to its character, is of low or local importance.

- 3.5.40 Generic criteria for determining the magnitude of an impact based on the strength of change the geographical scale at which it is identified, the duration, frequency and reversibility of the change is provided in **Table 3.6** below.

Table 3.6. Methodology for Determining Impact Magnitude

Magnitude of Impact	Criteria for Assessing Impact
Major	Total loss or major/substantial alteration to key elements/features of the baseline (pre-development) conditions such that the post-development character/composition/attributes will be fundamentally changed.
Moderate	Loss or alteration to one or more key elements/features of the baseline conditions such that post-development character/composition/attributes of the baseline will be materially changed.
Minor	A minor shift away from baseline conditions. Change arising from the loss/alteration will be discernible/detectable but not material. The underlying character/composition/attributes of the baseline

Magnitude of Impact	Criteria for Assessing Impact
	condition will be similar to the pre-development circumstances/situation.
Negligible	Very little change from baseline conditions. Change barely distinguishable, approximating to a 'no change' situation.

- 3.5.41 Step 3 of the process of assessing the significance of an effect is to describe and document the outcome of Steps 1 and 2, and to judge the significance of each potential effect determined by the interaction of value / sensitivity and magnitude, whereby the effects can be beneficial, adverse or neutral.
- 3.5.42 A generic Effect Significance Matrix is set out in **Table 3.7** to assist in this judgement of significance, whereby it is generally considered that any effect greater than “minor” is considered a significant effect.

Table 3.7. Effect Significance Matrix

Magnitude	Sensitivity		
	High	Moderate	Low
Major	Major Adverse/Beneficial	Major - Moderate Adverse/Beneficial	Moderate - Minor Adverse/Beneficial
Moderate	Major - Moderate Adverse/Beneficial	Moderate – Minor Adverse/Beneficial	Minor Adverse/Beneficial
Minor	Moderate - Minor Adverse/Beneficial	Minor Adverse/Beneficial	Minor - Negligible
Negligible	Negligible	Negligible	Negligible

- 3.5.43 However, in all cases the author should exercise professional judgement and take account of all relevant topic specific standards, guidance and threshold in assessing the significance of an effect.
- 3.5.44 Step 4 is to record those effects which are to be treated as significant, and to identify those effects which, while not in the end deemed to be significant, may well need to be considered further in the context of cumulative impacts.
- 3.5.45 The matrix presented above in **Table 3.7** is widely accepted and used within the EIA industry. The magnitude and significance criteria have been provided as a guide for technical specialists to assess effect significance. Generally, a significant effect in EIA terms is one which is moderate beneficial / adverse or above. An effect which is negligible or minor beneficial / adverse is considered to be not significant in EIA terms.
- 3.5.46 Where discipline specific methodology has been applied that differs from the generic criteria above, this has been clearly explained within the given chapter under the heading of Assessment Methodology and Significance Criteria.

Mitigation Measures

- 3.5.47 Any potentially significant adverse effects have been considered for mitigation at the design stage and, where practicable, specific measures have been put forward. Measures have been considered based on the hierarchy of mitigation set out in **Figure 3.2**.
- 3.5.48 Where the effectiveness of the mitigation proposed has been considered uncertain, or where it depends upon assumptions of operating procedures, data and / or professional judgement has been introduced to support these assumptions.
- 3.5.49 Mitigation to be implemented during the construction and operational phases will be secured through planning conditions and obligations.
- 3.5.50 Two main types of potential mitigation measures have been assessed:
- Embedded Mitigation – embedded mitigation includes design / standard control measures, which have been taken into account in an initial assessment of the effects. The Revised Scheme have been developed in such a way that the reduction and, wherever possible, elimination of any associated significant adverse environmental effects is integral to the overall design philosophy. The embedded mitigation measures will be captured and implemented through the provisions of the CoCP and are also presented within the technical chapters (**ES Addendum Volume 2, Chapters 6 to 17**).

- Additional Mitigation – further additional mitigation measures may be introduced, where appropriate, and are taken into account in the assessment of residual effects. Where it has not been possible to avoid adverse significant environmental effects, such additional mitigation and monitoring measures are discussed as applicable in the relevant technical chapter.

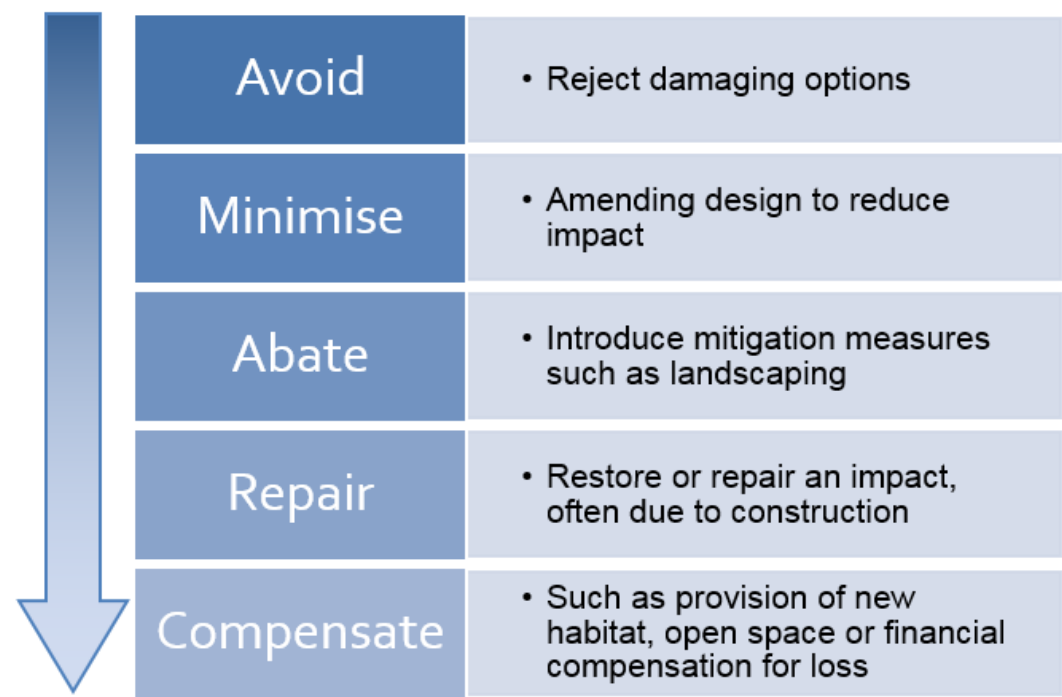
Residual Effects

- 3.5.51
- The likely residual effects on the environment, assuming the successful implementation of the mitigation measures proposed, are identified within each assessment.
- 3.5.52
- The residual effects have been assessed using the same system as described above taking account of any assessment mitigation proposals. Residual effects have then been assessed in terms of significance. Generally, based on the described classification and professional judgement, effects considered to be moderate or major have been deemed significant, and those considered minor, or negligible, have been deemed not significant.

Comparison of Residual Effects

- 3.5.53
- In each technical ES Addendum Chapter the residual effects identified for the Revised Scheme have been qualitatively compared back to the 2015 Proposed Development, with and without mitigation to demonstrate where the scheme has given rise to better or worse effects.

Figure 3.2. Mitigation Hierarchy



Cumulative Effects

- 3.5.54
- The EIA Regulations specify that the description of the likely significant effects within an ES should include “the direct effects and any indirect, secondary, cumulative...effects”.
- 3.5.55
- There are two types of cumulative effects: Type 1, intra-project effects which are the combined effects of individual topic impacts on a particular sensitive receptor, and Type 2, inter-project effects which are the combined effects of several development schemes (in conjunction with the Revised Scheme) which may, on an individual basis be insignificant but, cumulatively, have a significant effect.
- 3.5.56
- The ES Addendum has given consideration to cumulative effects for schemes located within 1 km radius from the boundary of the site. Using professional judgement, it is considered that this spatial extent represents a suitable area over which any potential cumulative effects may occur. Any variations from this 1 km radius boundary within individual topic assessments are set out in the respective technical chapters, for example a further radius has been applied to the effects associated with Townscape. The cumulative schemes considered include:

- approved but uncompleted projects (i.e. unimplemented); and
- projects for which an application has been made and which are under consideration by the consenting authorities.

- 3.5.57
- The EIA Regulations only require consideration of other existing and or approved projects. However, in order for the list to remain up to date at the time of submission we have considered submitted applications up to the time of submission of the Application.
- 3.5.58
- Committed developments where permissions have been implemented are under construction and are understood to be completed by the time construction of the Revised Scheme begins these have been included within the baseline where considered relevant to the assessment.
- 3.5.59
- Following the Scoping Review response received from the GLA it was advised that the scheme known as Huntingdon Industrial Estate (28-32 Redchurch Street PA/19/00294) was added to the cumulative scheme list. This scheme is not at submission stage and therefore limited information on the scheme exists however based on the information contained within the Scoping Report this scheme has been assessed qualitatively within the ES Addendum where relevant.
- 3.5.60
- Table 3.8** sets out the consented and committed schemes for consideration in the cumulative effects assessments, some of which are now known to be operational and therefore form part of the existing baseline. These are also shown spatially on **Figure 3.5** at the end of this chapter.

Interactive Effects

- 3.5.61
- Interactive effects are also considered in this ES Addendum. Interactive effects arise where effects from one environmental element bring about changes in another environmental element. These effects are also reviewed and form an integral part of the technical chapters. Examples of the main potential types of interactive effects are as follows:
- effects of water discharges on ground conditions;
 - effects of traffic on noise; and
 - effects of traffic on air quality.

Table 3.8. Schemes for Consideration in the Cumulative Effects Assessment

Map Reference	Scheme Name and Reference Number	Nature of Scheme	Status
1 (LBTH)	Land within former Truman's Brewery site, (LPA Ref. PA/12/00090)	Demolition of the existing store building, sub-station, workshops and boundary wall to Buxton Street and Spital Street up to the Cooperage Building and erection of a 3 storey high data centre with basement accommodation including provision of Use Class B1.	Application permitted (12 April 2012). Permission has lapsed without implementation.
2 (LBTH)	London Fruit Exchange Brushfield Street And Multi Storey Car Park Whites Row, Brushfield Street, London (LPA ref: PA/16/03266)	Demolition of Whites Row Multi-Storey Car Park, 99-101 Commercial Street (The Bank), 54 Brushfield Street (The Gun Public House), and partial demolition of the London Fruit & Wool Exchange behind the retained Brushfield Street facade and the erection of a six storey building with a basement, for business, employment and retail use (Use Classes B1/A1/A2/A3 & A4) with landscaping and associated works, together with a new pavilion building for retail accommodation (Use Class A1).	Application permitted (11 October 2017)
3 (LBH)	Art Otel - east of Old Street roundabout at the junction of Old Street, Rivington Street and Great Eastern Street. (LPA Ref: 2009/2405)	Demolition of existing buildings on the site and construction of a part eighteen storey and part six storey building for use as a Hotel, plus retail, bar and restaurant, art gallery and art cinema; Offices; and roof top bar and restaurant; together with ancillary hard and soft landscaping, revised vehicular access/egress, 48 cycle spaces and refuse/service arrangements.	Under construction

Map Reference	Scheme Name and Reference Number	Nature of Scheme	Status
4 (LBTH)	Black Lion House, 45 Whitechapel Road (LPA Ref. PA/13/02162)	Change of use, refurbishment and extension to existing office building (Use Class B1), to provide 11, 537m ² / 217 bed hotel (Use Class C1) including an additional 7th, 8th and 9th storey extension. Erection of a single storey office building.	Under construction
5 (LBTH)	Aldgate Place (LPA Ref. PA/13/00218)	Demolition of existing buildings and creation of a mixed use development, comprising three towers of 22, 25 and 26 storeys and a series of lower buildings ranging from 6 to 9 storeys. Provision of 463 private and affordable residential dwellings (use class C3), together with office (use class B1), hotel (use class C1), retail including restaurants, cafes and drinking establishments (use classes A1-A4) and leisure (use class D2) uses; creation of new pedestrianized street, public open spaces, children's play spaces and associated car and cycle parking together with associated highways works and landscaping.	Under construction
6 (CoL)	Bevis Marks House, 24 Bevis Marks (LPA Ref: 14/00433/FULMAJ)	The demolition of the existing buildings and construction of 2 basement levels and ground plus 16 storey building (89m AOD) comprising office (Class B1) use [35,658sq.m GEA] and retail (Class A1/A3) uses [758sq.m GEA] with associated servicing and plant facilities. [Total 36,416sq.m GEA].	Under consideration
7 (LBTH)	Fakruddin Street and Pedley Street (LPA Ref. PA/12/02228)	Redevelopment of site (including land at Fakruddin Street) to provide a car free development of 63 units (14x 1 bed flats, 28x 2 bed flats, 12x 3 bed and 9x 4 bed house) for 100% affordable housing within three blocks measuring between two and seven storeys including associated shared and private amenity space, landscaping, disabled parking, cycle parking, child play area and community centre (273m ²) including community building (90m ²).	Under construction
8 (LBTH)	11-31 Toynbee Street and 67-69 Commercial Street, London (LPA Ref: PA/16/02878/A1)	Demolition of the existing buildings on site and redevelopment to provide a part three, part four, part five storey building with basement, comprising a flexible workspace area on ground floor and basement (Use Class B1); a fitness tuition facility in basement (Use Class D2); office space on ground floor (Use Class B1); a larger commercial unit on ground floor for flexible A1/A2/A3/A5 use; two smaller commercial units on ground floor for flexible A1/A2/A3/A5/B1 use; an internal commercial unit on ground floor for flexible A1/A2/A3/A5 use; 23 residential units (Use Class C3) ; creation of roof terrace, amenity space and bin store; landscaping works.	Application permitted (18 October 2017)

Map Reference	Scheme Name and Reference Number	Nature of Scheme	Status
9 (LBTH)	Site At 3-11 Goulston Street And 4-6 And 16-22 Middlesex Street (LPA Ref: PA/18/01544)	Demolition of existing substation and construction of a part 8/16/20/24 storey building with basement, including 988 rooms of purpose built student accommodation (sui generis); 488sqm of incubator floorspace and 2,919sqm of affordable workspace (Use Class B1) at ground, first, second and third floor levels; together with cycle parking; landscaping and public realm improvements.	Decision pending
10 (LBTH)	Enterprise House, 21 Buckle Street, London, E1 8NN (PA/16/03552).	Demolition of existing office building and erection of a 13 storey building (plus enclosed roof top level plant storey) rising to 56.32m (AOD) containing 103 unit aparthotel (C1 Use) with B1 Use Class office workspace at ground and mezzanine level with an ancillary café (A3 Use Class) and hotel reception space at ground floor, together with ancillary facilities, waste storage and associated cycle parking store.	Granted Planning Permission at appeal 17 December 2018.
11 (LBTH)	Site at 2-6 Commercial Street, 98 and 101-105 Whitechapel High Street, carpark to the rear of 95-97 Whitechapel High Street (known as Spreadingeagle Yard) and Canon Barnett Primary School (LPA Ref: PA/18/02615/A1)	Demolition of 98 - 105 Whitechapel High Street, 2 - 6 Commercial Street and the western annex of the Canon Barnett Primary School; retention of the façade of 102 -105 Whitechapel High Street; to facilitate a redevelopment to provide buildings ranging from ground plus 3, 19 storeys, comprising office floorspace (Class B1), retail floorspace (Class A1-A5), educational floorspace (Class D1); relocation and expansion of the existing school playground; associated car and cycle parking, hard and soft landscaping and other associated works.	Registered
12 (LBTH)	Land bounded by 2-10 Bethnal Green road, 1-5 Chance Street (Huntingdon Industrial Estate) and 28-32 Redchurch Street (PA/19/00294)	Request for an Environmental Impact Assessment Scoping Opinion under Regulation 15 of the Town and Country Planning (Environmental Impact Assessment) Regulations 2017 (as amended) for redevelopment to provide an office-led mixed-use development comprising approximately 17,000 sqm (GEA) office floorspace (Use Class B1(a)) and 5,500 sqm (GEA) of flexible ground and lower ground floorspace (Use Class A1, A3 and B1(a), with associated plant and cycle parking in a building ranging from 2 to 10 storeys above ground with two levels of basement. Land bounded by 2-10 Bethnal Green road, 1-5 Chance Street (Huntingdon Industrial Estate) and 28-32 Redchurch Street	Not yet submitted. EIA Scoping Opinion issued 7 March 2019.

Map Reference	Scheme Name and Reference Number	Nature of Scheme	Status
13 (LBH)	Principal Tower (Principal Place / Bishops Place) (LPA Ref: 2016/2044)	Minor material amendment to planning permission 2015/0279 dated 13/05/2015, for the following development: Demolition of the rear of 233 Shoreditch High Street, perimeter walls, viaduct structure across Plough Yard and all other structures on the site; erection of a decking structure and development comprising the erection of one part 10, part 16 storey building to provide 76,530sqm B1 floor space together with 1885sqm at ground floor level of A1-A4 floor space (Building 1); one 50-storey block comprising 30,486sqm of private residential floorspace together with 242sqm at ground floor level of A1-A4 floor space (Building 2); Affordable housing component of one 14 storey block comprising 3,615sqm of affordable residential floorspace plus 116sqm of Class A1-A4 floor space at ground floor (Building 3); and one 6 storey block comprising 1,709sqm of affordable residential floorspace (Building 4); one single storey block comprising 263sqm of flexible space Class A1-A4/D1/D2/B1 (Building 5), one single kiosk comprising 100sqm of Class A1-A4, parking spaces; open space; all other associated works. The amendment is to vary conditions 2 (approved plans) and 38 (residential mix) in order to increase the number of units within Building 2 from 273 to 301 as well as condition 10 (retail opening hours) to extend the hours of retail use to 0700 to 2300 Mon to Wed 0700 to 2400 Thurs to Sat and 0700 to 2230 on Sun and public holidays. Other amendments include the addition of a D2 use to the flexible use proposed in Building 1, increased cycle provision, alterations to waste storage at buildings 2 and 3, reduction in retail floorspace in Building 3, and window alterations in Building 2.	Under Construction or Complete & Unsold
14 (LBH)	The Stage (Plough Yard) (LPA Ref: 2015/3453)	Minor material amendment (under Section 73 of the Town and County Planning Act 1990) to planning permission 2012/3871, dated 07/10/2015. The amendment is to vary conditions 1 (approved plans), 55 (floorspace) and 56 (unit mix) in order to provide 27 additional units in Building one (412 residential units in total); the relocation of plant and uses ancillary to the residential building; alterations to the basement of the development; alterations to the floorplans, the cladding material and the elevations of Building one; and, minor increases in A1 - A4, B1 and C3 floorspace. The development is subject to an Environmental Impact Assessment (EIA) in accordance with the Town and Country Planning (Environmental Impact Assessment) (England) Regulations 2011.	Under Construction or Complete & Unsold

Map Reference	Scheme Name and Reference Number	Nature of Scheme	Status
15 (LBH)	5-29 Sun Street 8-16 Earl Street & 54 Wilson Street (LPA Ref: 2015/0877)	Demolition of 17-29 Sun Street, 1-17 Crown Place and 8-16 Earl Street (excluding front façade) and construction within the eastern part of the site of a 3 level basement plus lower ground, ground level and mezzanine and part 6, part 10 storey podium building above ground level/mezzanine level with two towers of 29 and 33 storeys above ground/mezzanine level. The new building provides flexible office/retail floorspace at lower ground level (Class B1/A1/A3/A4), retail at ground and mezzanine level (Class A1, A3 and A4), office (Class B1) at lower ground, ground, mezzanine and levels 1-6 and 247 residential units (Class C3) at levels 7 - 33. Refurbishment of 5-15 Sun Street with roof extension and three storey rear extension (plus basement) to provide a 32 bed hotel (Class c1), Class A3 restaurant, Sui Generis clubhouse and hotel courtyard. Refurbishment and extension of 54 Wilson Street to provide a 7 storey (plus basement) office building (Class B1) with flexible office/retail (Class b1/A1/A3) at ground floor level. Provision of vehicle access, public courtyard, amenity space, car parking, with associated plant and works.	Under Construction
16 (LBTH)	120 Vallance Road 2-4 Hemming Street (LPA Ref: PA/15/01231)	Demolition of existing buildings at 120 Vallance Road and 2-4 Hemming Street and erection of four buildings to provide 1,331sqm (GEA) of commercial space, 152 residential units and new public realm, landscaped amenity space, cycle parking and all associated works	Under Construction or Complete & Unsold
17 (LBH)	201-207 Shoreditch High Street (LPA Ref: 2015/2403)	Demolition of existing buildings and structures and erection of a part 7, part 10 and part 30 storey building (plus 2 levels of basement) comprising office (Class B1) and hotel (Class C1) accommodation with ancillary retail, restaurant, event space, lounge and amenity areas; roof terraces; refuse and recycling facilities; cycle parking; servicing and plant; and landscaping.	Permission Granted
18 (LBH)	13-14 Appold Street (LPA Ref: 2015/1685)	Demolition of existing building and erection of a 45 storey mixed use office (Use Class B1) and business hotel (Use Class C1) with ancillary retail / restaurant use (A1/A3) at ground and lower ground and ancillary servicing and plant. The application is accompanied by an Environmental Statement pursuant to the Town and Country Planning (Environmental Impact Assessment) Regulations 2011.	Permission Granted – Not Started

Map Reference	Scheme Name and Reference Number	Nature of Scheme	Status
19 (LBH)	84-86 Great Eastern Street (LPA Ref: 2015/1834)	Demolition of existing buildings on the site and construction of a part twenty two storey (Block A: Ground plus twenty one floors) and part five/ part six storey (Block B: Ground plus four/ five floors) building for use as a 346 room hotel (22,174sqm GIA use Class C1 including health and leisure facilities); flexible uses including retail, bar and restaurant, art gallery and art cinema (3,324sqm GIA Use Class A1/ A3/ A4/ D1 and D2); private members club/ hotel use (781 sqm GIA sui generis/ Class C1); Offices (6,734 sqm GIA use Class B1); and public bar and restaurant (662 sqm GIA Use Class A3/ A4); together with ancillary hard and soft landscaping, revised vehicular access/ egress, 130 cycle spaces, 6 disabled vehicular spaces, refuse/ service arrangements, and all other works associated with the development	Permission Granted – Not Started
20 (LBH)	1-13 Long Street (LPA Ref: 2012/2013)	Erection of a new part 4, part 5, part 8-storey building to provide for 237 rooms of student accommodation and associated communal areas; erection of a new 10-storey building and two-storey extensions to the existing buildings at 1-3 Long Street and 5-9 Long Street to create 6-storey buildings along with associated refurbishment works to provide for 73 residential units; conversion of ground floor of 5-9 Long Street to provide for 816 sq m (GEA) of Class B1 use floorspace; construction of a landscaped podium above car parking area at ground floor level (40 car spaces); the provision of 255 cycle spaces and access and landscape works.	Under Construction or Complete & Unsold
21 (LBTH)	114-150 Hackney Road (LPA Ref: PA/17/00250)	Mixed use redevelopment of site including part demolition, part retention, part extension of existing buildings alongside erection of complete new buildings ranging in height from four storeys to six storeys above a shared basement, to house a maximum of 9 residential units (Class C3), 12,600 sqm (GEA) of employment floorspace (Class B1), 1,340 sqm (GEA) of flexible office and retail floorspace at ground floor level (falling within Use Classes B1/A1-A4) and provision of of Public House (Class A4), along with associated landscaping and public realm improvements, cycle parking provision, plant and storage.	Permission Granted – Not started
22 (CoL)	100 Liverpool Street & 8 - 12 Broadgate (LPA Ref: 15/01387/FULEIA)	Refurbishment and extension of existing buildings including retention of buildings structural frame and construction of new facade and the provision of three additional floors and rooftop plant to provide office (B1) use; retail (A1), flexible use for either retail (A1/A2/A3) or leisure (D2) uses at lower ground, ground and first floor levels; and flexible office (B1) /restaurant (A3) use at 9th floor level; provision of car and cycle parking; hard and soft landscaping; alterations to facilities associated with the bus station; and the provision of other works ancillary to the main building. (Total Floorspace 69,029sq.m (GEA) (Minor amendments to previously approved application 14/01285/FULEIA).	Under Construction

Map Reference	Scheme Name and Reference Number	Nature of Scheme	Status
23 (LBH)	97-137 Hackney Road (LPA Ref: 2015/3455)	Demolition of all existing buildings and construction of three replacement buildings ranging in height from ground plus four storeys to ground plus eight storeys, above shared basement. Proposed mix of uses to include a maximum of 184 residential units (Class C3), 13,334 sqm (GIA) of employment floorspace (Use Class B1), and 4,243 sqm (GIA) of flexible commercial/retail space at basement and ground floor levels (falling within Use Classes A1-A4, and B1) which can comprise of no more than 1,500 sqm (GIA) of A1 floorspace, no more than 500 sqm (GIA) of A2 floorspace, no more than 1,500 sqm (GIA) of A3 floorspace, no more than 1,000 sqm (GIA) of A4 floorspace, and no more than 1,400 sqm (GIA) of B1 floorspace, along with associated landscaping and public realm improvements, parking provision, plant and storage, and other works incidental to the proposed development.	Under Construction
24 (was 38) (CoL)	Land Adjacent To 20 Bury Street London EC3A 5AX (18/01213/FULEIA).	Demolition of existing building and structures and construction of a building to a height of 305.3m AOD for a mixed-use visitor attraction, including viewing areas [2,597sq.m GEA], an education/community facility [567sq.m GEA] (Sui Generis) and restaurant/bar use (Class A3/A4) [1,535sq.m GEA]; together with a retail unit at ground floor (Class A1); a new two-storey pavilion building [1,093sq.m GEA] (Sui Generis) comprising the principal visitor attraction entrance with retail at ground floor level (Class A1/A3) [11sq.m GEA] and a public roof garden; provision of ancillary cycle parking, servicing and plant and alterations to the public realm.	Likely to be determined before the Proposed Development.
25 (LBI)	Speedfix House and Monmouth House, 19 – 23 Featherstone Street (LPA Ref: P2015/3136/FUL)	Demolition of existing buildings and redevelopment of the site to provide a building of part 10, part 11 storeys fronting City Road and five storeys along Featherstone Street to provide 13,393sq.m. of office space (B1) including affordable workspace; 404sq.m. of retail (A1); together with ancillary hard and soft landscaping, revised vehicular access/egress, 302 cycle spaces, one disabled vehicular space, refuse/service arrangements and all other works associated with the development. This application may affect the character and appearance of a conservation area and the setting of a listed building. Town and Country Planning (Listed Building and Conservation Areas) Act 1990 (as amended).	Permission Granted – Not Started

Map Reference	Scheme Name and Reference Number	Nature of Scheme	Status
26 (CoL)	150 Bishopsgate (LPA Ref 17/00623/FULL)	Application under Section 73 of the Town and Country Planning Act 1990 to vary Conditions 33 and 54 of planning permission 14/001151/FULL dated 02.02.2017 to enable minor material amendments to the approved scheme for alterations to 142- 150 Bishopsgate and 1-17 Devonshire Row (odd numbers), relocation of 1 Stone House Court and redevelopment of Stone House (128-140 Bishopsgate and 77-84 Houndsditch), Staple Hall (87-90 Houndsditch) and 1, 3 and 5 Stone House Court, to provide a mixed use development comprising a luxury hotel, residential accommodation, retail uses (A1 and A3), hard and soft landscaping works including provision of a new public plaza, alterations to vehicular and pedestrian access and highways layout together with ancillary plant, servicing and associated works. The minor material amendments include amendments to elevational detailing, internal layout including mix of residential units, reconstruction of Devonshire Row southern spine wall, alterations to the public plaza and public realm and creation of a ballroom entrance pavilion at the south-west corner of the plaza. (56,526sq.m gea)	Under construction
27 (CoL)	(100 Bishopsgate) 61 St Mary Axe, 80-86 Bishopsgate, 88-90 Bishopsgate, 12-20 Camomile Street, 15-16 St Helen's Place And 33-35 St Mary Axe (North Elevation Only) (LPA Ref: 12/00129/FULL)	Amendments under section 73 to planning permission 11/00332/FULEIA dated 23 November 2011 for the erection of three buildings to comprise office (B1), retail (A1-A4), Library (D1) and Livery Hall (Sui Generis) uses with associated public space and landscaping, disabled car parking, cycle parking, servicing and plant.	Under construction
28 (LBTH)	Silwex House, Quaker street (LPA Ref: PA/16/00392/A1	Demolition of the roof and part side elevations, the retention and restoration of the southern and northern elevations and the construction of a two storey roof extension to provide a new hotel (Use Class C1) development comprising approximately 260 bedrooms over basement, ground and four upper floors with ancillary cafe space and servicing on the ground floor, associated plant in the basement and roof, improvements to the front pavement and associated works.	Granted 2016

Map Reference	Scheme Name and Reference Number	Nature of Scheme	Status
29 (LBH)	Shoreditch Village (183-187 Shoreditch High Street, bounded by Holywell Lane, New Inn Yard and rail viaduct) (LPA Ref: 2017/0596)	Demolition of 17 Anning Street, rear of 186 Shoreditch High Street and rear of 187 Shoreditch High Street. Redevelopment to provide 3 mixed-use buildings ranging from 2 to 8 storeys (plus basement), comprising office (B1) use, flexible retail (A1/A3) use and flexible office/retail (B1/A1/A3) use. Works include external alterations and refurbishment of 187 Shoreditch High Street, with change of use to flexible office/retail (B1/A1/A3) use; new public realm and street market; and façade retention of 186 Shoreditch High Street including accommodating new ground floor public access passageway from Shoreditch High Street to new public realm, along with associated landscaping, roof plant, terraces and other works incidental to the proposed development.	Granted 2018
30 (LBH)	168-178 Shoreditch High Street (LPA Ref: 2015/3316)	Demolition of petrol filling station and erection of a 6 storey (plus basement) mixed use development comprising 868 sqm of A3 (restaurants and cafes) floorspace on ground and basement floors and 2,884sqm of B1 (Business) floorspace on the 1st - 5th floors	Granted 2016
31 (LBTH)	281-285 Bethnal Green Road, London, E2 6AH (PA/17/00299/A1).	Demolition of the existing building (Use Classes B8 and B1a) and redevelopment, including the reinstatement and restoration of the principal facade and the former Rex Cinema auditorium, to provide a single screen cinema (Use Class D2) measuring 390 sq.m (GIA), 130 bedroom hotel (Use Class C1) measuring 3,885 sq.m (GIA) and restaurant and bar (Use Class A3), collectively measuring 276 sq.m (GIA), along with 24 no. cycle spaces and 1 no. disabled car park and associated highways works.	Planning Permission Granted 16 June 2017
32 (LBTH)	Land bounded by Elder Street, Folgate Street, Blossom Street, Norton Folgate, Shoreditch High Street and Commercial Street, E1 (PA/14/03548).	Redevelopment of the former Nicholls and Clarke urban block and adjoining former depot site, Loom Court and land and buildings north of Fleur de Lis Passage and Fleur de Lis Street, including retention and refurbishment of buildings, for commercially led mixed use purposes comprising buildings of between 4 and 14 storeys to provide B1 (office), A1 (retail), A3 (restaurants and cafés), A4 (public house) and 40 residential units; together with new public open spaces and landscaping, new pedestrian accesses, works to the public highway and public realm, the provision of off-street parking, and all necessary ancillary and enabling works, plant and equipment.(AMENDED PLANS RECEIVED showing retention of 12-13 Blossom Street Warehouses as separate buildings) Land bounded by Elder Street, Folgate Street, Blossom Street, Norton Folgate, Shoreditch High Street and Commercial Street, E1	Granted Planning Permission 3 May 2016

Map Reference	Scheme Name and Reference Number	Nature of Scheme	Status
33 (COL)	2-3 Finsbury Avenue 16/00149/FULEIA	Demolition of existing buildings and construction of a building arranged over three basement floors, ground and 32 upper floors plus mezzanine and three rooftop plant levels (168.4m AOD) to provide office accommodation (Class B1) (61,867sq.m); flexible retail uses (for either class A1, A2 or A3) at part ground and mezzanine levels (4,250sq.m GIA); cafe/restaurant uses (Class A3) at 13th floor level (1,291sq.m); flexible retail uses (for either class A1 or A3) at part ground floor level (248sq.m); a flexible space for office, conferencing, events and/or leisure use (for either Class B1, D1 or D2) at 13th to 18th floor levels (5,333sq.m) and a publicly accessible roof terrace and associated facilities at 13th floor level; hard and soft landscaping works; servicing facilities; and other works incidental to the development (total floor area 85,378sq.m GIA). 2-3 Finsbury Avenue London EC2M 2PA	Granted planning permission 29 March 2018
34 (LBTH)	Former Beagle House Now Known As Maersk House, Braham Street, London (PA/18/00971)	Demolition of existing building and the erection of mixed use development with flexible retail floorspace at ground level (Use Classes A1-A3), with B1 office use space above contained within a single building of ground floor plus 17 storeys (with an additional two storeys of enclosed plant at roof level and two basement levels). Minor Material Amendment (with respect to Variation of Condition No 2 - approved plans) of planning permission dated PA/16/00782 Amendments to include: Additional storey of accommodation to north-west and south-west quadrants of building (not involving an increase in the maximum height of the scheme) Change to structural grid of building (spacing of pillars) and appearance of base of development Internal changes including core layout and lift strategy Ground and basement layout change including revised cycle access Confirmed boundary line ownership	Planning Permission Granted 29 March 2019
35 (LBH)	49-51 Paul Street Hackney London EC2A 4LJ (2018/2104).	Redevelopment of the site by the erection of a building up to 10 storeys in height to accommodate a 145 room hotel (C1 Use Class), and a 147sqm restaurant/café (A3 Use Class) at ground floor level, with roof plant enclosure and other associated works.	Granted
36 (LBH)	Development House 56-64 Leonard Street LONDON EC2A 4LT (2017/4694)	Demolition of existing office building (B1) and construction of new ten storey office building (B1) with flexible retail use (A1/A3) at ground floor, terraces and other associated works. [Re-consultation for 14 days to account for (1) additional set-back to the Leonard Street north elevation upper level setback façade (levels 05-08) by approximately 2.5m; (2) additional set back to the taller element of the Kiffen Street Western façade (levels 05-08) by approximately 550mm; and (3) an increase in the area of office provision in the lower ground level by moving plant down to the basement level	Granted
Included for consideration of Townscape and Visual Impact effects only			

Map Reference	Scheme Name and Reference Number	Nature of Scheme	Status
37 (COL)	22 Bishopsgate, London EC2N (LPA Ref: 16/00849/FULEIA)	Amendments to planning permission ref 15/00764/FULEIA (for construction of a building arranged on three basement floors, ground and 61 upper floors plus mezzanines and plant comprising floorspace for use within Classes A and B1 of the Use Classes Order and a publicly accessible viewing gallery and facilities (Sui Generis); hard and soft landscaping works; the provision of ancillary servicing and other works incidental to the development (200,714sq.m GEA.) comprising changes to the layout and configuration of the basement and base of the building, including; relocation of the retail units; changes to the proposed wind mitigation measures; changes to the cycle parking provision and facilities; changes to the Bishopsgate elevation at lower levels; changes to the art street; and changes to the proposed land use distribution and floor area (201,863sq.m GEA).	Granted 2017
38 (COL)	1 Leadenhall Leadenhall Court 1 Leadenhall Street London EC3V 1PP (LPA Ref: 18/00740/FULEIA)	Demolition of the existing building and redevelopment to provide a 36 storey building with 28 floors for office use (Class B1) with retail floorspace (Class A1-A4) at basement, ground and fourth floor, office lobby and loading bay at ground floor, a publicly accessible terrace at fourth floor, 5 floors of plant and ancillary basement cycle parking (63,613sq.m GIA).	Granted
39 (COL)	1 Undershaft, London EC3P 3DQ (LPA Ref: 16/00075/FULEIA)	Demolition of the existing buildings and construction of a ground plus 72 storey building (304.94m AOD) for office use (Class B1) [131,937sq.m GEA], retail (Class A1-A3) [2,178sq.m GEA] at ground and lower ground floor, a publicly accessible viewing gallery (Sui Generis) [2,930sq.m GEA] at level 71-72 and a restaurant (Class A3) [1,220sq.m] at level 70. Public Realm improvement works, ancillary basement cycle parking, servicing and plant. [Total 154,100sq.m GEA]	Granted
40 (COL)	100 Leadenhall Street, 100, 106 & 107 Leadenhall Street London EC3A 3BP, (LPA Ref: 18/00152/FULEIA)	Demolition of the existing buildings and construction of a ground plus 56 storey building (263.4m AOD) for office use (Class B1) [102,043sq.m GEA], retail use (Class A1/A3/A4) [882sq.m GEA] at lower levels, a publicly accessible viewing gallery (Sui Generis) and after hours Restaurant/Bar (Sui Generis) [1,934sq.m GEA] at levels 55 and 56, new and improved Public Realm, ancillary basement cycle parking, servicing area and plant. [Total Scheme Area: 122,091sq.m GEA]	Granted

Map Reference	Scheme Name and Reference Number	Nature of Scheme	Status
41 (COL)	40 Leadenhall Street Site Bounded By 19-21 & 22 Billiter Street, 49 Leadenhall Street, 108 & 109-114 Fenchurch Street, 6-8 & 9-13 Fenchurch Buildings London EC3 (LPA Ref: 13/01004/FULEIA.)	Partial demolition and works of refurbishment and reinstatement to 19-21 Billiter Street; demolition of all other buildings on the site; redevelopment to provide a new building comprising two basement levels and ground plus part 10, 14 and 34 storeys plus plant (total height 170m AOD) containing offices (B1) and flexible retail/financial and professional services/cafe and restaurant uses (A1/A2/A3) at ground floor level; food and drink (A3/A4) uses at levels 13 and 14; change of use at ground and first floor of 19-21 Billiter Street to retail/cafe and restaurant/bar use (A1/A3/A4); the provision of hard and soft landscaping; alterations to Fenchurch Buildings and other incidental works. (125,699sq.m GIA).	Under construction
42 (COL)	6-8 Bishopsgate (2017)	Demolition of existing buildings and the erection of a new building comprising lower ground level, three basement levels, ground floor plus part 10, 25 and 51 storeys including plant [221.2m AOD] to provide office (Class B1) use [85,892sq.m GEA], flexible shop/cafe and restaurant (Class A1/ A3) uses [445sq.m GEA] at part ground floor and level 1 and flexible shop/cafe/restaurant/office (A1/A3/B1) uses [199sq.m GEA] at part ground floor and level 1; The provision of a publicly accessible roof top viewing gallery (Sui Generis) [819sq.m GEA] at level 50 with dedicated entrance at ground floor level; the provision of hard and soft landscaping. [TOTAL 87,355sq.m GEA].	Granted 2018

3.6 ASSUMPTIONS AND LIMITATIONS

- 3.6.1
- The principal assumptions that have been made and any limitations that have been identified in preparing the ES Addendum are set out in each technical chapter. General assumptions include the following:

 - assessments primarily assume the baseline conditions in 2018/19 when the majority of the baseline surveys, including traffic, noise, air quality were undertaken. Where environmental information has not changed such as for Ground Conditions and Archaeology the assessments have been based off the 2014/15 baseline surveys;
 - current surrounding land uses do not change, with the exception of the cumulative developments identified;
 - assessments are based on published sources of information and primary data collection. Sources are provided as necessary;
 - assessments are based on the description of the Revised Scheme and the anticipated construction methodology and programme summarised in Chapter 5;
 - the design, construction and operation phases of the Revised Scheme will satisfy minimum environmental standards, consistent with contemporary legislation, practice and knowledge;
 - planning permission, when granted, will contain conditions that will control disturbance during construction and operation, and be sufficient to limit the development to that which has been assessed in the EIA;
 - any future development of the Site, beyond the Revised Scheme to which this ES Addendum relates, will be determined through separate planning applications and is not assessed within this ES Addendum; and
 - the construction information on which the assessments are derived, are based on the best information available at the time of writing and represent a reasonable scenario of how the Revised Scheme may be implemented; and
 - subsequent to the modelling studies being carried out for some of the technical disciplines, the Revised Scheme have incorporated minor design amendments. Where this is the case, the results presented in this ES Addendum have been adjusted to best reflect the Revised Scheme and this is noted within the limitations and assumptions section of the individual technical chapters.

3.7 OBJECTIVITY

- 3.7.1
- The technical studies undertaken within this ES Addendum have been progressed in a transparent, impartial and unbiased way with equal weight attached, as appropriate, to beneficial and adverse effects. Where possible, this has been based upon quantitative and accepted criteria together with the use of value judgements and expert interpretations.
- 3.7.2
- The assessment has been explicit in recognising areas of limitation within this ES Addendum and any difficulties that have been encountered, including assumptions upon which the assessments are based. Where appropriate, the assessment of significance has been expressed with confidence levels.

Figure 3.3. Redline Boundary

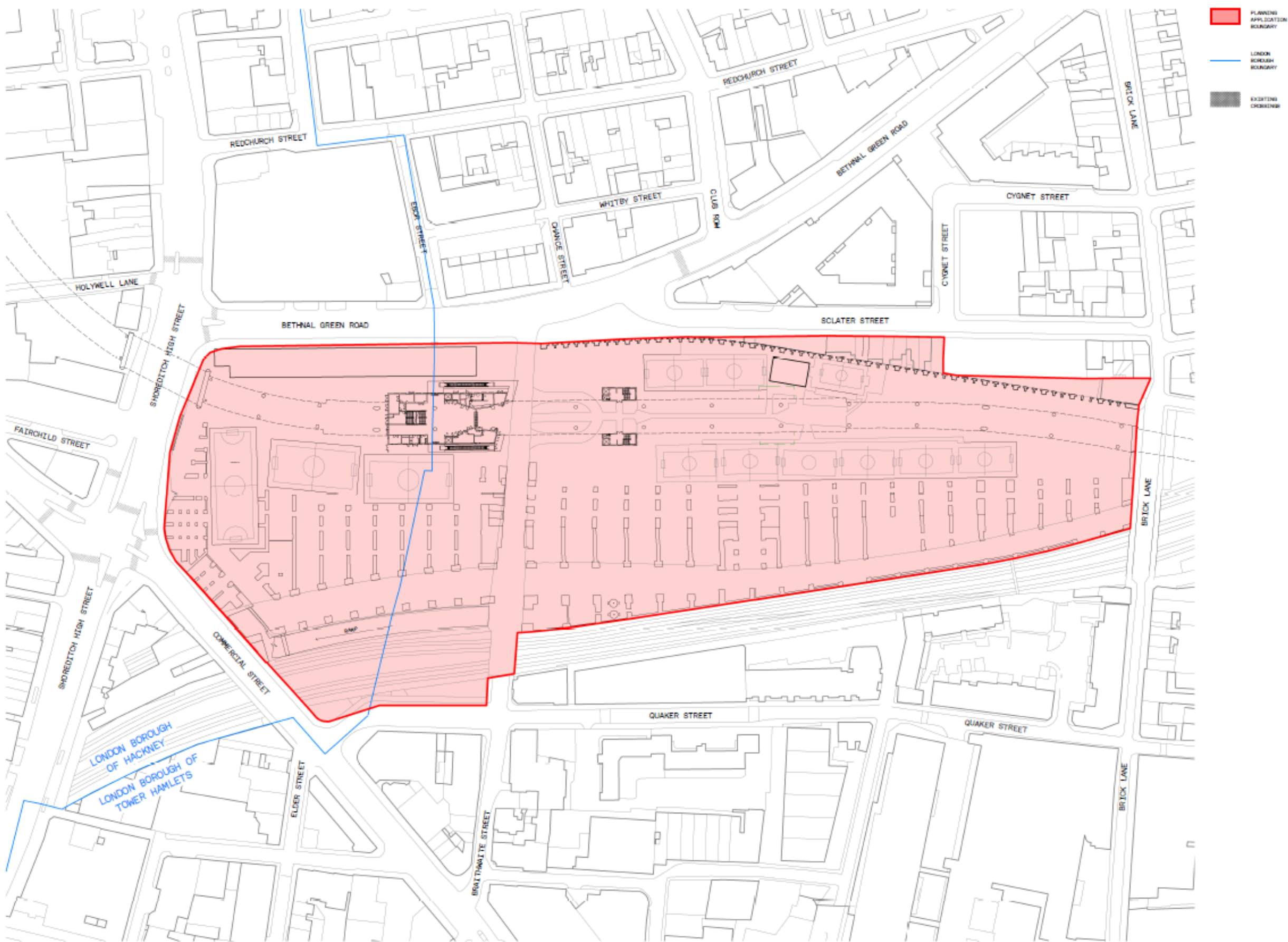
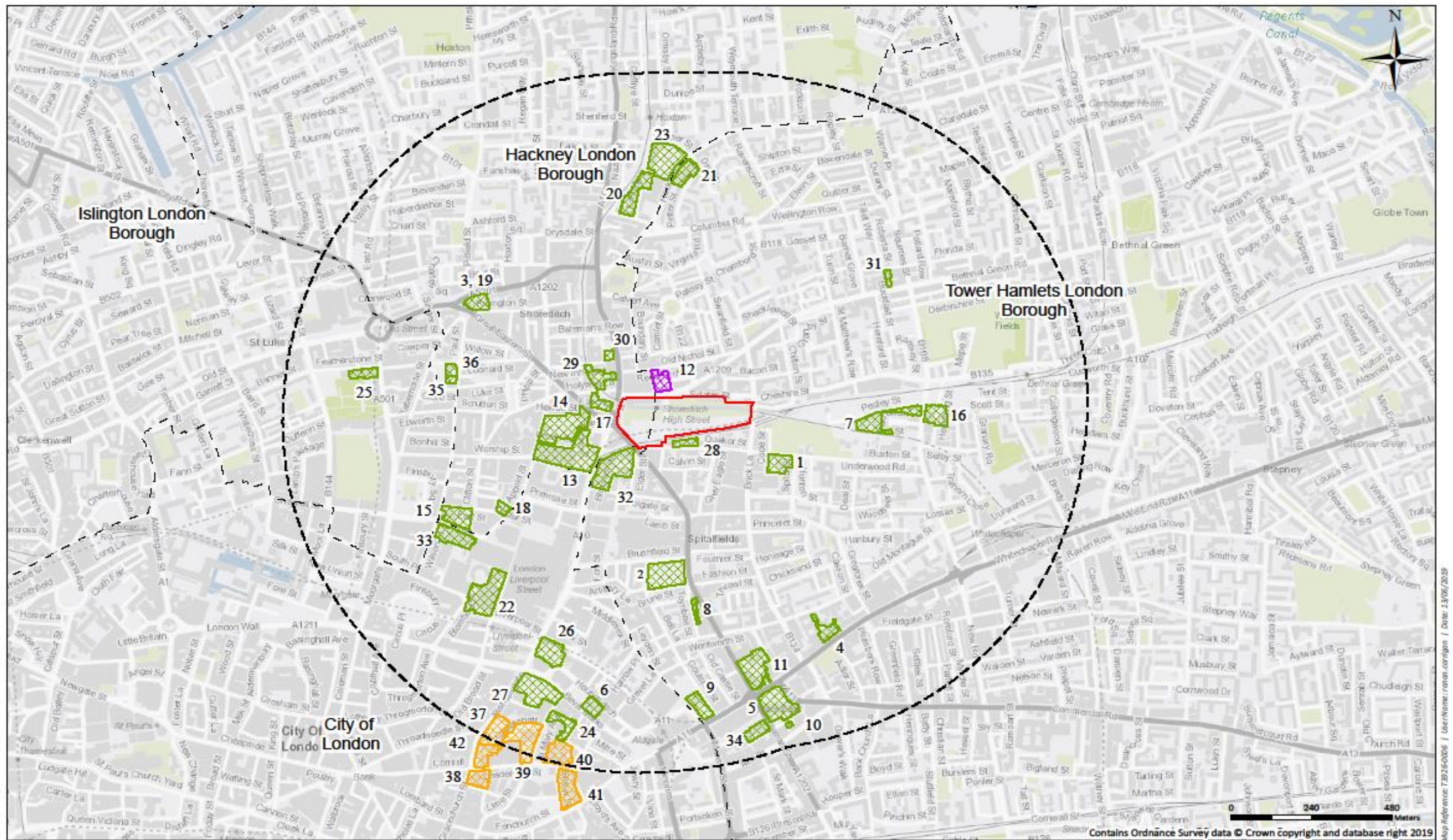


Figure 3.4. Cumulative Schemes



Project: Bishopsgate Goods yard

Client: Bishopsgate Goods Yard Regeneration Ltd

Cumulative Schemes Surrounding the Site



Temple Group Ltd, The Woolyard, 52 Bermondsey Street, London, SE1 3UD
Tel: 020 7394 3700 Fax: 020 7394 7871

- Legend**
- 1Km Site Buffer
 - Site Boundary
 - Cumulative Schemes
 - TMVA
 - Not Submitted
 - Borough Boundaries



ballymore.



Hammerson